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Signature Barbara Schofield Love
Date August 8, 1972

THE IDENTIFICATION OF LEARNING DISABILITIES

FOR THE ELEMENTARY SCHOOL COUNSELOR

by

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A professional paper submitted to the Graduate
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requirement for the degree

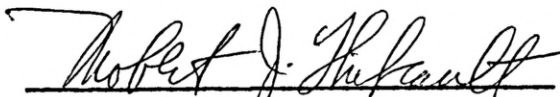
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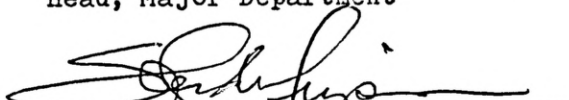
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ABSTRACT

A child with a learning disability is a normal child except he will have a reading, math, or social problem caused by one or more factors. The early identification of a learning disabled child will result in a better-adjusted child emotionally. From ten to forty percent of the children in elementary schools today suffer from one or more learning disabilities. A child who does not learn to read, usually not through faulty teaching but through undiagnosed learning disabilities, becomes the potential drop-out six or seven years later and is the behavioral problem before that time, and is an unhappy child. He is almost always in the normal range of intelligence.

The term "learning disabilities" grew from studies made of the brain-injured adults in World War II. In the 1960's impetus was given for additional studies when it was learned that many children had some but not all the symptoms of the brain-injured adults without having had the trauma associated with brain-injury. There is no unanimity of definitions for learning disabilities. The neurologist has one, the educator another. The symptoms are well-described and catalogued. In the treatment area, the suggestions range from improvement of motor skills to rearrangement of neurological training.

Most theories for remediation are based on Jean Piaget's work. Each child has to successfully build the concepts for foundations in one area before he can advance to another. If any area has been skipped or inadequately developed, then the child will experience a learning difficulty for lack of a conceptual base.

The child with a learning difficulty is most often a child with a perceptual problem. Most perceptual problems require testing for the identification of defects. The elementary counselor's role is to interpret the tests to the teachers, parents and the child. He is a resource person. With so many tests on the market, the counselor must be well-acquainted with those in the area where learning difficulties occur. Each child should be worked with individually and an individual program established.

The normal child is expected to perform adequately in several areas: gross motor skills, sensory motor skills, language development, conceptual skills, and social skills in order to do well in school. Various factors such as perceptions, malnutrition, emotional and cultural disadvantages can influence these skills.

The conclusions drawn from this study are that more effort should be made to have uniform terminology for the descriptions of the various learning disabilities, more research into the factors causing them, and more education for the personnel working with the learning disabled in a normal school atmosphere.

CHAPTER ONE

Introduction

What does an elementary counselor do when asked by a teacher how the teacher should handle a problem of a little girl who comes to class with her right shoe on the left foot, and the left shoe on the right foot, who often times starts to write on the right hand side of the page and works to the left?

What do you do for the hyperactive child that sits still less than three minutes at a time, is constantly twisting and turning in her seat, raising the desk top and burying her head in the desk much like a small squirrel at a cache of nuts?

What do you do with the boy who has to have his head almost down on the desk, whose body seems to form a reversed "S" and who writes so heavily that he invariably breaks the point of his pencil? He starts each day with a new pencil, and by the end of the day, it is ground down to a small nub.

How do you advise the teacher about the child that not only reverses such letters as "p" and "q" but also "b" and "d" and the words "saw" for the word "was" in addition to others (42:29)?

One factor that these children have in common is that each has a learning disability.

There is no behavior specialist, no remedial reading specialist, no psychiatrist, and no psychologist. There is a remedial reading program taught by a teacher who last went to school in the 1940's. She took the job because it was extra money for her. This is not too

uncommon a situation in the many smaller school districts in Montana.

The concern with learning disabilities, with its consequences of reading problems, is that so many of the problems in the counseling area have arisen because the poor achievers in school are the ones who drop out of school, are the ones with the behavior problems, and are the ones who most need these skills to succeed in other areas (17:3).

One boy in school who stuttered badly only in English classes was asked if he wanted speech therapy. His answer, "I don't need speech therapy, I need someone to teach me to read." A junior in high school, he got special reading. It meant working at material which had not been designed for adult reading, but because he realized his own deficiency and wanted to do it, he did it.

The government has recognized that these problems exist and is providing funds for remedial reading programs in some areas, and other projects that will alleviate, to some extent, the problems. The Job Corps is only one of many different programs.

Last summer in July of 1971, a group of counselors visited some of industrial areas in Montana to interview individuals working at different jobs. Among other questions asked was the worker's level of education. Some of the answers were somewhat contrary to what had been expected. Some of the better paying jobs, in the blue-collar areas, were not a matter of education, but a matter of unions and seniority. Training was primarily on-the-job. Even some of the white-collar jobs were a matter of seniority. This applied even to engineers and chemists.

The visit to the Foster Creek Job Corps Center, west of

Anaconda, was perhaps one of the most interesting experiences of the summer. The enrollees of this camp were from the Mid-West--Iowa, Kansas, Nebraska, and Missouri--and in this camp there were more whites than negroes. The director said that it is a policy for the government to never have just half whites and half negroes in a camp because trouble frequently breaks out. The Indians have their own Job Corps Center at Kicking Horse.

The educational director said that the enrollees were tested when they came with the average reading level of the group at about the third grade level. Some of the boys could read only the simplest material and just write or print their names. The negroes, on an average, were a year or so behind the whites. Practically all of these young men had been dropouts from school because the reading had been too much for them.

They were learning to read and enjoying it. For the first time they were succeeding at reading. Their books were fascinating. They were about adult subjects with a fair amount of science. Some used the comic book approach, but they were readable. Many of the boys had advanced to the stage where they were working on the lessons for the GED. Some were scheduled to take the exams in August.

As these boys' ability increased, there was a corresponding increase in their sense of worth and value. Many were making plans for further education. Some of them were studying manuals for the repairs to heavy equipment.

At a meeting of the Northern Montana Counselors Association held in Chinook in March 1972, officers of the nine-county mental

health organization were present. At that time the group discussed the proposed mental health plan for the Triangle Area--Great Falls on the south, east to Malta, and west to Browning--which would have at least one psychiatrist, two or more psychologists, psychiatric social workers, and other personnel located in strategic areas. The main office would be in Great Falls. At the present time, the Mental Health Clinic located in Great Falls is almost six months behind in its work. They will accept new cases on emergency basis. The suggestion was made to the counselors that the Mental Health Clinic would appreciate knowing what had been done in the way of counseling when referrals are made.

The counselors, in turn, criticized the mental health services for not letting the counselors know the dispositions of the cases referred and also wanted to know what the counselors could do. This should improve communications. The mental health services made the comment that school records are available for inspection to too many people that do not always observe confidentiality.

Of all the children referred to the Mental Health Clinic, the greatest number was not for drugs but learning problems arising from the inability to do school work, primarily reading, and the largest number of referrals was in the six to ten age group.

Last summer Eli Ginzberg's book, Career Guidance, published by McGraw Hill, stated that properly trained guidance counselors concerned with career development have little place in the elementary school. He did not acknowledge that guidance counselors had any good benefits to offer and suggested that no more guidance be done at the elementary level until more accurate guidelines are established (28:67).

The Problem

What are learning disabilities? Where do they start? Why? How do students, and they are usually boys, arrive in high school reading at only third grade level (48:157)? Where and how has our system of educating them failed? Is this a peculiarity of only the Montana schools or is it characteristic of the nation's schools (73:3-28)? What is being done?

What can the elementary counselors do? Perhaps the elementary counselors can and will assist the teachers, the students, and the communities, but how?

What are the functions of the elementary guidance counselors? There will be many variations in the definition depending upon the counselor's, the school's, the student's, and the community's needs. One of the most important duties is to counsel the teachers without their realizing that they are being counseled. To be diplomatic, it should be called coordinating the services of the counselor and the teacher. Many of the staff are aware of the tests, but are not aware of what they can do and what the tests can show. Sometimes they are unaware of some of the resources of the counselor.

Perhaps the school systems are at fault for not identifying and starting classes earlier for the disabled learners. If the child does not read at the end of the first grade, many of them do learn by the end of the second. These "late bloomers" do acquire skills by the conventional methods of instruction. It may take them from one to three years to catch up with their group, but they will. However, if by the third grade, the child is not reading, his opinion of himself has deteriorated, and he begins to feel himself a failure. Only expert

individual instruction and counseling can remediate these deficiencies. The cost of early identification would more than offset the cost of expensive remedial work and much counseling later on (1:447).

The reason why children can't or don't learn is of vital interest to counselors. It should be of interest to all concerned with elementary education and with children.

The Purpose

The purpose of this paper, then is to explore the field of learning disabilities in order to gather information that will assist the counselor to identify the child with a learning disability. Hopefully, it will provide some clues and information to aid the counselor in cooperating and assisting other personnel working in the elementary schools for the betterment of the child.

CHAPTER TWO

REVIEW OF LITERATURE

History

The work with learning disabilities is not an old study. It grew from the results of Kurt Goldstein's work with brain-injured adults from World War II. In his book, Aftereffects of Brain Injuries in War, he described disordered behaviors after the injuries had healed and were apparently cured (52:3).

In 1947, A. A. Strauss and Laura Lehtinen published Psychopathology and Education of the Brain-injured Child. They published a list of symptoms and behaviors characteristic of this group of children (52:3-5).

In 1938, Dr. Lauretta Bender had published her monograph on the Bender Gestalt Test and its application for adults. She also did some work with children and found that many of them made the same errors as the adults (5:8).

In 1964, Elizabeth Koppitz published her manual, The Bender Gestalt Test for Young Children, with drawings, explanations, and interpretations to be used with the young child to the age of ten, if not mentally retarded. It may be used for older children when brain injury has been known to occur or when suspected, or when an examination for further proof of mental retardation is needed. This test is almost a culture free test and does not rely on any spoken words (48:51). It is also a useful instrument to assess brain damage after a stroke.

In the early 1960's the term learning disabilities began to appear because there were, in many instances, no reasons nor justifications for the term, brain-injured. These children manifested many of the symptoms that had been used to describe the known cases of brain-injury, but not all.

Certain obvious learning disabilities have been recognized and provided for in such schools as those for the blind, the deaf, the mute, the mentally retarded, and in recent years in some locations, the severely handicapped children such as those with cerebral palsy or other crippling conditions. These schools, part of our educational system, have teachers and specialists trained to work with these problems.

The educational system has served to focus on the one who achieves success, graduating from school. To him go the jobs because employers will not consider an applicant for a job without this diploma (17:1-6).

In the rural areas where the schools are small and sometimes isolated, learning disabilities are not always recognized or remedial work undertaken. In other schools, the child is passed on to the next teacher in the hope that that teacher will find the magic word or plan that will do something to ease the frustration, anxiety, and the despair that has been building since the child entered school and gradually started to fall behind his classmates.

Definitions

There is no unanimity for definitions of learning disabilities. Terms, descriptions, and behaviors are classified in this broad area.

The term "learning disabilities" has gradually been accepted as

Strauss and Lehtinen presented the following definition of a brain-injured child:

A brain-injured child is a child who before, during, or after birth has received an injury to or suffered an infection of the brain. As a result of such organic impairment, defects of the neuromotor system may be present or absent; however, such a child may show disturbances in perception, thinking, and emotional behavior, either separately or in combination. These disturbances prevent or impede a normal learning process (23:5).

The "Strauss Syndrome " was described as a brain-injured child who is not a mentally defective individual, with normal IQ who has some of the following characteristics: hyperactivity, distractability, perceptual and conceptual deficits, and perseveration (23:5).

In addition to certain overt neurological disorders such as cerebral palsy, seizure disorders, progressive disorders of the brain, visual and hearing defects, as well as behavioral disorders, the counselor would do well to watch for these following characteristics: a child who walks on the toes on one foot, sometimes with a swinging movement of one leg and the arm on the same side, wears out the tips of shoes, is clumsy and awkward in walking, running, and playing ball. This could indicate an undiagnosed, mild form of cerebral palsy (64:104). If the child is hyperactive in addition to the above characteristics, have him place both his hands on his knees and then extend them outward for a time to check for muscle control.

Sometimes seizures are due to an overdose of medication (49:170).

Kirk and Bateman say:

A learning disability refers to a retardation, disorder, or delayed development in one or more of the processes of speech, language, reading, writing, arithmetic, or other school subjects resulting from a psychological handicap caused by a possible cerebral dysfunction and/or emotional or behavioral disturbances. It is not the result of mental retardation, sensory deprivation, or cultural or instructional factors (52:73).

When the National Advisory Committee on Handicapped Children issued its first report, they listed the following criteria to define and/or describe a child with learning disabilities:

A learning disability refers to one or more significant deficits in essential learning processes requiring special educational techniques for its remediation.

Children with learning disabilities generally demonstrate a discrepancy between expected and actual achievement in one or more areas, such as spoken, read, or written language, mathematics, and spatial orientation.

The learning disability referred to is not primarily the result of sensory, motor, intellectual, or emotional handicap, or lack of opportunity to learn.

Deficits are to be defined in terms of accepted diagnostic procedures in education and psychology.

Essential learning processes are those currently referred to in behavioral science as perception, integration, and expression, either verbal or nonverbal (81:34).

The Council on Exceptional Children uses this definition:

A child with learning disabilities is one with adequate mental ability, sensory perception, and emotional stability who has a limited number of specific defects in perceptual, integrative, or expressive processes which severely impair learning efficiency (38:3).

The Research Group on Developmental Dyslexia of the World Federation of Neurology in regard to learning disabilities says this:

A disorder manifested by difficulty in learning to read despite conventional instruction, adequate intelligence, and socio-cultural opportunities. It is dependent upon fundamental cognitive disabilities which are frequently of constitutional origin (78:405).

Dyslexia is an impairment of the ability to read, or to understand what one reads silently or aloud, independent of any speech defect (21:157).

Hyperlexia refers to the ability to recognize words at a higher level than the ability to integrate them. (Elementary teachers

have the tendency to equate the word recognition skills with intellect, and often times when a child reads well believe that he should comprehend all that he reads (22:20). This in turn may place more stress on a child than he can handle with the results that an emotional or behavioral problem might arise (71:34).

For educators, probably the following would be good definitions because they would enable the use of descriptive terms that are easily understood and comprehended by readers of educational literature:

Learning disorders might best designate a known impairment in the nervous system. The impairment may be the result of genetic variation, biochemical irregularity, perinatal brain insult, or injury sustained by the nervous system as a result of disease, accident, sensory deprivation, nutritional deficit, or other direct influence.

Learning disability might best designate a demonstrated inability to perform a specific task normally found within the capability range of individuals of comparable mental ability (23:4).

Labels carry unfortunate connotations. For some readers, the term, learning disability, would mean that some type of learning problem was present. For others, the term would imply brain-damage.

Another term for learning disabilities is minimal brain dysfunction. This child will have normal intelligence but will have specific problems. He can not read at his normal level, but he can express his thoughts well and sometimes quite fluently. He can not spell correctly and may have trouble with arithmetic, particularly in areas involving concept development (50:1).

Identification

The process of identifying the child with learning disabilities is very similar to that of the three blind men trying to identify an

an elephant. Each in his own way was correct, and each presented a true picture of what he perceived.

If the counselor is to use the definition that "a learning disorder of the nervous system," then he should watch for any symptoms that might further his knowledge and understanding of his client. He should observe the child, if at all possible, in surroundings that are familiar to the child when the child, himself, is unaware that he is the one under scrutiny.

Before the child first enters school, Dr. Hoffman, writing in Academic Therapy, suggests that physicians examining the pre-school child should look for physical and emotional impairment and also if the child's doctor believes that this child can compete with his peers. The suggestion was made that if the family doctor had knowledge that the mother's delivery was normal that might have some bearing on the child's readiness. If the labor was long and difficult, the possibilities of there being some damage that might be indicative of a learning problem are 22:1 that there will be one. Other perinatal influences change this ratio. The premature child as an example has a 5:1 chance of a learning disability (41:24).

Clements has perhaps the longest list of descriptive behaviors classifying learning disabilities under sixteen general headings. The ten most common are: (1) Hyperactivity, (2) Perceptual-motor impairment, (3) Emotional lability, (4) General orientation defects, (5) Disorders of attention, e.g., short attention span and distractibility, (6) Impulsivity, (7) Disorders of memory and thinking, (8) Specific learning disabilities in reading, arithmetic, writing, and spelling, (9) Disorders of speech and hearing, (10) Equivocal neurological

signs and electroencephalographic irregularities (52:8).

In school situations, children with learning disabilities show three common elements: (1) All are retarded or show disordered behavior in school subjects such as reading, language, speech. (2) None can actually be classified as an exceptional child or a deaf child. (3) All are presumed to have some neurologic basis for the disability (52:9-10).

It is thought that some disorders such as delayed determination in handiness, motor awkwardness, and directionality confusion which are responsible for some children who have difficulty in learning the conventional meaning of symbols, is an inherited trait as other members or relatives in the family might show the same trait.

The average child who has difficulty with reading is usually a male with one sister and one brother who entered the first grade before he was actually six years old. His reading readiness score was low showing that he was not yet ready to read. By the time he reached the sixth grade, he was reading at only second grade level. He may have repeated one grade. He is unable to recognize many words at sight and does not have the ability to acquire new words. His comprehension is very poor. His spelling and arithmetic achievement scores are usually below grade level. In the WISC there is no significant subprofile. His attendance, health, and discipline are usually normal.

In the elementary grades, the girls are usually the better students and have fewer learning problems. Maturation might possibly have something to do with this as the ossification processes of the bony skeleton consistently show that boys mature later than girls.

There is a twenty month lag in comparing the boys with the girls between the ages of four years and twelve years. Consequently the boys are not as physically ready for school as girls.

Standardized tests of reading achievement do not always indicate the pupil's optimum reading level. There may be a difference of as much as a two year level on special reading test, informal classroom evaluation, and the standardized tests. Usually the performance section of the WISC will be higher than the verbal.

In a validation study done in a lower middle class school in New York City by Katrina de Hirsch, a battery of 37 tests was given in kindergarten. At the end of the second grade, there were certain characteristics about those who had not learned to read. At the age of six, the boys lagged twelve months behind the girls in skeletal age. Since this in turn influences the motor skills which must be perfected before the reading skills, this could account for some of the better performances of the girls. Most of the ones who did poorly were very confused and bewildered at first coming to kindergarten. Some were still that way at the beginning of the first grade. Their behavior was defined as infantile. They whined a lot, were unable to focus attention on tasks, and needed immediate gratification for any task. They played vigorously, had great amounts of energy but were unable to mobilize or regulate it for school tasks (39:19).

The poor reader's manual coordination was poor. Either he could not hold a pencil or he held it and pressed it so hard to the paper that he tore the paper.

The drawings of the human figure by this group were crude, fragmented, and portions of the body schema were poor. This shows a

a reading problem because of lack of orientation in space concepts.

The child with a learning disability is frequently that child who can not walk into the room without falling over his own two feet. It can also be the child that impulsively does something and then does not know why. It can be the child that can talk interestingly about a number of subjects but can not read or tell you what she read. It is frequently the child who races through an objective test marking the answers without reading in order to be the first one finished. He is from one to ten percent of the school population in the United States (50:1).

He is the same child that a thorough physical and complete neurological examination would indicate that the child is normal. Yet both the teacher and the counselor and not infrequently, the parents, know that this child does not act in the same way that other children do. Some psychometrists, psychologists, or psychiatrists might be quick to label the child as "brain-inured," "brain damaged," or else "minimal brain dysfunction." The following guidelines are important for all who counsel to remember: (1) Only at an autopsy can a sure diagnosis of brain injury be made. (2) There are as yet, except in the most obvious cases, no valid tests to diagnose injury to the brain. (3) Much of what is assumed to be known about the "brain-injured child" is folklore. (4) Too many people with too little knowledge are doing too much diagnosing about brain-injury. (5) Most of the evidence today does not indicate brain-injury, but rather other factors that need more study and scientific evidence to substantiate them (38:24-27).

The child with a progressive disorder of the brain before the condition has been diagnosed might be listless and withdrawn for some

time before the diagnosis is made (69:40).

Gertsman Syndrome children do average on the WISC but manifest the following symptoms of this condition which involves tumors of the parietal lobe: (1) right-left disorientation, (2) agraphia--impairment in the ability to write, (3) acalculia--loss of the ability to carry out simple mathematical problems, (4) agnosia--loss of ability to recognize and identify familiar objects through a particular sense organ (69:145).

In the classroom, the normal child spends about three-fourths of his time with his eyes on his work during academic seat work. The cognitively handicapped child will show such behaviors as not paying attention, irrelevant activities--doodling, fiddling, playing with toys, reading comics--day dreaming, and even some times acts of passive aggression.

The neurotic child on the other hand, will be out of his seat, will be punching one of his neighbors, kicking the one in front or at the side of him, will be making a noise, twisting and turning in the seat, and sometimes vocalizing (under his breath or just loud enough to distract those near him.) However, a bored child will sometimes act in this same manner. The frequency of occurrence, the length of time carried on, and the different activities engaged in are the criteria (87:468).

Not all disruptive behavior in the school room is due to a learning disability. Extensive testing and evaluation of these and underachieving children will sometimes indicate absolutely nothing. Maybe a manipulative act might have to take place such as changing the child's environment to a different classroom or teacher. Again

it might involve counseling the parent to provide appropriate consequences at home as well. The parents of activists tend to be more permissive than are the parents of non-activists. In some cases when acts of violence are allowed to go unpunished, they become a reinforcement for further acts of violence (76:16). "Reverse identification" occurs when the adults identify with the children or the young, rather than the young with the adults. Those with low self-esteem, a highly dependent pattern of relying on someone else, and generally rather incompetent in their work will tend to imitate the leaders or the very popular ones. These are not learning disabilities but merely are behavior problems (74:82-84).

A certain amount of anxiety in the classroom in some situations is normal at times. A test is an anxiety producing factor, so is a school program. Too much anxiety, too often, can be an indicator of a psychological problem that will interfere with learning. Reasoning and feeling are not independent faculties. Anxiety can not be turned off. It can build up (44:71).

Children with learning disabilities exhibit less independence in caring for themselves. They are more dependent upon other to help them dress themselves, put on overshoes, coats, have more trouble with buttons and zippers. As a rule they are lower in cooperation in the classroom where there is a situation involving cooperation. They will either withdraw or want to take all the responsibility by doing it alone. They are less able to cope with new situations, are less reliable, and need more attention.

The drawings of these children are more constricted. There is an over-emphasis on the tops of drawings. Houses will have doors,

window, and some other details omitted. The organization on the page when there is more than one drawing will be poor, particularly if there are several as in the Bender. Large size drawings often are indicative of impulsiveness (72:488-501).

Children with learning disabilities will vary daily in skills, patience, and temperament. However, no examiner who tests these children is free from error, as he too will vary. In a protocol session, thirty-two prospective psychologists administered the WISC. The scores ranged from 76 to 93. Women will get better score results on children when using the WISC than will the men. Many of the young children identify the male examiner with a dentist, a doctor, or their fathers (29:108).

At the present time, most standardized "diagnostic" batteries lack the necessary reliabilities upon which to base effective educational interpretations for individual children (34:342).

The social development of a child with a learning disability will often indicate that while he may come from any social strata, in the urban areas he will come from the lower or poorer homes. 65% of the students in classes with learning disabilities live in the areas of towns where only 25% of the juvenile population lives. This is the area where broken homes are frequent, the family is medically indigent, where premature births occur the most often in the entire population. 50% of the boys who are retarded scholastically have parents who never completed high school. Most of these children have moved frequently, averaging four times a year (70:278).

The way that a child sees himself is of much importance before the child reaches the nine-to-eleven year old stage because he has to

master his environment by that time and know that long-term goals are of more importance than short-term ones (31:125). For many of these children, there is a feeling of not being wanted, of dependency. For others, success in some way is needed as well as being important to someone (17:4).

Our society is becoming more and more technical. As we become more technical, the demand for laborers without skills becomes less. Society in the United States is goal-oriented. Hard work and self-sacrifice are respected with a corresponding disrespect for those who do not work. The middle class mother, familiar with these concepts, sends her child to school with the explanation that school is a place to learn, and that the teacher's job is to teach. The lower class mother sends her child to school with the admonition to obey the teacher.

The middle-class mothers attempt to teach their children internal controls against aggressiveness and sexuality. The lower class mothers attempt to protect and shield but do not prepare their children to cope with them. The lower class child is not taught the consequences of the reason for not doing a particular thing; they are not taught decision making (70:278). "Children should never be taught anything outside their homes which make them doubt their parents' ideas (62:3)."

The parents' commitment to education determines the child's attitude. If the parents do not value books, the children will not. If the parents criticize the teachers needlessly and fail to influence their children to take academic matters seriously, the children won't. When these children who have had a problem learning reach junior high,

many of them have an actual antagonism to learning. . It has been one frustration after another (48:157).

Some of the parents have not had a level of education sufficient to help their child in school. There is frustration with both parent and child, the parent because he can not do it, the child because his parent is not the all powerful individual first conceived in the mind of the child. This is a difficult time for both (70:278).

The Role of the Elementary Counselor

The duties of the counselor in an elementary situation have been listed as follows: (1) to provide a service to children through counseling. (2) to provide assistance to teachers through help in development of instructional content and methods that contribute to the needs of the children. (3) to provide assistance to children through the conduct of small group sessions involving children with special common needs or problems. (4) to provide help to teachers in the achievement of understanding children. (5) to serve as a resource to parents in assisting them to provide home environment that will contribute to the development of their children. (6) to serve as a referral agent himself, so that the most effective use may be made of psychological, health, social service and other special services. (7) to serve as an aid to other staff members in affecting proper referrals of children needing assistance from other agencies. (8) to serve as a resource person with the principals, the director of personnel service and others in the organization of a guidance program that is continuous throughout the school system and is properly articulated with other school systems. (9) to take leadership in the coordination of the

total program of pupil personnel services. (10) to serve as a resource person in the planning and conduct of such inservice and school planning activities as are needed to keep the total school program, and the guidance program in particular, in a constant state of up-grading (46:74-5).

In an Illinois study where each of three schools had a certified elementary counselor, adequate facilities to conduct the requisite guidance services, the time, and the secretarial help and equipment for the experiments, it was found that the teachers referred 53 percent of the clients. Most of the individual conferences were in the morning with group conferences in the afternoon. Perhaps one of the most interesting outcomes of this project was the morning staff meetings with the teachers and counselors, at the teachers' suggestion, before school. As the teachers became aware of what the counselors were trying to do, they solved many of their own problems quicker and easier. They became more aware of both their own limitations and their abilities and realized that there were problems beyond their expertise and referred those problems to the counselors. At the end of the two year study, there had been a positive change in the behavior of 325 of the 429 cases referred (2:7).

CHAPTER THREE

LEARNING DISABILITY THEORIES

Theories

There are basic and measurable differences in rates and styles of learning. Some students learn more than others, but in general learn only as much as is expected of them. In one study made by Rosenthal and Jacobson, the teachers were told that the group of students they were getting were a remarkable group and would make excellent, dramatic gains in intellectual capacity. The groups did. The only specific reinforcement had been the teachers' beliefs that they would. Those who were not in the controlled experiment made just the ordinary gains (8:47).

Maslow's hierarchy of needs must be remembered. Learning is now considered one of those needs, but until all basic, primary needs are met, the need to know and understand will not be satisfied. There is a normal sequence in the development of mental abilities but the most rapid growth is during the early years. A child must perceive before he can know; know before he can analyze or evaluate (60:157-9).

"High intelligence in children is associated with mediational symbolic activity which presumably takes the form of hypothesis testing, while children of normal intelligence learn by gradual association (16:91).

Children with high-curiosity are more creative, flexible, and consistent in their thought processes, as well as being better adjusted socially (51:5).

As children get older, there is a tendency for the groups to more closely resemble each other. In many students, there is a lag or drop in grades between the seventh and tenth grades.

For the past fifty years, Jean Piaget has been publishing studies on the intellectual development of children. His writings, in French, have been translated and published in English and are the basic foundations for many of the theories in learning disabilities, curriculum development, preschool programs, and child psychology. Even though many call him a psychologist, he prefers to refer to himself as "a geneticist whose main interest is in the development of knowledge (61:3)."

Much of Piaget's research has been done by the use of open-ended questions about relationships or problems of cause and effect. Many of the observations were made about his own three children from the time of birth onward. Notations on child behavior were made while he was at home and at the Institut Jean Jacques Rousseau in Geneva where he was the director of research in this school whose purpose was the scientific study of the child and the training of teachers. His wife had been one of his pupils, and when he was not home to observe all significant behavior of their children, she noted it for reference.

Piaget, now in his seventies, is still active in the field of research and is director of his own research institute, the International Center of Genetic Epistemology. His theories are being subjected to more and more research. During the last several years, Piaget has revised many of his theories. He has been particularly interested in the development of perception in children. When he works with a child, he takes himself down to child's level.

To Piaget, the child is not a miniature adult, but rather an individual living in a world of his own which at times is very incomprehensible to adults. This child is interested not in how different he is from every other child, but rather how like he is. Bright children may develop at a faster rate than dull ones, but all must go through the same period of development and learning to adapt to the world around them (61:12)

Cognitive and emotional development may be permanently damaged during the pre-school years as this is the time these are formed. If there is damage in this area, emotional and learning problems will manifest themselves as school life starts. Ideals of morality and cooperation are formed in these early years, although the ideals of the peer group take over during the middle years of childhood when there comes to be a question of submission to authority. To the very young child, the parent is the usual final authority on any subject (61:72).

Emotional changes brought on by puberty are not as important as might have previously been thought because the fundamental problem of adolescence is that the individual is learning to discipline himself. He has to learn to prepare to assume the adult roles in attaining goals and establishing ideals.

"Effective, enduring work, undertaken in concrete and well-defined situations, cures all dreams," is Piaget's answer to the adolescent with his contempt for the society in which he lives (61:90).

Piaget believes that the child is always trying to establish a state of equilibrium between what he understands and what he is experiencing in his environment (57:194). He is not able to think like an adult because he does not have the logical structures, the organization

of thoughts, and the methods of reasoning are the results of maturation in an adult (54:170). That is one reason that a child would not understand the theory of relativity. By experience Piaget refers to both physical experience and empirical experience such as lifting weights, riding bicycles (55:211), counting marbles. These are all sensory-motor experiences (58:406) and without them for a background, reading and school will have little meaning. Social transmission, the process of verbal instruction received by a child at home and school, sets up a conflict within the child and disturbs his equilibrium so that the child is forced to find an answer. Sometimes his answer will be a mistake, but he learns from his mistakes.

Piaget's theory of cognitive development is divided into four stages: (1) the sensory-motor period from birth to two years. (2) The preoperational period from ages two to seven. (3) The concrete operational period from seven to eleven years, and (4) the formal operational period from eleven years to adulthood.

The sensory-motor stage is subdivided into six areas, four of them in a child's first year of life. In the first stage from birth to two months, there is no distinction between self and outer reality. In the next period of development, chance and a combination of primitive reflexes unite. The third step reinforces step two intentionally to make changes in the child's environment. From eight to twelve months, the beginning of behavioral patterns together with visual and better motor perception are utilized. From one year to eighteen months, the child learns to manipulate objects to gain a goal or a desired object. He varies behavior patterns for different results, usually trial and error. The sixth step is the internalization of sensory-motor behavior

patterns and the beginnings of symbolic representation. Internal experimentation begins rather than trial and error.

The preoperational period is characterized by egocentric thinking expressed in animism, artificialism, realism, and magic omnipotence. Perceptual constancy and symbolic play together with overgeneralized conceptualization is characteristic of the two to four year olds. In the four to seven year olds the beginning of prelogical reasoning appears based on perceptual appearances untempered by reversibility.

The child from seven to eleven years old develops logical thoughts, is able to reverse conclusions and classify objects and can work with concrete things in a part-whole relationship.

From eleven years on, the child begins to be able to theorize about relationships, thoughts, hypothesis testing, and logical conclusions.

While most of Alfred Strauss's work was with the children that he had labelled as "brain-injured," he did make observations about other children who had unusual conceptual behavior. When given large number of objects to sort into groups on the basis of common characteristics--such as size, shape, color--some bizarre combinations would result. There was also a meticulous placement of objects. The child's level of development must be considered. According to Strauss, brain-injured children have excessive difficulty in identifying foreground material in some of the gestalt figures. The brain-injured child as a general rule does not bite his fingernails, have tics, and is not subject to deep-seated anxieties. Tactile and auditory problems were also found. Drill with these children should be avoided because of automation, perseveration, and verbal memorization. Repetition should be achieved

through frequent experiences of insight and analysis. Speech training was needed with some and should be done by specialists. The teaching of rhythm and manual training was recommended (52:34).

Newell Kephart, one of the author of the Purdue Perceptual-Motor Survey, holds that although the perceptual-motor problems are usually anatomical or physical in nature, our restricted modern life with its limited development of eye-hand coordination, form perception, and time-space mechanisms have aggravated the problem.

For learning to occur there must be an ability to recall what was done on a previous occasion so that the muscles can adjust to what the brain has perceived. The two, perception and motor learning, must be learned at the same time. Before any higher intellectual learning can take place, there must also be perceptions of the body image, orientation in space, and discrimination of the things perceived (63:1-10).

Raymond Barsch stresses the pupil-helping-pupil approach to learning because such variations exist in the learning processes of children because of experiences, opportunities to learn, parental emphasis, success levels, and primarily because the school curriculum has done little to help the child with learning problems. He uses some unusual techniques and does not believe in a rigid schedule.

Marianne Frostig believes that poor perception is the cause of most learning disturbances. The child should have perceptual training before school, if possible. Children should be evaluated in six areas: sensory-motor abilities, language, visual and auditory perception, higher thought processes, social adjustment, and emotional development. Her programs are individualized after four tests are administered. The

tests are: Marianne Frostig's Development Test of Visual Perception, Wepman's Auditory Discrimination Test, Wechsler's Intelligence Scale for Children, and the Illinois Test of Psycholinguistic Abilities (24:373) (25:4).

To aid in amelioration of these learning disabilities, Frostig believes that emphasis and training should be in whichever area the child is low, that distractibility and impulsivity can be controlled by classroom management; the teachers have to use a variety of materials in the teaching of subjects and skills, and the child's social and emotional development are important (52:42).

Kathleen and Loren Fitzhugh concentrate on spatial organization, language, and numbers. They developed a special workbook that the child can mark his answers in. When the correct answer is written, there is a green response. The child gets immediate satisfaction when his answer is correct. This program is a supplementary self-help or remedial program designed to be used about one hour a day over a six month period of time.

To G. N. Getman, visual perception is a learned activity that relies on a series of sequential, physiological actions. Unless the body parts and systems have good coordination, visual perception of forms and symbols do not emerge. Getman utilized four processes described as: (1) the anti-gravity process which is used to locate oneself in the environment. (2) The centering process which will identify the person and objects in the environment in relationship to him. (3) The identification process which is the ability to identify and label things. (4) The speech-auditory process which is a communication skill.

Getman has also planned a series of practical lessons for the development of perception. These programs start with practice in general coordination, then balance, eye-hand coordination, eye movements, form recognition, and finally visual memory which involves imagery (52:47).

Carl Delacato believed that if the problem was in the nervous system, then treat the nervous system. If it were organs or any of the organs, then treat them. The neural system starts its growth in the first three months of pregnancy and continues for about six and one-half years after birth. It progresses vertically up the spinal cord through other areas of the central nervous system to the level of the cortex. At the cortex, progression is lateral sometimes from right to left, and with others from left to right. All the lower levels must be developed adequately before dominance in either one side or the other can occur. Trauma of the controlling cortical hemisphere results in loss of language skills. Trauma of the subdominant area results in tonal factors--their melody, rhythm, and accent abilities are affected.

Aphasia, delayed speech, stuttering, retarded reading, poor spelling, poor handwriting, and reading within normal range but below the mathematical performance are all decreasing degrees of the same problem, communication. These are all neurological disorders according to Delacato.

Training might start with the tonic neck reflex, proceed to sleep patterns, creeping, crawling, cross-pattern creeping, and up to the eye exercises (52:50).

The Delacato method, used primarily in Parochial schools, reportedly after two weeks of crawling exercises settled one hyper-

active child and within two months cleared up a bed-wetting problem of a nine year old (83:421).

According to Samuel T. Orton, psychological and environmental influences played an important part in language development. Certain constitutional differences make language harder for some children than for others. Laterality and dominance affect the language. Man's superiority over other animals comes from communication with his kind and from manual dexterity. Both of these are controlled in one hemisphere of the brain. Symbolic language has to be the result of training and consists of four steps, understanding the word, reproducing it, understanding the word, and writing it.

Orton discovered that the area of brain damage is more important than the amount of tissue destroyed. One brain hemisphere is not used for reading and damage there results in no loss in speech or reading. Similar patterns emerged for hearing and language loss.

No one formula can apply to all children. Each must be analyzed on his own problem (52:63).

A learning disability, to Barbara Bateman, is any child who displays a significant discrepancy between what he is able to do and what he actually does. He should not be emotionally disturbed, mentally retarded, or handicapped visually or auditorily. The program that best suits the child should be used (45:73).

Bateman suggests five stages to be used: determine whether a disability exists; utilize knowledge on how the child performs; list constitutional and familial factors together with educational information regarding the child; diagnose hypothesis avoiding technical terms, related problems, and recommendations; educational recommendations.

Douglas Wisemen is perhaps best known for his work with the ITPA, the Illinois Test of Psycholinguistic Abilities. Remedial work is assigned from deficits found in any of the tests (52:68)

To Grade Fernald, all difficulties in school whether from poor physical or emotional adjustment and difficulties with school subjects can be removed or compensated for if the child is of average or above average if proper diagnosis is made and treatment is provided. Her general rules, used universally, are (1) Do not call attention to an emotionally loaded situation, (2) Do not use methods by which the individual can not learn, (3) Do not subject a child to conditions that cause him to feel conspicuous or embarrassed, (4) Try to direct a child's attention to progress rather than what he can not do.

Wayne Otto and Richard McMenemy warn that diagnosis is not a one-shot thing. Throughout a program, diagnosing must be done to determine the effectiveness of the program and to effect any remediation needed (52:70). Work with child at the level where he is and where he can experience success, decided whether the child works better in a group or alone, and consult specialists when in doubt (52:70).

Perception

Perception has many meanings. It can be an event in the person or organism, primarily controlled by the excitation of sensory receptors, yet also influenced by other factors of a kind that can be shown to have originated in the life history of the organism (21:378). It is an intuitive feeling or recognition about something experienced before. It can influence behavior.

Perception involves several processes. It involves one or more of the sensory organs, the muscles, and the brain to code and classify the impression, and to store it until need for recall.

Imagine the differences between the feel of a piece of velvet and a sheet of sandpaper, the differences between riding a rocking horse and riding in a new car. Recall the smell of coffee cooking over an open campfire, and a skunk that has just sprayed everything in the area. Think of the first time you sucked an unsweetened lemon, and remember a dish of home-made vanilla ice cream. What does a bad thunder storm do to you as compared with the sound of children singing Christmas Carols?

These are memories, but they are compounded of perceptions that are related to actual experiences that are part of each person's life.

Psychologists have been trying for some time to determine whether the normal visual and tactual perceptions of shape and pattern depend upon learning or whether they are inherited.

Before learning can begin, the child must notice something. It must attract his attention. The ability to focus on relevant cues in the environment is a necessary must to learning (11:29). Next in order the child must make a response to the cue he has noticed. Because many

many responses gain attention of others, it is through these that the process of socialization starts. Noticing and doing are not necessarily indicating that learning is taking place. The needed implementation is order. Order in responding to commands and directions. The child's first real confrontation with order comes in toilet training. For the next several years he will be given orders, specific, non-specific, direct and non-direct. Behavior will be expected to conform to the rules of society. School will add more specific directions, rules, and orders. Perhaps the exploratory nature of children is one of the great and fascinating ways of learning (43:64).

As long as a child is a member of one society or another, social relationships will play a huge part in his life. Play has rules, but these are subject to change by the group (38:44-59). The social relations in the school are very important for learning and for peer opinion. The success or lack of success in learning to read will have definite social ramifications.

Mastery and achievement are almost lost without each other. The child who has mastered a subject feels a sense of achievement.

Piaget states that from the fifth week on, or from the time that a child starts to smile, perception is starting within the brain. This does not necessarily mean conceptualization, because that comes much later. However, persons and objects are tangible and animated with little discrimination. When the child is able to reach out and grab and manipulate, then the organization of perception has begun. Some become reflexive type habits, not true reflexes because the child is incorporating and making differentiations.

Intelligence appears before language. There has to be an

understanding between the relationship between himself and something to be manipulated. A ball rolls under a davenport. The baby tries to get it, finds that his arm is not long enough, and gets a stick to push it out. This requires thought, and usually is done about the eighteenth month (59:4-69).

One test that is fairly easy for adults, but quite hard for the children, is the oddity test. A group of items with something in common--shape, texture, color, size, pattern--are grouped or placed so the child can see, feel, and examine. There will be one in the lot that does not belong to the group. The child is to find the one that does not belong (10:19).

Piaget used brown and white beads, made of wood and all the same shape with some of them painted brown and some white. The child was asked to put all the wooden beads in a box. It took several months for the concept of shape determined the choice.

The human infant handicapped by an impaired or missing component of his sensory-motor system can still acquire concepts through various compensatory behaviors. The blind improve hearing (15:9-10).

Many children's verbal ability far surpasses their performance ability. Since most school tests and assignments are performed under the stress of getting something done within a certain time, these children are under definite disadvantages. There are a couple of approaches that can be made, one is to improve the manual-visual skills which include dexterity, eye-hand coordination, and fine motor skills with tasks that make them use fingers and hands. Another particularly good tool for these children is the typewriter, especially if hand dexterity is quite poor.

Simple tasks require more motivation for performance than do the more complex ones because of boredom. However after doing simple muscular work, better performance can be obtained in mental skills.

There are many games that can reinforce concept thinking. Simon says, kickball, steal the bacon are all games that have several activities in them that will improve gross motor skills. Activities that are good for motor skills are balancing, hopping, throwing.

A child needs the security of being loved. He needs to be touched, loved, talked to and noticed. Perhaps one of the most unusual experiments was that performed in the reign of Frederick II during the thirteenth century. Frederick wanted to know what kind of language a baby would speak if he had been exposed to none. He had fifty babies. He had fifty women, each to take care of one child. The women were not to speak to the children, fondle them, or play with them. They were to see that the children were fed, diapered, and generally cared for. No one ever knew what the language would have been because the babies all died. This has happened in institutions today when there has not been sufficient help to care for infants (19:47). A child can accept love and also give it without any anxiety about the giving. He is comfortable with himself, his family, and his social group, and they are comfortable with him (18:106).

If an environment is favorable, the individual will develop to a better degree than if unfavorable. Of importance is the receipt and processing of information about the environment and the way in which the child reacts to his environment.

If the child does not have adequate information to formulate an opinion or experience to reinforce an action, he will be less efficient and effective in developing higher mental abilities (35:341). If he

has no success in one area, he will withdraw. This "psycho-social phenomenon" of the individual's antagonism in areas where he has previously failed only increases the magnitude of his experimental deprivation (59:54-55).

Perceptual motor learning and performance seem to be based on several different attributes, generally called behavioral supports. These include the aspiration level, arousal, ability to analyze a task, in addition to other perceptual abilities. These can influence verbalization and cognition, subject to modification by the individual's self-assessments of what should be done. Ability traits have much to do with performance.

The raw stimuli that reach the brain would remain only raw stimuli unless the brain was interacting with the world and with the internal world of his own, the awareness of his own body and his own self. This motor information comes from a sense of equilibrium and from kinesthetic receptors in the muscles, joints, and tendons.

Once the motor functions have become well-organized, considering size and age, then sensory information can be added with the motor base to build upon (20:9-11).

The process of movement learning starts with broad-generalized movements of the more general areas, then finally to localized or specific areas. Difficulties will arise in the child's learning ability if any of the sequential steps are missed or omitted. "Splintering" the learning of a skill or activity before the fundamentals have been grasped. It would be like teaching a child to stand on his head before he knew how to do a forward roll. In an adult it would be trying to fly a plane because you had read a book on flying.

Perception involves integrating reflexes into the conceptual schema of life when controlling them at times can be more difficult than the initial movements. These reflexes are combined and organized into generalized patterns which are of unlimited variety. It does not require the same muscles each time or that the muscles be used in the same way. The child who reaches behind him to pass a note, overhead to catch a fly, and at the side to tag a runner is using the same arm in different ways with different muscles.

Gross motor skills must be developed first. Hopping, walking, running, jumping, and other activities involve the use of the big muscles. Learning to walk is not only a hard chore for a baby, but also a painful one. He takes a good many falls and bumps before he becomes very proficient.

Development of the body schema is the second stage of development with balance, directionality, body awareness all incorporated in this so the child learns to orient himself in the world. For the first few years, everything is oriented to the child's position in the world. It is also the time of developing the concepts of back, front, up, down, near and far. The child learns to fight against gravity from the time he leans over and falls out of his high chair, sits down when he is learning to walk, discovers steps, bumps his head when coming from under a table or chair. He learns what his mouth is for and does much experimenting in trying to get anything and everything into it.

In the perception of space, the child learns in usual order proximity, separation, order, enclosure and continuity of structural elements; then he responds to curves, angles, lines, and parallels. All work should be presented in this order.

Integration of the separate parts and their movements into generalized movement patterns starts when the child first notices his own first moving. It is sometime before he realizes that it is his. He eventually integrates these movements into patterns so that he is able to focus attention on the movement itself (58:8-53). The first time a child hits the water of his bath with his hand, the splash and sound startle him. Maybe because his mother laughed, he does it again. Bath time becomes fun time.

Perception is a thinking process which gives meaning to a sensation or stimulus. It is the knitting together of nerve impulses into a conscious impression of the external world. One sees what one wants to see (9:578-81). Imagery has to be present.

If perception is recognizing the world about one, seeing and interpreting by relying upon a previous experience, then memory draws on past experiences also. If an emotional problem is present, the learning will be absent or distorted. The ability to learn in school depends upon the ability to form associations. The more stimulation the child has had, the more and the quicker he learns. The exception to that is with an excess of the stimulation, for example sound. The child hears so much with radio, TV, and a house full of relatives and friends, that he learns to turn-off the sound and listen to what he wants to.

One of Delacato's theories was that the tonic-neck-reflex unless developed in young children when they were learning to crawl would interfere with their learning abilities. A child with a deficiency in the use of the neck muscles that pull the head up and back and who perhaps never crawled, will sit at a desk with his hips and knees bent to work against the tendency of the elbows to straighten. He will

slide down to keep his head forward while he writes and will use more pressure on his pencil and break the point.

This same child will have difficulty in working at the chalkboard. He will seldom write above his head unless he holds on to the chalk tray with one hand. Sometimes he will have his knees placed quite closely to the wall to brace himself if he has to do something that requires the use of both hands.

This child cannot catch a fly ball, compete in a wheelbarrow relay, or look for a plane in the sky (36:414). The Delacato plan would have this youngster start at the stage he missed, crawling, work a few minutes each day and progress on to other skills.

One boy, high school junior and a very poor reading prospect because he read at about fifth grade level, asked whether the Delacato method would help him. In leafing through the magazines in the library, he had read the article in one of the popular magazines concerning the work of Delacato. This boy's walk was more a shuffle, his head and neck led his body down the hall. He was awkward in gym because his movements were uncoordinated and jerky. He did not get along with the others in school.

This boy was the youngest of four children with an older brother and two sisters. The family lived on a farm where the mother liked to work outside. As the three older children were fairly close together in age and because there was at least a six year difference, no one wanted to stay in the house with him. He was not allowed on the floor or ground except at meal times until he was two years old. He never had learned to crawl. Whether he tried it, he never said. He did all of a sudden do better in reading, and finished three years of college.

In intelligence tests this boy had been in the average range. In achievement tests, he was always one to two years behind.

A criticism of today's schools states that in gym we are not including a sufficient number and variety of skills emphasizing body parts. In the classroom we are neglecting the contact skills--the manual exploratory skills. Body awareness has to be developed before perceptual training can take place (39:204-205).

In one of the first experiments for visual perception ability, apes were reared in darkness from birth to the time of testing. Then they were tested on visual discrimination forms and showed much visual deficiency in this area, but there had already been some deterioration of the eyes because of long disuse.

A second experiment on birds with translucent head covers that allowed light to come through, but not enough to discriminate forms, showed that these birds were deficient in visual perception of simple forms that other birds knew.

A very disagreeable tasting caterpillar, the larval state of the Cinnabar Moth, is brilliantly striped in black and yellow. After once trying it, birds reject it (16:92-95). From observation, chickens also reject these caterpillars by cackling loudly and withdrawing to the other side of the pen.

The Marianne Frostig Developmental Test of Visual Perception is one of the better tests of visual perception because of the amount of research for standardization, reliability, and validity. It is an excellent screening device for pre-school, first and second graders, and may be used after the age of eight with some success. The test, divided into five areas, measures visual perception.

Test 1 measures the Eye-Motor Coordination. This is dependent upon the musculature of the individual. The first figures are easily done as there is wide spacing provided. As the space becomes narrower, the fine muscle development is needed here in order not to go over the lines. The curved lines are easier for the child to do than the angles or drawing or tracing over another line.

If the eye-motor coordination on this test is low, then a check with the Purdue Perceptual Motor Match is indicated. If it, too, is low, then there might be a lack of visual motor structure present. This might need an ophthalmologist, excercises, or a combination of both. Ophthalmologists have said that there has not been enough scientific evidence as yet at this time to prove that perceptual motor training of the visual system can significantly influence reading disabilities (6:536).

The second test in the Frostig is Figure Ground. This test involves geometric patters within other patterns. This is primarily a test of form perception. Sometimes a child who has trouble in this test will have troubles in the language arts area because he can not recognize words within words, for example, horsemanship. Imagine the responses from a first grader. Once he identified the words, he would still have trouble getting the associations. It is in the addition of prefixes and suffixes that the child might have some difficulty.

The figure ground test in the Frostig, according to Marianne Frostig is the one that shows emotional disturbances and has had a high correlation (24:373) (27:1).

Figure ground discrimination is necessary in school work for the concepts of lines, circles, straight lines, up and down, and is the basis

of conceptualization. Rearrangement of the elements may present an entirely different picture. The child who has trouble with figure ground might recognize the word in its printed form and be completely lost if it was in cursive or script type.

In the third test, form constancy, geometric patterns are used. Circles and curves are easier for the young child to draw. Many times a small child will locate the four corners with dots and then draw lines to connect the dots. This test incorporates designs within designs with distractors. A child knows from the pattern he is shown exactly what he is to outline. He is told to draw a line around each circle. A picture of a circle (ball) is shown to him, but he is not to do anything with the ovals (eggs). Then he has squares to do, but not the rectangles (boxes).

With children who do poorly in this area, sometimes they should be involved using three dimensional forms so that they can feel as well as see the forms (27:3).

In test four, similarities and opposites, the children seem to recognize the opposites easier than the similar ones.

Test five is spatial relations and is a very difficult test for little children as it requires that they look at a pattern and then draw one like it. This test is of extreme importance in both reading and writing since the child has to deal with a pattern laid out in space (23:311).

The Frostig Program was originally a set of ditto masters costing about a hundred dollars for the entire program. Practice could be done in different areas, but they were not separated by level.

In 1966 Marianne Frostig and David Horne presented a new program.

This program called The Developmental Program of Visual Perception is presented in workbook form. It differs from the old program in that the work is presented at different levels, it includes more instructions for physical exercises and three dimensional activities. These directions in bold-face type say, "The physical exercises and three--dimensional activities are as essential to the success of the program as the paper-and-crayon exercises. They should on no account be ignored (26:6)."

Marianne Frostig states, and restates throughout all her writings that the integration of various abilities is essential. To strengthen visual perception, we have to improve motor activities, the sense of touch, and develop the sense of hearing so that a child learns to listen (25:2).

The Bender Gestalt Test is perhaps the most predictive test for visual perception. The patterns are relatively simple, for an adult, and do not take long for a child to do. The test is usually done in less than fifteen minutes. The spatial organization needed to do this test can indicate the possibilities of a reading problem among other things.

Integration of designs can show directionality or lack of it. The math principle, the part-whole relationship, is also covered in this test. Ordinarily a five year old does the drawings faster than a nine year old. There is, however, a difference because the five year old hurries through the drawings. If a child needs an excessively long time to draw the Bender figures, he may be a perfectionist or working against a visual perception deficiency (47:37).

In her manual for the Bender, Elizabeth Koppits says:

School achievement in the elementary grades is related to three basic functions in visual-motor perception. Apparently a child must have achieved maturity in these areas before he can function well in school: (1) the ability to perceive a design as a limited whole and be able to start and stop an action at will, e.g., he has to be able to follow simple instructions down to the last detail and must not expand the drawings of a limited series of dots into a long string of impulsive loops or dashes. He must not get carried away by an activity and must not repeat it over and over again, unable to stop himself from perseverating. He must be able to perceive and to comprehend the beginning and the end of a word on the printed page. (2) The ability to perceive and to copy lines and shapes correctly in regard to form and directions, e.g., to be able to write letters correctly with all their curves and angles, and to be able to follow a written word from left to right. (3) The ability to integrate parts into a whole Gestalt, e.g., to be able to form whole words out of single letters and to understand that one and one make two (47:9).

It was found that some children who did not do well on either the WISC or the Stanford-Binet did quite well on the Bender. Because of lack of verbal stimulation as well as other cultural implications, they had the potential but needed more stimulation. If a child does poorly on both the Bender and either the WISC or the Stanford-Binet, he probably is working at full capacity and can not do much better.

One special form of visual perception that is usually caused by a genetic factor is the red-green color blindness. Color blindness varies from monochromatism which is the complete inability to discriminate different hues and saturations, although brightness and perception remain normal, to a complete color blindness where everything is gray. In normal populations one of every twelve males is color blind. In females only one of every hundred females is color blind. In the retarded children one of every five children is color blind, regardless of sex. In di-chromatism, the individual sees only two of three basic hues, red, green, blue (65:609).

Dr. Humphrey F. Sassoon and Margie Tolder of the Texas Research Institute of Mental Sciences, Houston, reported a mild color vision deficiency at the convention of the Federation of American Societies for Experimental Biology. An evaluation is being made at Bethesda, Maryland.

Dr. Sassoon stated that tests to detect color-blindness are not very good for detecting blue vision defects. If a child has even a mild deficiency in blue vision, he will not be able to see the blue lines on his paper that have been printed for guides. With the prevalence of blue-green chalkboard with the use of yellow chalk, the child might have trouble reading the writing.

Most of the work given young children, that is in addition to their usual work, is in a faint purple ditto. A child with blue-vision deficiency might still be trying to read the paper when everybody else was finished.

One half of the three year olds screened showed a blue color deficiency; eleven per cent of the ten year olds made the same kind of errors, and eleven percent of the checked adults also had a mild blue-vision deficiency (75:3).

Dr. Sassoon believes that this color deficiency will label the child as slow, one with a learning problem, and will lead to frustration, anxiety, and will interfere with learning.

Binocular vision starts to develop at the child's eighth month. With some children, it does not develop. Groups working around the country have done screenings for "lazy eye" and referred to doctors those who seemed not to be using both eyes.

In the event that one eye does not function, only one eye is

required for reading. Depth perception, the ability to judge distance, draw a straight line, are all more difficult. However, if the person is moving, he regains or develops depth perception as long as he is in motion.

Most pilots have wider peripheral vision than the average person.

Hyperlexia is the ability to recognize words on a higher level than the ability to equate them. This happens to many children and gets them into trouble when the teacher equates word recognition skills with intelligence. The teacher thinks that they are smarter than they actually are (71:41).

In some children the motor match with the visual perception is deficient. There is a deficiency in directional relationship. They can not see the relationship between up and down, right and left, back and front, and become confused. When it comes to the printed word, "b" and "d" look alike.

Dominance

The area of dominance is an area of disagreement with the writers of learning disability papers. The Delacato proponents would insist that since it is primarily a motor function, it should be in their area. Most children establish dominance in either the right or the left hand prior to school. With the slower maturing child, this may be extended another two years until the child is almost eight. At that time most children can tell the other person's right or left hand when asked to do so.

If the child is confused about rights and lefts after the age of eight, an emotional problem might result. If an ophthalmologist's

report is that the vision is normal, then it becomes a matter of training the preferred hand, foot, eye, and the entire body.

In testing a child suspected of no dominance, using the Bender, and then checking the male parent with the same instrument, the parent made the same kind of errors. The father was ambi-dextrous.

The child who does not know left from right when told to work from left to right, becomes easily frustrated. When the teacher is short of patience, the child can suffer and become an emotional problem.

Kephart defines the right-left generalizations as directionality and laterality. Using the body as a zero point axis, a child determines how far right and how far left to go. If this is not established, then his space orientation is faulty, his spatial perception is off, and his reading ability is poor (63:9-11).

Auditory Perception

Auditory perception is the ability to receive and to respond to auditory stimuli (82: Program 22). The child with an auditory perception problem will make many errors in decoding words. The teacher who uses the phonetic approach with this child will run into trouble because the child will usually have trouble in several areas: (1) Auditory figure ground--a child is unable to differentiate between certain pitches, intensity, and time. To him it is all noise. (2) Auditory discrimination--the child is unable to distinguish between sounds phonologically similar, cab, cad/ gale, jail. (Auditory memory span, the child is not able to remember aural information. He may be able to remember two directions, but if you give him a third, he becomes confused. (4) Auditory-visual integration is the ability to translate information

rapidly from one sensory modality to another (4:385). Once in a while a child will have intersensory interference, a difficulty in translating the language he hears to tell what he sees (22:20).

The counselor usually can do the auditory tests from the ITPA, decoding, association, sequencing, and refer the child when needed. Normally no child has both an auditory and a visual problem (12:584).

With some children, however, deafness is not a physical condition but a perceptual deficit resulting from an RH factor. Over one-half of these parents of RH deafened children were enrolled in college at one time or another. These children show poor memory, poor handwriting, lack of abstract ability, and hyperactivity. They are sometimes an emotional problem as they have poor impulse control and tend to do much perseveration in school. With so many of them having had parents with more than average education, there will be an additional emotional strain here (53:8).

Hyperactivity

Parents are usually not aware of a child's not acting up to the normal standards of what other children do, especially if this is the oldest child in the family. It is usually in kindergarten or the first grade that the school notices that the child is different in his actions.

As a baby and a small child, he slept poorly, cried a lot as an infant, was very irritable on occasions, and then was as charming as could be. As he got older, he fought sleep, and when still older, he wandered a lot (84:105).

Sometimes the hyperactivity is a dietary deficiency, sometimes

sometimes a vitamin deficiency, and sometimes it is a case of worms.

An attempt by training motor responses to slow down hyperactivity is to give them movement tasks that require performances over an ever longer period of time. He is unable to do many gross motor skills well. These motor tasks must be of interest and require concentration. He will usually prefer cursive writing to printing as curves are easier for him to do (30:44).

The hyperactive child is lacking in impulse control, is easily distracted, and unable to concentrate or work at a task for any length of time. In either the Frostig or Bender, he will show visual perception problems. His relations with his peers and his parents are sometimes quite poor.

The hyperactive child is extremely hard to test. With an attention span of fifteen minutes at the longest, the testing sometimes stretches out to several sessions. As the child will not sit still, he is in the seat, on the seat, under the seat, about the room, and sometimes in your lap.

This child has trouble to synthesize experiences into a meaningful whole. He will respond to things in parts and segments. Often he will give you a far-out tale.

In figure ground work, there are distortions. The hyperactive child has trouble distinguishing between the figure and the background. He has very poor coordination in physical education classes, and he is not very able at catching a ball.

The hyperactive tends to persevere a great deal. He is often unaware of it, but seems to do it under compulsion. He is always in action. He cannot control his motor activities and responds to every

to every stimuli which encourages movement. He is basically clumsy and displays poor balance. He might have trouble locating body parts when asked. His "draw a man" picture from the Metropolitan Readiness Test will often have the arms sticking out of the neck. His speech is often rambling. At times he needs a place just to be by himself. If no room is available where the child can go to work by himself for a short while, then the library, the rest room, or even a carrell in the room will help. Any place to shut off the others few a minutes is what he needs (15:180).

Hyperactivity has a tendency to decrease at about age thirteen. By the time young adulthood is reached, it has become controlled. It is not often encountered after age twenty. The person might still be a nervous individual but the distractibility has disappeared. Many of these children are on medications. Tranquilizers are not usually prescribed by the doctors. They do prescribe a stimulating effect one--dexedrine, benzedrine, Retalin, Tofranil, Aventy--as these have a reverse effect in this condition. They are not habit forming with these children. They must be given daily and only for the improvement of attention. At times they will overcontrol, then the child has loss of appetite, inner tension, insomnia, irritability, and sometimes nausea. This should be reported to the doctor so medications can be changed.

Hyperactivity, or as it is sometimes called, hyperkinetic impulse disorder, affects approximately ten percent of the school age children in varying degrees. Boys are more frequently the victims than are the girls. One explanation is that boy babies have more birth injuries because they are born with larger heads and are more likely to create a problem during the birth process.

In school these children will perform better in a one-to-one situation as they are too easily distracted by the movements and talk of the group.

These children are sensitive, easily set off to laughter or tears. They are explosive. They get mad quickly and get over it just as quickly. They need immediate gratifications of wants. Their performance is varied and often unpredictable. He is a source of irritation to himself, his teacher, and his family (49:160).

The causes of hyperactivity are generalized as follows: genetic factor, poor implantation of ovum, threatened miscarriage, maternal illness, medications, abnormalities of birth process, illnesses, injuries, hemorrhages in first three years of life, or abnormalities of function, from emotional causes, or delay of maturation.

Malnutrition and Learning

Malnutrition has been recognized as a factor in the ability to learn. In many rural, poverty areas, the schools provide both a morning meal and a noon meal. These poor children do worse in school and on lists of intelligence, social, and psychological factors.

The undernourished have a higher infant mortality rate, higher rate of infectious and chronic diseases, greater number of premature births and lower birth-weight in infants. They also have more mentally retarded in proportion to the population.

When an experiment was done on rats during pregnancy with a good diet as opposed to an undernourishing one, the young rats of the undernourished mother had smaller brain cells and fewer in number. The offspring had this as a genetic factor for many generations.

In humans, the child of a mother who has been undernourished will tend to have a smaller head thus decreasing the area for brain cell development. These infants are 15% smaller in body weight than the normal child. The glands necessary for growth development are also proportionately smaller by about a third. As the children grow older, the better nourished had I.Q.'s about eight points higher at ages three and four.

In the tests that were administered to this group in hearing, perceptual-motor, and visual perception and integration, the research group found that the work was of poor quality. The earlier the malnutrition, the more profound the psychological retardation.

In an attempt to rehabilitate some of these children, some were fed at school and were given vitamin and mineral supplements. I.Q.'s improved from 10 to 18 points. Since a lack of Vitamin C and B complex can impair mental development, these children are going to be given supplements until they are in their late teens.

In the United States, malnutrition is increasing regardless of social class. Children come to school with little or no breakfast except perhaps a bottle of coke and/or a candy bar. When they get to class, they are apathetic, irritable, inattentive, and have frequent colds and illnesses (3:257).

Of the twelve known disorders involving genetic vitamin dependency, B₆ is involved in five. In these cases, the body seems to be unable to use the normal levels of vitamins properly, but treatment with massive doses up to one thousand times the usual requirements have been found significant after two to six months treatment in such things as childhood schizophrenia and reduction of autism. Improvement in

concentration and longer attention span have been noted in the hyperactive.

Children that are hyperactive, psychotic, brain-injured, or have learning disabilities eat a diet which is highest in cereals, in carbohydrate foods, in sweets, and in foods with sugar. The wheat gluten and/or its corresponding glutens in other cereals can intensify a condition if already present, or make manifest one that has been latent (14:245).

Emotional Disabilities

A child is an individual with thoughts, feelings, emotions, and some pretty-far out ideas to some adults. Piaget has explained the conceptual thinking of children and has taken the time to talk, listen, and play with them. Their world is different from ours. We should try to understand theirs, so they will make an easier adjustment to ours.

A child who is not loved as a baby will become withdrawn to the point of giving up or else develop severe emotional problems. If the rejection takes place when the child is two or three, he might become autistic.

Children with emotional problems present many of the same problems as other children with learning disorders only to a greater degree.

Bruno Bettelheim has this to say about the emotionally disturbed children:

All seriously disturbed children are characterized by an imbalance in their motor coordination. Some are inhibited so that not only their psyches but their bodies seem as heavily "armoured," as medieval knights. They seem unable to

to move. It is almost as if they need all their energy just to lift an arm or leg, and that achieved, there seems no energy left for further movement. Some children shuffle along stiffly as if they can not lift their feet, others move only the whole arm, as if they can not bend the elbow.

Other children move their limbs and joints continuously, a hyperactivity which often extends to involuntary muscles or those which do not usually move independently from others. These children, in addition to their hyperactivity, show a continuous twitching of the small muscles, and a wide variety of tics. They seem to have so far lost control of the movements of their limbs or other parts of their bodies that they appear spastic or disjointed (7:189).

Whether the learning disabilities cause the emotional problems or the emotional problems cause the learning disabilities is like a doughnut with the counselor in the hole. He can reach out and take a bite anyplace because he has the whole problem to work on. He should try to work with what seems the most important problem at the time.

There are some emotional factors that do hinder learning in the classroom. These can be either temporary, such as a fight with a friend, or longer-range like the break-up of a home.

An accident might have an influence on learning for several weeks. One high school boy came back to school after being in the hospital with a severe concussion. When he saw the Bender being scored one afternoon, he wanted to try the test. His test showed many deficits for his age. His behavior and talk, as well as his reading ability, had shown a regression. Several months later, he was almost back to where he had been before the accident.

Cultural Factors

In the urban areas where there are minority groups, there can be many emotional problems because of differences in socio-economic status, race, outlook on life, and codes and ways of life.

The Spanish-American child will appear quiet, obedient, and polite because those traits are taught in his culture. The father is the dominant person in the household and his word is law.

After all the black militant displays, the negro child might be aggressive, in some instances. The girls are rather ambiguous in their attitudes toward men. The girls will exploit them because for two or three generations the women have been the bread-winners of the families since the men have not been able to find employment. The men can take just so much and leave confirming the women's opinions that the men are just not worth much. Of course, the men feel that the women are domineering and bossy. The kids grow up with mixed ideas and feelings about their sex and their race. The little negro boys will often be aggressive (85:3). Rigidity and lack of spontaneity are both characteristics of the middle-class negro who has escaped the ghetto.

The American Indians have many subcultures with different backgrounds. There were the civilized Indians, those who practiced farming and lived in their cities. Some developed a high degree of culture with a written language. Then there were the nomadic Indians who relied on hunting and game for their living. Today some of the Indians live in towns and live as other individuals in society while still others live on reservations. They are attached to their reservations. Many feel that the whites are trying to alienate the children by establishing the white customs and ideals. To the Indians the whites are job and money oriented. The Indian philosophies are oriented more toward the family, nature, and conservation of resources.

Suspicion of the whites is characteristic of all three groups. Pride in their own cultures is there (85:5).

The environment, socio-economic backgrounds, familial patterns, mores, and their life-styles mean much to minorities and must be of consideration in assessing problems. The Indians, in addition, have a highly non-verbal form of communication. With the conflict of two very different cultures, practically two different languages, no wonder there is often a learning disability. One can always learn more from the observing than the talking according to the Indians.

Learning Disabled Child's Background Compared with Normal Child's

In a recent study, parents of average children were compared with parents of children with learning disabilities. Certain characteristics manifested themselves. Parent A is the parent of an average child in school who has no learning problems. Parent B is the parent of a child who has many learning problems.

PARENT A	PARENT B
Healthy	Sickly
Active	Lethargic
Moderate Income	Low or definitely high income
Young	Old or very young
Moderate or high intelligence	Low or very high intelligence
Habitually moderate reactions or variable swings between over and under reactions	Habitual overreaction or under-reaction, or unchanging (excessive) moderation
Flexible attitudes; willing to try, to explore, to change direction; willing to "give" as well as "take"	Channeled attitudes: afraid, unwilling or unable to deviate from a fixed course of action or opinion
A well-developed sense of family (there are few generation-gap problems when related families make a habit of meeting together	No sense of family: ignorance of family activities; failure to visit, correspond with, or consider relatives
High mobility	Immobility or low mobility
Outgoing: expansive, social, gregarious; motivated to alter own	Withdrawn: associal, failure to accept other's opinions and actions

own behavior in some degree of consideration of others

failure to alter own behavior in consideration of others

Protective: parental judgments made; child not permitted exposure to undesirable persons or situations. Excessive risks not permitted. Monitors child's TV viewing

Overprotective: even minimal avoided; inability or unwillingness to allow consequences of child's actions to fall upon himself. Underprotective: little or no parental supervision

Effective female: firm voice, love, discipline, organization, planning, achievement, follow-through. At home when child arrives from school

Ineffective female: weak voice, vacillation, lack of organization, lack of follow-through, inconsistency. Absent when child comes home from school

Effective male presence in home, or absent male with effective female in home

Effective male but not present in home, or ineffective male present present in home

Frequent human contacts: mixing with others academically, socially, and in business gives opportunity to learn cooperation as well as competition

Basically negative experiences with others; chip on the shoulder; expecting and getting successive failures in relations with others; contacts made with suspicion if at all

Positive approach to life, child, and problems

Negative approach: sour, glum; "why bother?"

Strong beliefs, opinions, and actions

Weak beliefs, opinions, and actions

Attached: home, church, job, political party, clubs, hobbies

Unattached: drifting or shifting; few roots or contact points

Achievement and status gained largely by personal effort

Achievement and status gained by inheritance, gift, nepotism, bribe, or bluff

Communication in the home between family members: orderly discussion; a chance to be heard but everyone in his place; conversation not all reasonable but not all emotionally based

Poor home communication; some family members ignored; silence or chaotic communication; steady diet of trivial talk or emotional harangue

Busy, involved, industrious: doers, workers; activists

Watchers, listeners, sleepers, sitters; armchair generals and athletes; passivists

Direct acceptances or challenge of facts and issues; dealing with the problems face-on without delay; direct response to life's problems and challenges	Denial or clouding of issues; avoiding diagnosis; failure to hear; excuses, projection of blame, apathy, resignation; partial or garbled responses to problems
Planned Parenthood: children viewed as wanted, perhaps a challenge, coming as direct result of parents' choice	Accidental Parenthood; children viewed as chore, bore, punishment or threat to personal freedom; child may become scapegoat
Organized (but with a loose basic matrix)	Unorganized or overorganized: rigid, unyielding matrix (if any)
Family unit strengthens in time of stress	Family unit weakens or even dissolves in times of stress (88-396)

CHAPTER FOUR

LEARNING DISABILITIES AND THE COUNSELOR

Which should have first consideration: the emotional problem or the event causing the emotional problem? The counselor is going to have to use his own judgment here. Whichever takes priority, that he should do. If at all possible, he should work with both as much as possible.

The counselor who is working with children in the presence of other children should always build on the strong points of his child for any changes he wants to emphasize. Remediation work, built on the weak points, is best worked on individually. As the child has developed the problem primarily because of these weak points, calling attention to them would but complicate the problem and increase the length of time working with the child.

Always avoid labelling. The counselor is but human, and if he makes a mistake in the recording of a test or fact, particularly in records that are kept for years, the label follows the child.

Testing is an excellent method for diagnosing learning problems. The person doing the testing should be qualified and know what the test is for, what it is supposed to do, how to interpret it, and how to use it. Some children will do poorly on a group, but will do well on an individual, test because working against a time limit makes them very nervous. Others need the spirit of competition.

When a teacher glibly quotes WISC scores, ITPA scores, and

admits that she has had no training in the administration and has figured-out the interpretation of the test herself, and admits that the counselor did not give her the tests to use but says that she has both tests in her room and administers them to children in the classroom herself, then testing can leave a bitter taste in the mouth of the administration.

Achievement tests can be valuable tools as long as the teachers are not teaching for the test. These tests can be the basis of a comparison of year to year work. The counselor, if he is new to an area, would do well to go over achievement results. If a child is not reading at grade level, how many years has he been doing this? Did the entire class fall down this one year? It has happened. How do the child's math scores compare with his reading scores? There is usually a good correlation of math and reading scores with I.Q.'s. If his math is average or above, and his reading is down, then talk to the teachers, the principal, the school health nurse, the child and his family. Find out.

When the counselor administers tests, he should remember that Katrina de Hirsch administered as many as thirty-nine tests to each child in a learning disability group. Dr. de Hirsch has stated that the most reliable visual testing instrument for visual perception is the Bender Gestalt.

If the Bender Gestalt presents some unexplained problems, the WISC subtests are good. If there is a discrepancy of more than three points between the verbal and the performance (total scores) with the performance test being the higher, then suspect that there might be a visual perception problem present.

A qualified pediatrician is an excellent resource. When referring a child to a pediatrician who has not seen the child previously or does not know the family, the counselor should provide background information--how the child acts in school, at play, what testing has been done and the results as long as this does not violate the concept of confidentiality of the pupil-counselor relationship.

An ophthalmologist is the most qualified examiner of eyes to whom a child can be referred, for eye examination. In the event of strabismus, the failure of one eye to function with the other for binocular vision, the doctor might give exercises.

If a child with blue color vision is going to be working on ruled sheets that have faint blue lines, Elmer's Glue used to draw the lines and then let dry before use, will present a smooth surface to the child's fingers. Hopefully he will gradually become accustomed to the spacing.

Most tests of motor skills require much time. In doing testing, a short test might be done for screening purposes. The balance beam is one valuable piece of equipment either in the room or in the gym. The trampoline and somersaults, as well as standing on the head, in addition to improving physical body health, will also improve the functioning of the eye by teaching it to look at the world from different angles.

Many first grade children are unable to stand on one leg with the eyes closed. To complicate this, touching the right ear, left eye, or top of the head can show to what extent the sense of direction has developed as well as knowledge of whether the child knows his body well. Walking across the balance beam with eyes closed is a feat that not very many first grade students can do.

The sense of time is not built in people as it is in plants. Most children don't develop the sense of time until after they are seven years old. Some don't develop it until they are almost ten! An hour is almost the same as a minute when something interests them (56:89). Here a stop watch can help develop a sense of time with an older group.

Children love stop watches and even first graders can learn to operate them quite successfully. The stop watch can help develop the concepts of time as they like to time each other at activities. For the first graders, the watch should have a large face and be shockproof.

Similarities can be identified by a short trip to a nearby parking lot for a comparison of cars. If that is too far, then go to the nearest bicycle rack.

For the child who is hyperactive, there should be a place where she can vent feelings of frustration against her own activities or those of the group, and a place that she knows that she can go when the frustration is building up. As the child gets older, she realizes when this might happen, but before that time the child is going to throw temper tantrums, cry for no reason, refuse to work or if he does work, he perseverates. She might laugh hysterically for several minutes or completely withdraw. With so many probable causes of hyperactivity, the counselor will have trouble identifying the real one. An electroencephalogram might indicate some abnormal electrical impulses, but not always. With primary youngsters, some play therapy here might be done.

When a hyperactive child is on medications, the teacher should know. The child's family, the child, the doctor, the teacher, the nurse, and the counselor should all work together with this child.

If there have been other cases of hyperactivity in the family, there might be need of some family counseling. Educate yourself and the staff. Most important is to help the child (41:23) to help her own case.

For the girl with no established dominance, a bracelet placed on the wrist of the hand that appears dominant or a ring on the boy's finger might start the identification processes. The P.E. teacher can work with jumping skills, dart throwing, kickball, and many other fun activities that can help a child build dominance.

Rhythm by the aid of music is excellent for motor skills and for developing a sense of time.

For the child who sits at his desk like a reversed "s", if an eye examination shows no defects, then perhaps the visual motor schema has not been developed entirely because his gross and fine motor skills have not been perfected. Motor activities that will make him tilt his head backwards and look up are good. If he is in the fifth or sixth grade, some of the model rocketry projects are not too sophisticated for this age, and to follow his rocket's trajectory, he will have to use those neck muscles.

There are several books about perceptual training in the grades. A valuable one is the curriculum bulletin published by the St. Paul School District, Bulletin #359, Fine and Gross Motor Activities. They have another one, #360, Language and Cognitive Development. These are arranged on mimeographed paper so that the pages can be cut in half, and for durability be mounted on a six by nine (half sheet) of heavy construction paper and made into a file with headings similar to ITPA.

For screening children individually and quickly, the Bender Gestalt takes less than fifteen minutes. Interpretation of this visual perception test takes longer so it is wise to make notes just after the testing so as to be able to refer back to them.

Sometimes to explain the Bender Gestalt Test to parents, the easiest way is to have the parents draw the designs. The counselor can then show the parents where the child erred. If, as sometimes happens, the male parent draws the design in somewhat the same manner, find out whether he is ambi-dextrous or if he is a left handed individual. Frequently the parent will state that he never learned to read until he reached junior high, and that reading is still not one of his ways of spending time.

Testing always should start where the child is in behavioral age and activities, not in calendar age. Work from there. Piaget's activities, questions, and experiments can be duplicated at any child's level (1:447). His documented work can locate specific findings within days of the normal expected development.

The arithmetic subtest in the WISC is a good measure of the child's ability to form concepts and apply them. In this test both the picture arrangement and object assembly are hard for children that might have a visual perception problem. The object assembly is also good for spatial organization (29:89). The digit span in the Stanford-Binet is particularly difficult for the young hyperactive child. The block counting in year ten is also good for visual perception (77).

Most parents are cooperative and very willing to work with the counselor in any way to benefit the child. Cost of medical treatment at times might be a problem and one that will require cooperation.

Not all children with visual perceptual problems will need help. The child with a good I.Q., 120 or above, often makes good adjustment and compensates within a couple of years of school or less. Boys will sometimes spurt ahead and make good progress when they are in the middle or junior high grades after their coordination has improved.

Perceptual Skills in Elementary Grades

Elementary children are supposed to do certain perceptual skills that examine most of the perceptual areas excluding the sense of taste and the sense of smell.

The following are primarily auditory in nature although other functions might be noticed simultaneously. If the secondary sensory functions occur, they are disregarded.

I. Auditory Decoding

- A. Recognizes environmental noises
- B. Understands parts of speech--nouns, verbs, adjectives, prepositions, etc.
- C. Follows one, two, three, or four directions.
- D. Recognizes the names of the colors.
- E. Understands a story read to him.

II. Auditory Associations

- A. Matches noisemakers by sound, e.g., two horns or two whistles.
- B. Speech-sound discrimination--words, nonsense syllables.

III. Auditory Closure

- A. Recognizes incomplete words.
- B. Auditory blending of sounds to form words.
- C. Simple analogies.

These are primarily the visual areas but may overlap into others.

I. Visual Decoding

- A. Recognizes objects and pictures.
- B. Recognizes a picture cut into two, three, or four pieces.
- C. Recognizes colors

II. Visual Association

- A. Matches colors, objects, pictures.
- B. Matches object with picture.
- C. Matches geometric forms--two or three dimensional forms or three-dimensional forms with pictures of forms.

III. Visual Closure

- A. Recognizes incomplete pictures.
- B. Recognizes incomplete letters, numerals, or words.

These are tactile-kinesthetic functions.

- I. Recognizes by touch alone objects placed in either hand.
- II. Matches sandpaper forms by touch.
- III. Recognizes simple geometric forms, letters, words, etc., when they are drawn on the back of his hand or on his back.

There are five vocal functions.

- I. Uses words, phrases, or sentences.
- II. Uses adequate grammar--proper inflectional endings, tenses, person and number, etc.
- III. Uses adequate sentence structure--words not omitted, transposed, substituted.
- IV. Tells a story in logical sequence.
- V. Mean sentence length appropriate for age.

There are also five motor functions to be recognized or done.

- I. Imitates examiner's actions.

- II. Pantomimes everyday actions--combing hair, brushing teeth, batting a ball.
- III. Copies geometric designs.
- IV. Draws human figures.
- V. Writes his name, letters, numerals, words, sentences.

The memory functions number three.

- I. Repeat a series of digits in, or not in, sequence.
- II. Recall a set of objects seen.
- III. Recalls a set of pictures, letters, numerals, words.

The sequencing functions are also three in number.

- I. Recall a pattern of taps, pitches.
- II. Recall in sequence a series of objects, pictures, forms.
- III. Recalls a series of unrelated words, a sentence, a series of related words (34:342).

Testing Information

The following pages are devoted to aids for the counselor and consist of a short test that can be administered within fifteen minutes for dominance, and a checklist for referral to the mental health clinic or other personnel associated in that area. The final group of pages was prepared by the Pupil Personnel Service operating out of Big Sandy and Harlem until 1970. It answers questions such as: (1) which test to use for what problem, (2) what remedial function can you advise the teacher to use?

For establishing dominance this test will require ten to fifteen minutes each. Three out of three trials or four out of five trials, in which the same member was used for any subtest is rated as expressing dominance for that item. In three out five tests, if variance occurs,

rate as lacking dominance in that item.

Writing, eating, throwing a ball, brushing teeth, and combing hair are tests used for handedness. The child is to imagine himself eating a dish of ice cream, and demonstrates how he would do the others.

Footedness was determined by kicking a ball (a wad of paper), walking, hopping, and stepping up a flight of imaginary stairs. The child was told to put his hands at his sides and his feet together before he did any of the tasks in order to avoid a follow-through motion from a previous task.

In earedness, the child is told to put his hands together, palm up, then the watch is placed in his hands. He is to put the watch at his ear, listen, and tell whether the watch was running. Then the watch is placed first in the right hand, and then in the left, each time, he is given the directions to put it at his ear and tell if it is running. Note should be made to see which ear he uses. A final check is made when the watch is put on a desk or table and the child is told to bend over and listen to it. Dominance is judged by the number of trials in which the watch was carried to the same ear or the head bent so that the same ear could be used.

A card with a pinhole was used to test eye dominance, for near vision. The child was to hold the card first with both hands, then left, then right, and each time was to look at the examiner. The hand is varied in holding the card. The eye to which the card was held was considered dominant for that trial.

When the child was to point with his index finger and aim at the examiner's closed eye, the finger that was in line with either the right or left eye was considered the dominant one. If it was

held at the nose, then no dominance was established for distance vision.

Those with high I.Q.'s establish a pattern of dominance early in life (68:177-185).

A test was made of each child's ability to follow a moving target in order to test for binocularity.

Other objects may be used with the ear test, such as shells, a small transistor radio. A kaleidoscope may be used with the eye to see which hand is used. Also watch his aim at a target when he throws.

When it is necessary to refer a child to a psychologist, a psychiatrist, or to a mental health clinic, the following form has been suggested as being appropriate (33:35-37):

I. Disturbed Classroom Behavior:

1. Day dreams almost incessantly and very few school activities hold his interest.
2. Extremely impulsive and/or hyperactive. There is a quality of drivenness to the hyperactivity.
3. Demonstrates a very short attention span and poor ability to concentrate. Rarely seems to finish assigned tasks. He may or may not perform adequately at the task but habitually never seems to finish.
4. Inability to tolerate frustration--tends to seek immediate reward or gratification; has difficulty waiting for his turn when some activity demands it.
5. Excessive requests to go to the bathroom.
6. Overly impatient for snack and lunch time to come; frequently asks when it will be time to eat.
7. Destructive with his own, peer's, or school property.
8. Inability to accept limits or restraints and will not or can not abide by the rules.
9. Overly exhibitionistic; craves attention and the lime-light.
10. Compulsively ritualistic in work or behavior, e.g., the child who must tap the teacher's desk four times each time he passes her.
11. Tends to be extremely rigid in the way he performs tasks; or consistently tries to straighten or fix things which he insists are unbalanced, inharmonious, or misplaced.
12. Resistant to changing to new activities and in general adjusts poorly to new situations.
13. An inability or unwillingness to handle even the most minor of responsibilities. Burdened by excessive doubts;

indecisive and unable to make decisions.

14. Chronically fearful, apprehensive, or depressed.
15. Will deny vehemently when caught doing something he is not supposed to do. Will insist he did not do it even when caught "red-handed."

II. Disturbances in Attitudes Toward the Self:

1. The child who has a generalized sense of inferiority. He is clearly unrealistic in regard to his strengths or his limitations. Tends to be self-depreciating and ridicules or criticizes self. May express with that he were dead or that he had never been born. Does not feel that he is, or can ever be of any value to anyone.
2. The child who has an expanded sense of adequacy and is equally unrealistic about his abilities. He may feel that he does not have to do what he does not want to do because he is special or privileged in some way, even in face of realistic confrontation by others.
3. The child who feels that his own desires, feelings, or impulses are bad or sinful and as a result generalizes that he is bad. The child may insist that he needs to be punished even when his behavior has not warranted any punishment.
4. The child who is preoccupied with the belief that some aspect of his body is extremely ugly, distorted, or freakish, or who insists that he is crazy or mentally retarded.
5. The child who feels guilty usually without any appropriate cause or the child who never seems to demonstrate any feelings of guilt at all in situations where he should ordinarily be expected to feel some remorse.
6. The child who feels that he is unable to love or be nice to anyone.
7. The child who sees himself (herself) as being more like the members of the opposite sex than like members of his (her) own sex.

III. Disturbed Behavior with the Teacher:

1. Exaggerated rebelliousness or aggression; resistant to teacher's requests or suggestions either in a direct or in an indirect, passive way; seems to perceive every request as a demand.
2. Feels easily hurt or rejected; can not accept constructive criticism since it is a personal attack.
3. Unwilling or unable to share teacher with fellow classmates; tries to monopolize teacher and is very demanding or her and resentful toward others seeking her attention.
4. Extremely dependent on the teacher; can not seem to operate autonomously; overconcern with pleasing the teacher; looks for special favors.

5. Overly shy in relating to teacher and any other adult or authority figure who confronts the child.
6. Stealing from teacher and/or peers.

IV. Disturbed Relationship with Peers:

1. Overly aggressive, controlling, or bullying; may provoke fights or frequently get out of seat to talk to or hit other pupils. May tease or tattle on others to excess.
2. Overly bragging and boastful to peers and/or teachers. Tries to inflate self to others with reports of grandiose achievements or experiences.
3. Extremely competitive with others and becomes upset when teacher praises others in the class.
4. Overly shy and fearful of peers.
5. Frequently used as a scapegoat by classmates.
6. Inability or unwillingness to be concerned about the welfare of the group as a whole.

V. Inappropriately Infantile Behavior:

1. Inability or unwillingness to separate from parents; cries incessantly for parent and repeatedly pleads that he wants to go home.
2. Whining, crying, or temper tantrums, without appropriate provocation.
3. Thumb sucking or fingers incessantly in the mouth.
4. Repeated enuretic wetting or fecal soiling.
5. Inability or unwillingness to dress himself (tying shoe laces, buttoning coat, etc.)
6. Doesn't seem to know his age or anything about his birthday.

VI. Disturbance in Physical Functioning or Appearance

1. Chronically fatigued.
2. Frequent vomiting in class.
3. Frequent and severe skin eruptions, or severe picking at skin, causing sores.
4. Constantly picking, biting, or tearing fingernails.
5. Obesity or overly emaciated appearance with no apparent organic cause.
6. Tics, such as compulsive eye blinking or facial twitches, etc.
7. Seems to be accident prone and "everything" seems to happen to this child.

VII. Disturbance of Speech:

1. Infantile speech patterns (baby talk).
2. Overly fearful in regard to speaking or reciting; may stammer, stutter or speak almost inaudibly.

3. Selective mutism; refuses to speak to teachers, nurse, or doctor, and/or peers, but parents insist child speaks at home.

VIII. Sexual Disturbances

1. Masturbates frequently; either overt or covert.
2. Has made sexual advances to classmates; may deliberately expose genitals.
3. Curses or uses "dirty" words frequently or compulsively.
4. Preoccupied with sexual or birth processes and constantly asks questions of teacher and/or peers.

IX. Difficulties in Learning:

1. Discrepancy between achievement test or IQ scores and level of performance in classroom work.
2. Discrepancy in abilities or performance between types of classroom tasks, eg., being good in reading but very poor in arithmetic, or vice versa.
3. A noticeable lack of motivation to learn or to try to do his best.

DIAGNOSIS AND REMEDIATIONS OF FUNCTIONS

FUNCTION	DESCRIPTION OF FUNCTION	DIAGNOSTIC INSTRUMENT	THEORETICAL REMEDIATION
Box 1 Auditory Decoding Semantic	Ability to respond to similar auditory stimuli on the basis of common conceptual characteristics	I.T.P.A.	Continental Press Rhyming Skills; Phonetic Keys to Reading
Box 2 Visual Coding Semantic	Ability to recognize similar visual stimuli on the basis of common conceptual characteristics	I.T.P.A.	S.R.A. Basic Reading Series; Economy Company Reading Skills; Phono-Visual Method; Continental Press Reading--Thinking Skills
Box 3 Auditory Vocal Association Semantic	Ability to produce another which is meaningfully associated with the stimulus	W.I.S.C. Similarities Stanford-Binet Similarities; I.T.P.A. 3	Synonyms and Antonyms; Continental Press Reading--Thinking Skills
Box 4 Visual Motor Association Semantic	Ability to respond to meaning-components of visually presented stimuli	I.T.P.A. 4; W.I.S.C. Picture Arrangement, Columbia Test of Mental Maturity	Specific Skill Series "Using the Content"
Box 5 Vocal Encoding Semantic	Ability to express ideas verbally with no additional stimuli other than the initial set	W.I.S.C. or Stanford-Binet Vocabulary	Peabody Language Development Kits; Show and Tell, Listen and Tell; Touch and Say

Box 6 Motor Encoding Semantic	Ability to represent meaningful units on the motor level	Myklebust Picture Story Language Test (Abstract-Concrete Scale) Manual Expression, I.T.P.A.	Written Composition "Specific Skill Series"
Box 7 Auditory Decoding Grammatical	Ability to identify a sound pattern of the language	Peabody Picture Vocabulary Test	Words-in-Color Rebus, Sight Approaches to Reading
Box 8 Visual Decoding Grammatical	Ability to identify a visual letter pattern of the language	Wide Range Word Recognition	Linguistic Basals: Programmed Linguistics Approaches; I.T.A.; (Hay-Wingo)
Box 9 Auditory Vocal Grammatical	Ability to hear a fragment of sentence and to supply the necessary symbols to make it whole	I.T.P.A. 7	Specific Skill Series
Box 10 Visual Motor Grammatical	Ability to order a series of words in correct grammatical sequence	To be developed	Rolling Readers; Dolch Phrase and Sentence Cards; Jumbled Sentences
Box 11 Vocal Encoding Grammatical	Ability to produce vocal sequences with no additional external stimuli except the initial set	Stanford-Binet	Ginn Language Kit; Starter Concept Cards; Stories in Pictures

Box 12					
Motor	Ability to represent grammatical sequences motorically	Myklebust Picture-Story Language Test (Scored for syntax)	Puppetry, Pantomime, Dramatics, Written Spelling; Written Composition		
Encoding					
Grammatical					
Box 13					
Auditory	A variety of perceptual processes are sampled from simple to complex including the location of sounds, discrimination between sound patterns, distinction of pitch and rhythm, and integration of sound patterns	Monroe Sound Blending; Wepman Auditory Discrimination	Sound Blending Skill Activities		
Decoding			Durrell's Improving Reading Instruction; Readiness Auditory Discrimination Activities		
Perceptual					
Box 14					
Visual	A variety of perceptual processes from simple to complex are sampled including ocular-motor control, convergence, visual integration, visual discrimination, visual analysis, position in space, spatial relations	Fig. Ground, Frostig & Ayers; Position in Space, Frostig; Spatial Relations, Frostig; Visual Integration W.I.S.C.Object Assembly W.I.S.C.; Raven's Prog. Matrices; Visual Analysis W.I.S.C., Stanford-Binet; Block design, W.I.S.C., Stanford-Binet	Frostig: Fairbanks, Robinson; Erie Program; Ruth Cheves; Fitzhugh Program; Continental Press		
Encoding					
Perceptual					
Box 15					
Auditory	Ability to reproduce a series of meaningless sounds as an integrated sequence (auditory span of attention.)	I.T.P.A. 8	Auditory Sequencing Activities;		
Vocal		W.I.S.C. Digit Span; Stanford-Binet digit Span	Rote Memory Improvement Games; Rhythm Band		
Perceptual					

Box 15

Visual
Vocal

Perceptual

Ability to reproduce a series
of meaningless sounds as an
integrated sequence (auditory
span of attention.)

ITPA 8

W.I.S.C. Digit Span
Stanford-Binet Digit
Span

Auditory Sequencing Activities
Rote Memory Improvement Games
Rhythm Band

Box 16

Visual
Motor

Perceptual
(Closure)

Ability to reproduce a series
of meaningless symbols as an
integrated sequence (visual
span of attention)

I.T.P.A. 9

Frostig; Fernald;
Continental Press; Cheves,
Fairbanks-Robinson; Erie
Program

Box 17

Vocal
Encoding

Perceptual

Ability to integrate speech
into intentional sequences
automatically

To be developed

Verbal Reproduction Activities
Rote Songs; Rote Poems;
Tongue Twisters

Box 18

Motor
Encoding

Perceptual

Ability to integrate skill
movements. A variety of motor
acts are explored including
balance, rhythm, body image
and differentiation, percep-
tual-motor match and fine
eye-hand coordination.

Purdue Perceptual Motor
Survey (Balance and
Posture, Body Image,
Perceptual Motor Match)
Bender Gestalt (Visual
Motor Integration),
Frostig, (Fine Eye-
Hand Motor Coordination)

Kephart; Frostig; Barsch

Box 19

Auditory
Decoding

Projection

Ability to distinguish the
presence and absence of
auditory signals

Audiometric Evaluation Beyond scope of this model

Box 20

Visual
Decoding

Projection

Ability to distinguish the
presence or absence of visual
signals

Optomological
evaluation

Beyond scope of this model

Box 21 Auditory Vocal, Auditory Motor Projection	The ability to translate an auditory signal into a vocal and motor act. The purpose is to assess transmission from decoding to encoding	To be developed	Beyond scope of this model
Box 22 Auditory/- Visual, Visual-Motor Projection	The ability to translate a visual signal into a motor and vocal response. The purpose is to assess transmission from decoding to encoding.	To be developed	Beyond scope of this model
Box 23 Vocal Encoding Projection	The ability to correctly articulate words	Speech Evaluation	Beyond scope of this model
Box 24 Motor Encoding Projection	The ability to initiate, maintain and inhibit motor activities	Neurological	Beyond Scope of this model

(Pupil Personnel Services, Big Sandy, Montana, 1969)

CHAPTER V

CONCLUSIONS

The term, learning disabilities, is a very broad, very general term that can have many meanings depending upon the personal need to describe a situation or a lack of ability in learning. Those working in the area should come to an agreement on the terminology.

The remediation suggestions vary from neurological reorganization to an optical examination with the appropriate exercises. It is this lack of unanimity among educators and specialists that makes prescriptions difficult.

The 1960's were an era of programmed instruction. The 1970's has started with considerable emphasis being placed on learning problems. During the past three summers, the State Department in conjunction with one of the colleges in the state, each in different locality, has had a workshop on this subject. It is a very popular field to write about at the present time. There are several publications devoted primarily to learning disabilities. There is no dearth of material for reading but rather a plethora.

Reading, arithmetic, and social difficulties are symptomatic of more fundamental weaknesses.

Elementary counselors who are working in an area where no psychologist or psychiatrist is available should avail themselves of the opportunity to gain more knowledge and experience in the area of learning disabilities.

The teachers have made the complaint that most psychologists and psychiatrists lack the school background and consequently do not understand the teachers' problems. The elementary counselor should be well aware of what happens in the classrooms. He should have some ideas of what he can or can not do. The counselors should consider inservice training with the teachers so that the teachers are aware of the counselor's job and what he can do. The counselor can also learn from the teachers. After all, the teachers are the ones who see the problem in the classroom most often.

The problem of inadequately trained teachers is more pressing because it involves a serious difference of opinion among educators of teacher training institutions. The argument as to whether or not to emphasize subject matter courses or professional technique courses has been going on for some time. The subject matter proponents appear to be in the ascendency. Local universities offer the most minimal training in the myriad approaches to the teaching of reading. In fact, a secondary teacher of English or language arts can be graduated from most teacher training schools in the country and never have taken a course in the teaching of reading. The primary teacher may be required to take one course in the teaching of reading or language arts. Educators must change the requirements and philosophies of teacher training institutions, if not, then the local school systems must provide an ongoing program of inservice education and curriculum development. In other words, schools will not only need to teach children but also teach teachers (36:9).

There is going to have to be very close cooperation of the entire staff: counselors, teachers, aides, and with the parents, child and professional people out of the school area so that all can work together to plan for the child.

There should be much more research in several areas, especially in the validation and reliability of some of the instruments used in assessing learning difficulties. These instruments should also be more specific in stating their aims.

Most children who are older have a very fair approach to analyzing their potentials and limitations. It is the parents who are unrealistic at times. The children need a realistic appraisal of their abilities and interests (40:51). Children also need to know that some occupations might be beyond their abilities. Parents should be brought into the planning.

Some children can help other children and learn more by teaching than by being taught.

A profile of each child should be available to both the counselor and the teacher.

An individual prescription sheet should be made for each pupil who has a learning disability.

There should be referrals to appropriate agencies and people as needed.

Finally, the counselor must remember that he is not God, and that he, the counselor, will make mistakes. When he does err, he should acknowledge his mistakes and try to rectify them.

Recommendations

1. That there be a universal vocabulary for identification of learning disabilities.
2. That validation and reliability studies be done on more of the diagnostic materials.
3. That more research be done into causes, diagnosis, and treatment of learning disabilities.
4. That beginning teachers have more work in this area.

SELECTED REFERENCES

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1. Adkins, Patricia and Walker, Carl. "A Call for Early Learning Centers," Academic Therapy, 6 (Summer 1972), 447.
2. "An Appraisal of Role Behavior of an Elementary School Counselor: Summary of a Project Report," Elementary School Guidance and Counseling, 6(October 1971), 5-12.
3. Baken, Rita. "Malnutrition and Learning," Phi Delta Kappan, 51(June 1970), 527-30.
4. Baker, Georgia Ann Pitcher. "Auditory Problems or Auditory Interference?" Academic Therapy, 6(Summer 1971), 385.
5. Bender, Lauretta. A Visual Motor Gestalt Test and Its Clinical Use. New York: American Orthopsychiatric Association, 1938, pp. 3-18.
6. Benton, C. D. "Ophthalmologists Recommend Less Emphasis on the Eyes in Learning Disabilities," Journal of Learning Disabilities, 3(October 1970), 536-538.
7. Bettelheim, Bruno. Love Is Not Enough. New York: Collier Books, 1950.
8. Bigge, June L. "Expected Learning Often Comes Through Unexpected Teaching," Exceptional Children, 34(September 1967), 47.
9. Blankenship, Elsie. "First Primer on Visual Perception," Journal of Learning Disabilities, 4(December 1971), 578-581.
10. Bourne, Lyle E. Human Conceptual Behavior. Boston: Allyn and Bacon, 1966.
11. Bruner, Jerome S. "On Perceptual Readiness," (Hollander, Edwin and Hunt, Raymond G., editors) Current Perspectives in Social Psychology. New York: Oxford Press, 1967. pp. 29-34.
12. Clark, C. M. and Dodd, B. E. "Auditory Factors in Visual Motor Testing and Training. Winter Haven Perceptual Forms Test," Journal of Learning Disabilities, 4(December, 1971), 582-585.
13. Cook, David R. Guidance for Education in Revolution. Boston: Allyn and Bacon, 1971.
14. Cott, Allan. "Megavitamins: The Orthomolecular Approach to Behavioral Disorders and Learning Disabilities," Academic Therapy, 7 (Spring, 1972), 245-255.

15. Cratty, Bryant J. Perceptual Motor Behavior and Educational Processes. Springfield: Charles C. Thomas, 1969.
16. Deese, James. The Psychology of Learning. New York: McGraw-Hill Book Co., 1958.
17. Deno, Evelyn. Identifying the Needs of Johnny Low. Moravia: Chronicle Guidance Publication, 1965-1966.
18. Despart, J. Louise. The Emotionally Disturbed Child. Garden City: Anchor Books, 1970.
19. Dobson, James. Dare to Discipline. Wheaton: Tyndale House Publishers, 1972.
20. Early, George. Perceptual Training in the Curriculum. Columbus: Charles E. Merrill Publishing Co., 1969.
21. Horace B. English and Ava C. English. A Comprehensive Dictionary of Psychological and Psychoanalytical Terms. New York: David McKay Co., 1958.
22. Farmer, Cornelia R. "Relationship Between Ability to Read and the Meaning of Expression of Emotion," Journal of Learning Disabilities, 4(December 1971), 20.
23. Frierson, Edward C. and Barbe, Walter B. Educating Children with Learning Disabilities. New York: Appleton-Century-Crofts, 1967.
24. Frostig, Marianne. "Disabilities and Remediation in Reading," Academic Therapy, 7(Summer 1972), 373-391.
25. Frostig, Marianne. "Educational Goals of the Perceptually Handicapped," Individual Learning Disabilities Workshop Presentation. Greeley: Rocky Mountain Educational Laboratory, 1968. pp. 1-8.
26. Frostig, Marianne and Horne, David. The Frostig Program for the Development of Visual Perception. Teacher's Guide. Chicago: Follett Corporation, 1964.
27. Frostig, Marianne. "Visual Perception, Integrative Functions, and Academic Learning," Journal of Learning Disabilities, 5(January 1972), 1-15.
28. Ginzberg, Eli. Career Guidance: Who Needs It, Who Provides It, Who Can Improve It. New York: McGraw-Hill Book Company, 1971. p. 67.
29. Glasser, Alan J., Zimmerman, Irla Lee. Clinical Interpretation of the Wechsler Intelligence Scale for Children. New York: Grune and Stratton, 1967.

30. Green, Sister Mary Isabelle. "An Introductory Study of Teaching Handwriting to the Brain-Injured Child," Exceptional Children, 34(September 1967), 44.
31. Griffiths, Anita. "Self-Concepts in Remedial Work with Dyslexic Children," Academic Therapy, 6(Winter 1970-1971), 125-129.
32. Guthrie, John T. and Golberg, Herman K. "Visual Sequential Memory in Reading Disability," Journal of Learning Disabilities, 5(January 1972), 41.
33. Hammer, Max. "A Teacher's Guide to the Detection of Emotional Disturbances in the Elementary School Child." Journal of Learning Disabilities, 3(October 1970), 35-37.
34. Hammill, Donald W. "Evaluating Children for Instructional Purposes," Academic Therapy, 6(Summer 1971), 341-346.
35. Haring, Norris G. and Hauck, Mary Ann. "Improved Learning Conditions in the Establishment of Reading Skills with Disabled Readers," Exceptional Child, 35(January 1969), 341-351.
36. Heath, Earl J., Bender, Miriam L., Early, George H. "Developing Perceptual Motor Skills," Academic Therapy, 6(Summer 1971), 414-415.
37. Heath, Earl J., Early, Frances. "First Things First--Building Effective Perceptual Motor Skills," Academic Therapy, 7(Winter 1970-1971), 204-205.
38. Hewett, Frank M. The Emotionally Disturbed Child in the Classroom. Boston: Allyn and Bacon, 1967.
39. Hirsch, Katrina de. "Early Identification of Learning Disabilities," Individual Learning Disabilities Workshop Presentation. Greeley: Rocky Mountain Educational Laboratory, 1938, pp. 18-32.
40. Hirschlein, Geulah and Jones, John C. "Why Johnny Can't Feel?" Education, 91(September 1970), 50-52.
41. Hoffman, M. S. "Early Indications of Learning Problems," Academic Therapy, 7 (Fall 1971), 23-24.
42. Jackson, Merrill Stanley. "Modes of Adaptation to the First Confrontation with English Orthography in Visual Modality," Journal of Learning Disabilities, 5(January 1972), 29-34.
43. Jenkins, Gladys Gardner, Shacter, Helen S., Bauer, William W. These Are Your Children. Glenview: Scott, Foresman and Company,
44. Kaplan, Bert L. "Anxiety: A Classroom Close-up," Elementary School Journal, 71(November 1970), 71.

45. Kirk, Sam and Bateman, Barbara. "Diagnosis and Remediation of Learning Disabilities," Exceptional Children, 29(October 1962), 73.
46. Kopplitz, Eugene D. Guidance in the Elementary School: Theory, Research, and Practice. Dubuque: Wm. C. Brown, 1968.
47. Koppitz, Elizabeth. The Bender Gestalt Test for Young Children. New York: Grune and Stratton, Inc., 1964.
48. Lane, Patrick R. "Educational Therapy for Adolescent Non-Readers," Academic Therapy, 6(Winter 1970-1971), 157.
49. Laufer, Maruice W. "Medications, Learning and Behavior," Phi Delta Kappan, 52(November 1970), 169-170.
50. Lehman, Eileen F. and Hall, Robert E. Who Is This Child? Moravia: Chronicle Guidance Publications, 1966-1967.
51. Maw, Wallace H. and Maw, Ethel W. Differences Between Children with High and Low Curiosity. Moravia: Chronicle Guidance Publications, 1965-1966.
52. McCarthy, James J. and McCarthy, Joan F. Learning Disabilities. Boston: Allyn and Bacon, Inc., 1969.
53. McCay, Vernon. "RH Factor and Deafness: The Problem, Its Psychological, Physical, and Educational Manifestations," Exceptional Children, 34(September 1967), 5-12.
54. Piaget, Jean. The Child's Concept of Physical Causality. Totowa: Littlefield, Adams and Co., 1968.
55. Piaget, Jean. The Child's Conception of Movement and Speed. New York: Ballantine Books, 1970.
56. Piaget, Jean. The Child's Conception of Time. New York: Ballantine Books, 1969.
57. Piaget, Jean. The Child's Conception of the World. Totowa: Littlefield, Adams, and Co., 1969.
58. Piaget, Jean. The Construction of Reality in the Child. New York: Ballantine Books, 1954.
59. Piaget, Jean. "The Mental Development of the Child," Six Psychological Studies. New York: Vintage, 1967. pp. 3-70.
60. Polardy, J. Michael. "Some Revised Learning Principles," Education, 91(November 1970), 157-159.

61. Pulaski, Mary Ann Spencer. Understanding Piaget: An Introduction to Children's Cognitive Development. New York: Harper and Row, 1971.
62. Radin, Norma. An Analysis of the Factors Impeding the Education of Lower-lower Class Children. Moravia: Chronicle Guidance Publications, 1967-1968.
63. Roach, Eugene G. and Kephart, Newell C. The Purdue Perceptual Motor Survey. Columbus: Charles E. Merrill Publishing Co., 1966.
64. Robins, Ferris and Robbins, Jennet. "An Interdisciplinary Approach to Mental and Physical Disabilities," Journal of Learning Disabilities, 5(January 1972)104-109.
65. Schein, Jerome D. and Salvia, John A. "Color Blindness in Mentally Retarded Children," Exceptional Children, 35(April 1969), 609.
66. Schiffman, Gilbert. "Remediation of Reading Problems," Individual Learning Disabilities, Workshop Presentation. Greeley: Rocky Mountain Educational Laboratory, 1968. pp. 9-18.
67. Seiderman, Arthur S. "A Look at Perceptual-Motor Training," Academic Therapy, 7(Spring 1972), 375.
68. Shafer, Sarah A. and Lilly, Elwood C. "Dominance in Relation to Achievement," Academic Therapy, 6(Winter 1970-1971), 177-185.
69. Shain, Richard J. "Neurological Diagnosis in Children with Learning Disabilities," Academic Therapy, 7(Winter 1971-1972), 139-147.
70. Sherman, Mandel. "Environment and Learning," Education, 91(April 1971), 277-280.
71. Silberberg, Norman E. "Hyperlexia: Specific Word Recognition Skills in Young Children." Exceptional Children, 34(September 1967), 41.
72. Slavrianos, Bertha K. "Emotional and Organic Characteristics in Drawings in Deficient Readers," Journal of Learning Disabilities, 3(October 1970), 488-501.
73. Smith, Robert M. Teacher Diagnosis of Educational Difficulties. Columbus: Charles E. Merrill Publishing Co., 1969.
74. Soares, Louise and Soares, Anthony. "Social Learning and Disruptive Behavior," Phi Delta Kappan, 52(October 1970), 82-84.

75. Sullivan, Brian. "Color Blindness Slows Learning," Associated Press Release, Great Falls Tribune, April 12, 1972.
76. Slyter, David J. and Hawkins, Robert P. "Delayed Reinforcement of Classroom Behavior by Parents," Journal of Learning Disabilities, 5(January 1972), 16-23.
77. Terman, Lewis M. and Merrill, Maud A. Stanford-Binet Intelligence Scale: Manual for Third Revision. Boston: Houghton Mifflin Company, 1962.
78. Thompson, Lloyd J. "Mental Retardation and Dyslexia," Academic Therapy, 7(Summer 1971), 405.
79. Taylor, Raymond G. and Nolde, S. Van L. "Correlative Study Between Laterality, Mobility, and Binocularity," Exceptional Child, 35(April 1969), 627-630.
80. Turlick, Donald A. "Psychomotor Therapy," Journal of Education, 153(April 1971), 44-50.
81. U. S. Department of Health, Education, and Welfare, Special Education for Handicapped Children. First Annual Report of National Committee on Handicapped Children. Washington: Government Printing Office, 1968.
82. Valett, Robert E. The Remediation of Learning Disabilities: A Handbook of Psychoeducational Resource Programs. Belmont: Fearon Publishers, 1967.
83. Vivian, Sister M. "Neurological Approach to Prevention of Reading Problems," Academic Therapy, 7(Summer 1972)421-428.
84. von Hilsheimer, George. "The Teacher as a Human Engineer," Academic Therapy, 6(Winter 1970-1971), 135-150.
85. Vontress, Clemmont. Cultural Differences: Implications for Counseling. Moravia: Chronicle Guidance Publications, 1968-1969.
86. Waugh, Ruth and Watson, Zana. "Visual Perception and Reading," Education, 91(February 1971), 266-269.
87. Werry, John S. and Quay, Herbert C. "Observing the Classroom Behavior of Elementary School Children," Exceptional Children, 35(February 1969), 461-470.
88. Wunderlich, Ray C. "Resolute Guidance for the Learning Disabled Child," Academic Therapy, 7(Summer 1972), 393-399.