

DOCUMENT RESUME

ED 133 946

EC 092 853

AUTHOR Sommers, Paul A.  
 TITLE Teaching Children with Learning Problems.  
 PUB DATE [76]  
 NOTE 20p.; Author: Liaison Education Affairs Comprehensive Child Care Center, Marshfield Clinic and Medical Foundation, Marshfield, Wisconsin

EDRS PRICE MF-\$0.83 HC-\$1.67 Plus Postage.  
 DESCRIPTORS Child Development; Clinical Diagnosis; \*Definitions; Early Childhood Education; \*Educational Diagnosis; Elementary Secondary Education; \*Identification; \*Interdisciplinary Approach; \*Learning Disabilities; Program Development; \*Program Evaluation; Resource Staff Role

ABSTRACT

Assessing and developing programs for children with a learning disability (LD) has been a complex and confusing task often involving professionals from the domains of health, education, and the social services in addition to the parents. The problems have included trying to agree upon a definition of LD, identifying interdisciplinary variations for similar symptoms, and conjointly interfacing services. The vague LD syndrome has survived because of its popularity with educators, physicians, and psychologists. As a diagnosis and assessment, LD has promoted confusion for those professionals who must deal with the problem and for the child referred as LD. Even if LD could be proved to exist in a few children, such a procedure would remain an exercise in futility since it would not bring forth any specific changes in educational programming or therapy to enhance the level of functioning and development within the child. (Author/IM)

\*\*\*\*\*  
 \* Documents acquired by ERIC include many informal unpublished \*  
 \* materials not available from other sources. ERIC makes every effort \*  
 \* to obtain the best copy available. Nevertheless, items of marginal \*  
 \* reproducibility are often encountered and this affects the quality \*  
 \* of the microfiche and hardcopy reproductions ERIC makes available \*  
 \* via the ERIC Document Reproduction Service (EDRS). EDRS is not \*  
 \* responsible for the quality of the original document. Reproductions \*  
 \* supplied by EDRS are the best that can be made from the original. \*  
 \*\*\*\*\*

ED133946

# Teaching Children with Learning Problems

U.S. DEPARTMENT OF HEALTH,  
EDUCATION & WELFARE  
NATIONAL INSTITUTE OF  
EDUCATION

THIS DOCUMENT HAS BEEN REPRO-  
DUCED EXACTLY AS RECEIVED FROM  
THE PERSON OR ORGANIZATION ORIGIN-  
ATING IT. POINTS OF VIEW OR OPINIONS  
STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF  
EDUCATION POSITION OR POLICY

by

Paul A. Sommers, Ph.D.  
Director: Liaison Education Affairs  
Comprehensive Child Care Center  
Marshfield Clinic and Medical Foundation

FC092 853

## Abstract

Assessing and developing programs for children with a learning disability has been a complex and confusing task. Incumbent within such a process lies the problem of often involving professionals from the domains of health, education and the social services in addition to the parents. Given the polemic of trying to agree upon a similar definition of the problem; identifying interdisciplinary variations for similar symptoms; and, conjointly interfacing services for purposes of solving the learning problem, it may take a magical act to get the job done! The vague learning disability (L.D.) syndrome could not have survived if it had not become popular with educators, physicians and psychologists. L.D. as a diagnosis and assessment promotes confusion for those professionals who must constructively deal with the problem and for the child referred as L.D., invites a self-fulfilling prophecy of frustration and non-learning. Even if L.D. could be proved to exist in a few children, such a procedure would remain an exercise in futility - since, it would not bring forth any specific changes in educational programming or therapy to enhance the level of functioning and development within the child.

The term learning disability has been a most frequent subject of discussion in many educational circles. L.D. as it is most commonly referred to has been used as a convenient diagnostic label, a categorical referent point, and used by administrators for purposes of labelling children to facilitate their accounting procedure which enables them to apply for State and Federal financial aid.

Wepman, Cruickshank et al (1975) indicate that attempts to identify, assess and develop programs for children with learning disabilities have been quite common within the disciplines of medicine, psychology and education. They go on to indicate that unfortunately, there is little agreement either between or among professionals in these areas on criteria to be used for identifying these children. Because the disabilities presented are extremely heterogeneous, the search for any commonality of symptoms, pathology or etiology has so far been fruitless.

Medical studies have been able to delineate with some degree of accuracy, sufficiently reliable criteria for identifying as brain injured, those children who show clearcut signs of central nervous system pathology, however, much confusion, discussion and disagreement develops over the observation and interpretation of vague, "soft neurological" indicators. On a similar note in the domains of education and psychology, procedures for the classification of children with learning disabilities are equally unsatisfactory. Even in the way of terminology, great diversity exists nationally as the following examples indicate: Special learning and behavior problems (SLBP-Minnesota); learning disabilities (L.D.-Delaware and Wisconsin); educational handicapped (EH-California); specific learning disabilities (SLD-Florida); extreme learning problems (ELP-Oregon); communicative and intellectual deviations (CID-West Virginia); neurological handicapped (NH-Connecticut, Nevada, and Oklahoma); perceptually handicapped (PH-Colorado, Indiana, New Jersey, and Washington); brain damage (BD-Pennsylvania).

As connoted by the variety of terms used, there has been little uniformity from discipline to discipline or from state to state regarding any communality upon which a definition of learning disabled children could be based.

Most work done to date in pursuance of trying to solve the L.D. dilemma has come from the educational domain. Allegedly, the prevalence of learning disabilities is more complex to determine than any other area of special education. Estimates of learning disabilities have ranged as extreme as from 1% to 30% of a total school district population. The lack of a clear definition of this category of handicaps has created a plethora of problems at all levels including financial, accounting, identification, programming, education, general management, as well as for empirical educational, psychological, and medical research. More than one-hundred manifestations have been defined as learning disabilities and range throughout such syndromes as dyslexia, ataxia, dysgraphia, perceptual-motor factors, clumsiness, aggressive behavior, slow learning, hyperactivity, minimal brain dysfunction, etc.

Generally incorporated within previous definitions, the term refers to children, youth, and adults who deviate from standards expected of them (McCarthy and McCarthy 1969). McCarthy and McCarthy indicate that perhaps no other single label connotes a greater variety of seemingly unrelated conditions than the term learning disabilities. There is apparently no clear professional unanimity for the meaning of the term learning disabilities, although the Kirk definition and that of the National Advisory Committee on Handicapped Children probably represent the best available concensus statements. Following are those definitions:

Kirk

"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 possible cerebral dysfunction and/or emotional or behavioral disturbances. It is not a result of mental retardation, sensory deprivation, or cultural or instructional factors."

National Advisory Council on the Handicapped

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

POLEMICAL IMPLICATIONS

Given the current setting, a most overwhelming interpretation of learning disabilities as it applied to children, is that it has become an all encompassing, wastebasket term for any child who does not quite conform to society's stereotyped expectations of so called normal children. As it stands today, almost any learning related deficiency can be affirmed as L.D. Children are labelled as such by school psychologists who find discrepancies on psychological testing; by teachers who find vague symptoms in the classroom that they relate to L.D.; and, physicians who routinely relate aggressive and hyperactive behavior in

children to L.D. It appears that the labelling of children as L.D. has almost become a national past time!

However, the L.D. label could not have survived if it had not become popular with teachers, physicians and psychologists who routinely deal with children. In addition, as a support to the labelling fad are state and federal laws requiring such specifications. Legal education has indeed encouraged teachers, their specialized support service personnel and outside assessment experts to label every child that moves. Most states reward schools with financial aids and a variety of other funding incentives in proportion to the number of children who have been labelled. Such a dilemma has complicated the level and degree of service to be provided to those children who are in need of specialized services. The range and nature of confusion produced by this matter reflects upon the critical task of program development. Essential variables to consider include: age requirements mandated by law; the type and extent of handicapping conditions; who should pay the bill; one county or city providing better services than another, and many more considerations. Nevertheless, the fact still remains that the child must be provided appropriate service and as soon as possible (hopefully at the same time the handicap is identified). To further complicate the issue, many agencies may need to be involved including: public schools; day care programs; developmental disability programs; clinics; private schools and other non-profit organizations and agencies. Given past legislation, basically all needed child oriented services are available, but it may take a magical act to pull such services together.

#### Medical Correlates of the Educational Dilemma

Many learning disability correlates have clinical connotations and often the physician is called upon for diagnosis and treatment services. The

physician's primary role is basically one of determining whether or not a disease oriented problem exists. This search for a disease leaves little choice but to assume that the physician will become essential to the diagnosis and management of the child's problems. Unless the very reliability and validity of the learning problem is established, the physician is trapped in the ritual of hunting for the elusive diagnostic factors behind the learning disability label.

Evidence accepted by various experts as documentation of a learning disability is quite flexible. This is not surprising since no test or neurologic sign has yet been proved to differentiate children with learning disabilities from normal children. Barton Schmitt (1975) reviews neurological screening which has been used in many cases as a guide to assist in the determination of learning problems.

Dr. Schmitt reviews soft and hard neurologic signs.

"Soft signs: Can be viewed as fine or gross motor deficits of obscure importance (Lucas, et al 1965) such as: Divergence of out-stretched hands, difficulty maintaining tongue protrusion or lateral gaze, jerky eye tracking, mirror movements, inability to use a scissors, and poor handwriting. These signs are often not reproducible and there is a lack of inter-examiner reliability between two different observers."

"Hard signs: Hard signs are detected by the classical neurological examinations including testing of: Cranial nerves, cerebellar, extrapyramidal, motor and sensory functions. Such findings to be included by this testing are as follows: Rapid flexions and extension in succession of a muscle group (clonus); tight flexor muscle groups; seizures; loss of coordination of the muscles -

especially of the extremities (ataxia); motor paralysis; and, cranial nerve palsy. Hard signs are reproducible and are not normal beyond the first year of life."

Dr. Schmitt further indicates that soft neurological signs are not helpful findings. Most of them represent transient phenomena and disappear with age. At best they are evidence for neurological immaturity. The point at which they become abnormal is not well standardized. They are so common under age seven that they should never be considered abnormal before that age (Hart, 1974, and Kinsbourne, 1973). Even when they persist beyond age seven their etiological importance is highly speculative (Touwen, 1970). By and large soft signs lead to additional confusion rather than clarification.

#### Psychological Variables Adding Confusion to the Educational Dilemma

Abnormalities on visual-motor perceptual tests (Bender-Gestalt) and verbal performance discrepancies on intelligence tests (Wechsler) have been touted as diagnostic of learning disabilities. Less well known is the fact that these same test discrepancies are equally characteristic of other groups of children, especially those with psychiatric disorders (Adams, 1973, and Schmitt, 1973). Also, it is quite common to find some overlap between scores derived on these visual-motor-perceptual and verbal-performance estimates between children with a specific learning disability and children meeting standard expectations. In fact, according to Weiner (1974) Bender-Gestalt test errors due to maturational delay are so common that this test is of limited value diagnostically prior to age seven. And, even after age seven one must be careful in interpreting such results.

Many children assessed by examination through administration of the Bender-Gestalt have been referred because of suspected learning disabilities. It is not uncommon to find in the summary report of the test results, statistics which when interpreted are illustrative of central nervous system impairment, or

severe learning discrepancy. As referenced by Benton (1962), all that the discrepancies indicate on the Bender-Gestalt is that a child has visual-motor-perceptual problems. In many cases these problems are more likely to be due to normal variation, developmental delays, cultural deprivation or reactive emotional disorders rather than to central nervous system impairment, or to severe learning problems. Similarly, the Wechsler Intelligence Scales (both for children and adults) have been used to assess children and adolescents who are suspected of having learning disabilities. These scales include both verbal and performance indexes. Alluded to has been the hypothesis that a twenty point discrepancy between scores on the verbal and performance scales has been considered diagnostic of learning disabilities and in some cases central nervous system impairment. Schafer, (1948) indicates that several other findings are more likely. For instance, high performance - low verbal is often found in children from verbally deprived environments, e.g. - from inner cities and some rural areas; children with auditory-perceptual problems; and, children who "act out" rather than think, e.g. - juvenile delinquents. Following are two fairly common interpretations of individuals with high verbal - low performance test score discrepancies: (1) Neurotics, especially those with obsessive, compulsive tendencies; and, (2) children with visual-motor-perceptual problems (Anastasi, 1968).

The danger of psychological test extrapolation is that many people consider the quantitative results totally scientific and place absolute reliance on their interpretation. Although, it is common knowledge that tests and their interpretation should be recognized in view of their limitations, many times they are accepted for "face value" and if the results are construed to connote below standard performance, the child being assessed is the benefactor of the ensuing self-fulfilling interpretation of deficiency. It behooves child advocates to see that the proper use of psychological

test data be made. It is not the cause of a learning problem that should concern us, but instead the development of a remediation plan based upon a child's confirmed strength(s) and weakness(es). Empirically derived child oriented test data can best be used to assist in the development of an overall educational plan for a specific child - not for purposes of determining cause which, even if we could determine, tells us nothing about intervention or programming for remediation purposes.

#### SELF-FULFILLING PROPHECY

A learning disability label stigmatizes the child as being defective. The mere process of labelling influences the parents' and schools' expectations of the child. After being labelled as learning disabled, the child begins to be treated as a non-learner rather than an individual, and over-time, begins to live and play the expected role of a non-learner. The label indeed develops into a self-fulfilling prophecy. Once a label has been attached to the child it becomes very hard to change. The label follows the child from class to class, school to school, and job to job, etc. To the parent it can represent a hopeless, irreversible situation. At best, the label can only lead to considerable frustration and confusion for all involved.

Research and longitudinal follow-up of children with specific educational problems who have been identified through appropriate assessment procedures and programmed for in accordance to their needs has often led to new findings about more appropriate techniques and methodologies to be used. However, given the very basic but extremely difficult task of identifying the learning disabled child presents many problems to those interested in research and longitudinal follow-up. A standard process to identify, assess, develop programs and follow-up children with learning disabilities is currently non-existent. It is virtually impossible to appropriately research this

domain given the many symptoms and etiological subtypes. Mixing the subtypes that can be classified as a learning disability makes the result of longitudinal follow-up and research using a slightly different definition or connotation uninterpretable. Such inaccuracy promotes added vagueness and confusion to the already significantly detrimental self-fulfilling effect of the L.D. label.

L.D. as a Facade

There is not scientific evidence to support the learning disability assessment. L.D. is an overworked non-specific, uninterpretable assessment. There is an alleged high incidence. However, it is not logical to believe that a range for learning disabilities could be from 1% to 30% (in some instances even higher) of any specific population of individuals. Such a range of estimates points to a milieu of psycho-educational-social factors rather than a simple learning problem. A noted discrepancy found within such a wide range, points to a great deal of confusion if experts can't agree any better than from 1 to 30 when rating something apparently clear enough in their own mind that they can call it a learning disability. As noted earlier by the types of different definitions found throughout the country, a great deal of variation is in existence in terms of learning disability understanding and interpretation. The discrepancy and incidence between different communities, countries and states points to observer and identifier bias (Kenny, 1971) and (Huessy, 1970). In addition, a good deal of the reviewed research on learning disabilities indicates that there is male preponderance with the disorder. Various correlates of learning disabilities indicates that a greater number of boys have some learning related problem than girls. For example, it has been found that hyperactivity exists nine times more in boys than girls and that dyslexia is more commonly found in boys than girls on about a 10 to 1 basis. It is completely

illogical to assume that boys are learning disabled that much more than girls. It points to the fact that certain cultures and certain individuals are less tolerant of the biologically more aggressive nature of boys than girls. It also appears that certain cultures have set up a standard expectation system for which both boys and girls are expected to perform equally, although it is common knowledge that boys and girls develop on a different level and at a different rate in the areas of maturation, physical growth, cognitive functioning, and attitudinal and behavioral development.

#### An Outer Range of Normalcy

Children can be vastly different without being diseased or learning disabled. Abrams, 1968, has identified the fact that there is an immense individual variation in behavior, emotion, intellect, and cognitive ability. He further indicates that it is incumbent upon those who provide services and/or programs to children with specialized needs to completely search out all relevant data prior to the development and implementation of an intervention effort. It is Abrams perception that if we were to plot out each of the variables that are critical to the individual child's learning success, we would find that most of these variables would fall within the normal range of expectation for the child (i.e. behavior, emotion, intellect and cognitive ability) given their inter and intra-relationship with each other. The L.D. population is not a homogenous group and each individual would be best looked at in terms of specific strength(s) and weakness(es) for planning purposes. Too often we generalize the fact that an individual is learning disabled in all areas. The stigmatizing implication of the self-fulfilling L.D. label perpetuates the generalized analogy of non-learning. However, the most common finding is that if a learning disability does exist, it exists in a specific form that is measurable and can be ameliorated and/or resolved through accommodation and adaptation (Piaget, 1969).

Appropriate assessment and follow-up programming based upon the specific need of the youngster without generalizing the deficiency into other areas which would only confound the problem and confuse a program of remediation will warrant the most profound success.

#### A PRACTICAL APPROACH TO L.D.

Once a generalized version of the term learning disability is cast aside, the following guidelines may be helpful. Avoid using the learning disability term. Confusion regarding learning disabilities can only be prevented if the label is not used at all. If you must use labels, it is far better to use labels that describe a specialized need in terms of measurable functioning, i.e. the number of letter or word reversals contained in a written sentence. Many times a specific assessment of an individual's current level of functioning in each area of programming can appropriately help to plan remedial programs (McCormack, 1976), i.e. decreasing 25% of letter or word reversals contained in a written sentence. The generalized learning disability label tells us nothing about appropriate remediation strategies. Reconsider each child previously labelled as learning disabled within the parameters of normal variation (including an outer range of normalcy), psycho-social development, environmental and family factors. It is believed that many children currently labelled and served as being learning disabled, are not! However, they may have measurable learning problems which should become the focus of our remediation strategies. A review of our current practice of working with children who have learning problems must be examined to determine: (1) the appropriateness of our assessment, and (2) the longitudinal success of our programming efforts in terms of measurable gains being made by the children we are serving as determined through a systematic analysis of their progress.

#### Medical Implications

Keep medical evaluations reasonable. Unwarranted diagnostic procedures should be avoided wherever possible. This can only be done if we as classroom

teachers, psychologists and educational administrators develop an assessment of each child in such a way that, as a referral is made to a medical center or clinic, the ensuing medical report will reflect in a supportive manner to the work we are doing with the child who has been referred. A specific request must be made of the clinic to answer medical questions about educational problems in such a way that the medical data can help us to provide better programming for the children. When we as educators develop a report in such a way that it eliminates educational programming alternatives and places the focus of the problem within the medical domain, the clinician then is forced into taking a primary role in the service to the child. Contrawise, the role to be taken by the clinician should be one of a supportive nature to classroom teachers who are facing the problem on a day-to-day basis in the classroom. To expedite a resolution of this problem it would be very helpful and appropriate for educational staff to briefly outline the major points of medical concern and send this information, in-advance, of the clinic visit, to the primary physician, clinician or coordinator who will be working with the youngster. This procedure would facilitate a more efficient and appropriate blend of medical and educational data.

Often times the question of drug utilization and administration is discussed. Most of those disorders that are classified as learning disabilities do not require the use of drugs. Basically, drugs are never indicated for learning problems in that no medication has the power to make children smarter. In addition, drugs are never indicated for utilization before a special education program and/or behavior modification intervention plan can be implemented. Drugs represent a very simplistic approach to a complex problem that involves the manipulation of affective, cognitive, and psychomotor variables in addition to the basic physiologic mechanism effected by drugs. Only a physician can prescribe drugs and such utilization should only reflect an alternative to resolve a medical based problem. It is unfortunate

that some physicians have joined some educators and psychologists in advocating large scale drugging of non-compliant children who may be representing daily classroom problems because of their behavioral, physical, and attitudinal challenges that confront teachers in the process of providing instruction for remediation of the learning problems.

#### Psychological Implications

A parallel relationship can be drawn from the medical evaluation to the psychological evaluation. A major interest in the interpretation of psychological data should not be one of trying to determine cause. The primary findings to be examined are those which would lead to a measurable determination of existing abilities and learning discrepancies. Knowledge of these attributes would lead us to develop more appropriate programs for specific learning programs, psychosocial growth, and other daily and long range activities of importance. It is also critical for us to specify educational questions of psychological importance prior to psychological evaluation. In this manner the psychologist will have an opportunity to address the specific areas of interest as the psychological examination proceeds. For this purpose, it would be very necessary and appropriate to write a brief summary of the specific psychologically related questions and send them to the psychologist before testing is initiated. It is important to develop educational assessment in such a manner that an interface between psychological assessment and program intervention data is occurrent. Too often the psychologist is expected to be the key diagnostic and prescriptive decision-maker. Regardless of how important the psychological data is, it can only be viewed and appropriately utilized as a supportive service to the total program set-forth for each child. It is incumbent upon educators with daily programming responsibilities for children to develop programs in such a manner that these services remain of a supportive nature.

#### False Hope Merchants

Unwarranted programming for children with learning problems has been erupting on a nation-wide basis ever since the area of learning disabilities has been

receiving publicity and parental attention. Parents must be cautioned of the false hope merchants who are trying to sell expensive treatment packages for an estimated 1% to 30% of preschool and school aged children whom they describe as having learning disabilities. Many of these programs advocate relearning motor development thus inducing the remediation of specific learning disabilities through patterning by crawling, performing body coordination exercises, using laterality training or walking on balance beams, and many, many others. There is no evidence that these techniques improve learning or ameliorate a specific learning disability - a magical cure there is not! In addition, many health related programs have also been acclaimed to remediate learning problems. They have included, mega-vitamin and trace element approaches, hyposensitization, food allergy experimentation, and special visual training activities including muscle exercises and ocular pursuit activities. Even eyeglasses have been advocated for helping to remediate reading related learning problems in children. Although these specific activities, techniques and appliances may lead to specific improvement in body coordination, or allow the individual to see what they are looking at, they do not lead to improvement in learning or reading; if you want to improve reading - teach reading activities (Allington, 1975). As specific learning deficiencies are noted, it must be realized that adequate remediation will be contingent upon how well specific training activities are planned to accommodate and/or adapt to the child's handling of the specific problem.

#### Multidisciplinary Team Implications

A most viable and appropriate means to assimilate the necessary individualized data for each child with a learning problem includes a comprehensive multidisciplinary assessment (Sommers, 1973; Jones and Sommers, 1975; and, McCormack, 1976). A basic multidisciplinary "team" assessment functions by utilizing various individuals who have been trained in special education or in the area of support services

to diagnose problems and interventionally prescribe specific educational, health and/or social activities based upon the expressed and illustrated needs of the child. Most of this work can be done within the school system by exceptional educators and those support staff members assigned to exceptional education. In some cases, there is a need for outside health and social services. Prior to involving these services it is highly recommended and most appropriate for the school district to summarize their specific questions for each out-of-district resource. As the referred child precedes through the multidisciplinary team assessment process and it becomes obvious that a specific learning discrepancy is suspected, a teacher trained and experienced in diagnosing and prescribing activities for the child should absolutely become involved in the case. In this way the specialist who has the background and training will be most helpful to develop an appropriate educational and behavior program after the child's specific learning discrepancy(ies) has been delineated.

#### CONCLUSION

Learning disabilities (L.D.) is an invalid, wastebasket assessment. L.D. is a harmful diagnosis! It is harmful, in that it allows us to overlook environmental factors, forces us to perceive children with wide variations in learning ability to be "disabled"; it labels children in a derogatory way; it encourages the use of drugs; and, it promotes a self-fulfilling prophecy of non-learning and failure! Even if L.D. could be proved to be present in a few children, this activity would remain an exercise in futility - since, it would not bring forth any specific changes in educational programming or therapy to enhance the current level of functioning and development within the child.

## REFERENCES

- Abrams, AL: "Delayed and irregular maturation versus minimal brain injury." Clin Pediatr 7:344-349, 1968.
- Adams, J: "Clinical neuropsychology and the study of learning disorders." Pediatr Clin North Am 20:587-598, 1973.
- Allington, Richard: "Attention and Application: The Oft Forgotten Steps in Teaching Reading." Journal of Learning Disabilities. Vol. 8, No. 4, April 1975.
- Allmond, BW: "Psychological testing of children: Review and commentary." Pediatr Clin North Am 21:187-194, 1974.
- Anastasi, A: Psychological Testing, ed. 3. New York, Macmillan Co, 1968.
- Benton, AL: "Behavioral indices of brain injury in school children." Child Dev 33:199-208, 1962.
- Furth, H.G. "Piaget and Knowledge: Theoretical Foundations." Prentice-Hall, Inc. Englewood Cliffs, New Jersey - 1969.
- Hart, Z, Rennick, PM, Klinge, V, et al: "A pediatric neurologist's contribution to evaluations of school underachievers." Am J Dis Child 128:319-323, 1974.
- Huessy, HR, Gendron, RM: "Prevalence of the so-called hyperkinetic syndrome in public school children of Vermont." Acta Paedopsychiatr 37:243-248, 1970.
- Jones, WA and Sommers, PA: "Comprehensive Needs Assessment: An Inferential Approach." The Journal of Educational Technology. Englewood Cliffs, New Jersey, 1975.
- Kenny, TJ, Clemmens, RL, Hudson, BW et al: "Characteristics of children referred because of hyperactivity." J Pediatr 79: 618-622, 1971.
- Kenny, TJ, Clemmens, RL: "Medical and psychological correlates in children with learning disabilities." J Pediatr 78:273-277, 1971.
- Kinsbourne, M: "School problems." Pediatrics 52:697-710, 1973.
- Kirk, Samuel A. and Bateman, Barbara: "Diagnosis and Remediation of Learning Disabilities," Exceptional Children 29, No. 2 (Oct. 1962): 73.
- McCarthy, James J. and McCarthy, Joan F: Learning Disabilities. Allyn and Bacon, Inc. Boston - 1969.
- McCormack, James E: "The Assessment Tool That Meets Your Needs: The One You Construct," Teaching Exceptional Children, Vol. 8, No. 3, Spring 1976.
- Schafer, R: The Clinical Application of Psychological Tests. New York, International Universities Press Inc., 1948.
- Schmitt, BD: "Responsibility for school problems: An objection to pediatric globalism." Pediatrics 44:771-773, 1969.

Schmitt, Barton: "The Minimal Brain Dysfunction Myth", American Journal for Disabled Children, Vol. 129, Nov. 1975.

Schmitt, BD, Martin, HP, Camp, BW, et al: "The hyperactive child." Clin Pediatr 12:154-169, 1973.

Sommers, PA: "An Inferential Evaluation Model." The Journal of Educational Technology. Englewood Cliffs, New Jersey, 1973.

Touwen, B, Prechtl, HF: "The Neurological Examination of the Child With Minor Nervous Dysfunction", publication 38. Clinics in Developmental Medicine, London, Spastics International Medical Publications, 1970.

Weiner, IB, Goldberg, RW: "Psychological testing of children." Pediatr Clin North Am 21:175-186, 1974.

Wepman, Joseph M, Cruickshank, William M, Deutsch, Cynthia P, Morency, Anne, and Strother, Charles: "Learning Disabilities," Issues in the Classification of Children by Nicholas Hobbs. Jossey-Bass Publications Washington-London-1975.