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Learning disabilities historical overview and definitions

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LEARNING DISABILITIES
HISTORICAL OVERVIEW AND DEFINITIONS

by

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CHAPTER I

INTRODUCTION

A look back into history indicates that the entire concept of educating each child to the limits of his ability is relatively new. The educational process has come a long way from the Spartans' practice of killing the deviant or malformed infant but the journey was by slow stages.[1]

It is consistent with the democratic philosophy of society that all children be given the opportunity to learn, whether they are average, bright, dull, retarded, blind, deaf, crippled, delinquent, emotionally disturbed, or otherwise limited or deviant in their capacities to learn. Schools have evolved, therefore, exhibiting numerous modifications of regular school programs to adapt instruction to children who deviate from the average and who cannot profit substantially from the regular school program.[2]

The history of special education reveals that often it is through study of the abnormal--mentally retarded, blind, deaf and learning disabled--that new insights have

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[1]Samuel A. Kirk, Educating Exceptional Children (Boston: Houghton Mifflin Company, 1972), p. 5.

[2]Ibid., pp. 3-4.

been gained regarding the intriguing problem of how any child, normal or abnormal, achieves success in learning. Gradually a new type of handicapped child has emerged. Presumably this child existed in the past, but only since refined techniques for determining success in learning became available has it been possible to differentiate him from those who learn normally, to identify him with confidence and accuracy. The handicapped child of this new type has a learning disability of neurogenic origin.[3]

He is the child who has eyes but cannot visually perceive, he has ears but cannot understand language, he has average or above average intelligence but he cannot learn under ordinary school circumstances.

Children with learning problems are not discoveries of the Jet Age. Such children probably baffled the teacher in the one-room schoolhouse of grandmother's time as much as they do teachers in modern nursery schools and ungraded primary classes. There is increasing interest in the subject and increasing focus on what can be done to ameliorate the conditions.[4]

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[3]Doris J. Johnson and Helmer R. Myklebust, Learning Disabilities Educational Principles and Practices (New York: Grune and Stratton, 1967), p. 1.

[4]Sister Joanne Marie Kliebhan, Foreward to Interpretation of the 1961 Illinois Test of Psycholinguistic Abilities by Barbara Bateman (Seattle: Special Child Publications, 1968), p. 9.

In 1968, the writer was teaching in a first grade classroom in Cheyenne, Wyoming. One of the students in the classroom, Mark, had difficulty in remembering vocabulary words, simple instructions and often displayed disruptive behaviors. The distraught parents took him from pediatrician to pediatrician. Finally they were sent to a Child Clinic in Fort Collins, Colorado. The writer accompanied the parents and Mark on several occasions in order to observe the instructions and to secure help from the instructor. A battery of tests was given Mark and he was diagnosed as "brain damaged" and having a "learning disability". No one at that time was willing to clarify either term.

The desire to clarify these terms led the writer to work with exceptional children at the State School in Faribault, Minnesota, and enroll in the Masters Degree program in Special Education with a particular emphasis on Learning Disabilities at Cardinal Stritch College in Milwaukee, Wisconsin.

In its newness, the learning disabilities concept is seen by some as a pathway for the solution of all problems, and by others as a source of semantic confusion.[5]

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[5]Robert P. Anderson, Learning Disabilities and Guidance (Boston: Houghton Mifflin Company, 1970), p. 1.

Statement of the Problem

What is meant by terms "brain damaged" and "learning disability"? It was the intent of the writer to acquaint the reader with history of the term "learning disabilities" and provide a review of the definitions of the term.

Summary

The philosophy of a society is reflected in its educational system. The democratic system recognizes individual differences and in the educational realm realizes its responsibility to provide educational opportunities for all. A relatively new term has surfaced on the horizon of educating the exceptional child--the learning disabled child. The child has always been with the school system and the society; only the terminology is new. An exploration into the research of the history and etiology of the term "learning disability" will be the content of Chapter II.

CHAPTER II

A REVIEW OF RESEARCH

Historical Overview

Doctor Samuel Orton, a psychiatrist presented his studies of a sixteen year old boy, "M.P." to the American Neurological Association. His purpose was to document the fact that there are children who show no evidence of brain defect or brain damage, but cannot recognize whole word patterns, and become confused with relation to word patterns or letter orientation. This report on "M.P." was presented in 1925, and Orton began clinical work on this phenomenon, along with Doctor Lauretta Bender and others in 1926. In 1927 or 1928 he coined the word "strephosymbolia" which means twisted symbols. Some twenty years later the Orton Society was formed in honor of Doctor Samuel Orton and remains active in the field of specific language disabilities to this day.

During the early 1920's a number of universities throughout the United States, developed clinic schools dedicated to the study of children with special problems in learning (usually reading); these schools demonstrated advanced or exemplary educational techniques. Out of these

schools, a program evolved mainly for children with normal intelligence, but with extreme educational disabilities.

The Institute of Logopedics, Inc., in Wichita, Kansas, established in 1934 is an example of a special purpose remedially oriented program which serves one area of learning disabilities. Its services extend from mild speech problems to the complexities of severe aphasia.

The Cove Schools were organized in 1947 to provide educational programming for "brain-injured" children, following the philosophy of one of the pioneers in the field, Dr. Alfred A. Strauss. Dr. Laura Lehtinen Rogan was closely associated with Strauss in his organization of Cove Schools.[6]

Learning disabilities as a comprehensive field of study is generally considered to have begun in 1947 with the appearance of the book by Alfred A. Strauss and Laura Lehtinen, Psychopathology and Education of the Brain-Injured Child.[7]

Only since 1963, has the term "specific learning disability" generally replaced many of the terms that utilize biological concepts such as brain injury, or such special disabilities as aphasia, perceptual handicaps, and

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[6]B. R. Gearheart, ed. Education of the Exceptional Child (Scranton: Intext Educational Publishers, 1972), p. 187.

[7]Janet W. Lerner, Children with Learning Disabilities (Boston: Houghton Mifflin Company, 1971), p. 13.

dyslexia. A conference to explore the problems of the perceptually handicapped was held by parents in Chicago on April 6, 1963. Dr. Samuel A. Kirk addressed the meeting. With some further preliminary remarks, Kirk presented to the parents for the first time the term "learning disabilities". The following evening the group voted to organize itself as the Association for Children with Learning Disabilities.[8]

The Strauss Syndrome Definition

During the post World War II period, Strauss and Lehtinen generated widespread interest in the problem of specific learning disabilities by focusing attention on brain-injured children. Strauss was a German physician and neurologist who migrated to the United States in the late 1930's. The specialty which he brought with him was the education of children who showed abnormal development and who were suspected of having brain damage. In collaboration with Hans Werner, a child psychologist, and Laura Lehtinen, a teacher, he conducted research and organized programs for children thought to have suffered brain damage. The publication in 1947 of Psychopathology and Education of the Brain-Injured Child describing the authors' research, theories, and educational methods stimulated national interest in children with learning disabilities.

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[8]Daniel Hallahan and William Cruickshank, Psycho-educational Foundations of Learning Disabilities (Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1973), p. 4.

Strauss' main thesis was that children with brain injuries incurred before, during, or after birth are subject to major disorders in (1) perception, (2) thinking, and (3) behavior, and that these disorders affect the child's ability to learn to read, write, spell, or calculate using arithmetic symbols. The diagnosis of brain injury was reached primarily from the presence of behavioral manifestations or disorders, and was not based solely on traditional neurological diagnosis.[9]

Strauss and Lehtinen described specifically a particular type of brain injured (exogenous) child that has since been labeled the "Strauss Syndrome" child by Stevens and Birch (1957).

The basic Strauss and Lehtinen definition was rather broad. 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 can be demonstrated by specific tests. These disturbances prevent or impede a normal learning process. Special education methods have been devised to remedy these specific handicaps.[10]

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[9]Kirk, Educating Exceptional Children, p. 48.

[10]Ibid..

The authors refined this general definition and arrived at the following seven criteria for classifying a child as brain injured, the first four being behavioral and the last three biological in nature: (1) perceptual disorders--such children when viewing pictures, see parts instead of wholes and make figure-ground distortions; (2) perseveration--they continue at an activity once started and have great difficulty in changing sets; (3) thinking or conceptual disorders--they organize materials and thoughts differently from most average individuals; (4) behavioral disorders--they display such characteristics as hyperactivity, as well as explosive, erratic, and uninhibited behavior; (5) slight neurological signs; (6) a history of neurological impairment; and (7) no history of mental retardation in the family.[11]

It does not matter what the nature of the defect or injury is, whether infectious, traumatic, toxic or embryonic, nor what its localization or extent, the clinical consequences are the same, "since all brain lesions, wherever localized, are followed by a similar kind of disordered behavior."[12]

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[11]Lloyd M. Dunn, ed. Exceptional Children in the Schools (New York: Holt, Rinehart and Winston, Inc., 1973), p. 534.

[12]A. A. Strauss and Laura Lehtinen, Psychopathology and Education of the Brain-Injured Child: Vol. 1, Fundamentals and Treatment of the Brain-Injured Child (New York: Grune and Stratton, 1957), p. 20.

Strauss theorized that such brain injury was exogenous rather than endogenous, that is, the impairment was due not to an inherited pattern or the genetic structure of the brain, but to an injury that occurred outside of the genetic structure. An example of an exogenous cause of brain injury before birth is an infection such as German measles contracted by the mother early in pregnancy and affecting the fetus. An example of an exogenous cause of injury during birth is any condition that would seriously reduce the infant's supply of oxygen during the birth process. An example of exogenous brain injury after birth is a fall on the head or an excessively high fever in infancy or early childhood. The terminology put forth by Strauss and his associates proved to be confusing. The terms exogenous and brain injury began to be consistently linked by some authors.[13]

Although Strauss' concept of brain-damaged children and the procedures in assessment that led to such a diagnosis have been challenged, the educational procedures for remediation of the behavioral symptoms have not been seriously questioned. Many subsequent developments in learning disabilities were stimulated by Strauss and Lehtinen's work. Among these developments are the perceptual motor approaches

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[13]Lerner, Children with Learning Disabilities, p. 14.

of (1) William Cruickshank, (2) Newell Kephart, (3) Raymond Barsch, and (4) Gerald Getman.[14]

The Minimal Brain Dysfunction Definition

During the 1960's minimal brain dysfunction became the broadened label to include both the Strauss-type child and other children with perceptual and learning problems. This shift in terminology resulted largely from the efforts of Clements who served as a project director for Phase I of a three-phase project jointly sponsored by the United States Department of Health, Education and Welfare and the National Society for Crippled Children and Adults.[15]

Terminology and the identification of children with learning disabilities was the concern of Task Force One of the National Project on Minimal Brain Dysfunction in Children. The deliberations of the committee composed of nine physicians, two psychologist-educators, and an agency executive, were published by the National Institute of Neurological Diseases and Blindness. Thirty-seven different terms had been found which designated this condition, including dyslexia, perceptual deficit, hyperkinetic behavior syndrome, organic brain damage, minimal cerebral palsy and learning disabilities. From this array Task Force One selected the term "minimal brain dysfunction" and issued the following statement:

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[14]Kirk, Educating Exceptional Children, p. 48.

[15]Dunn, Exceptional Children in the Schools, p. 536.

1. Brain dysfunction can manifest itself in varying degrees of severity and can involve any or all of the more specific areas, i.e., motor, sensory, or intellectual. This dysfunctioning can compromise the affected child in learning and behavior.
2. The term minimal brain dysfunction will be reserved for the child whose symptomatology appears in one or more of the specific areas of brain function, but in mild, or subclinical form, without reducing overall intellectual functioning to the subnormal ranges.

(Note: The evaluation of the intellectual functioning of the "culturally disadvantaged" child, though perhaps related, represents an equally complex, but different problem.)

Physicians tend to prefer a term such as minimal brain dysfunction which points to the medical nature of the problem. Educators, on the other hand, tend to prefer a term such as learning disability, educational handicap, or perceptual disorder, which indicates that the problem is educational in nature. Parents often decry terms which include such words as brain, neurological, cerebral, or even handicap or dysfunction. They tend to prefer the most neutral term possible such as "learning problem".[16]

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[16]Lester Tarnopol, ed., Learning Disorders in Children (Boston: Little, Brown, and Company, 1971), p. 3.

The condition was defined in the Clements' report as follows:

> The term "minimal brain dysfunction syndrome" refers to children with near average or above average intellect with certain learning or behavioral disabilities ranging from mild to severe, which are associated with deviations of function of the central nervous system. These deviations may manifest themselves by various combinations of impairment in perception, conceptualization, language, memory and control of attention, impulse or motor function. The aberrations may arise from genetic variations, biochemical irregularities, perinatal brain insults or other illnesses or injuries sustained during the years which are critical for the development and maturation of the central nervous system, or from unknown causes.[17]

Clements concluded that minimal brain dysfunction was the best way to describe the child with near-average intelligence and with certain learning or behavioral disabilities associated with deviations or functions of the central nervous system. This term differentiated the minimally involved child from the child with major brain disorders (cerebral palsy, epilepsy, autism and other gross disorders of mentation and behavior).

This basic definition had much in common with the one of Strauss and Lehtinen. In one respect, it was more restrictive in that only children of near average, average or above average intelligence could be included in this category, thus eliminating all those with low I.Q.'s. Strauss and Lehtinen placed no such limitation in their definition. In terms of the behavioral manifestations, it

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[17]Lerner, Children with Learning Disabilities, p. 19.

was broadened to include language and motor disorders. Clements elaborated on the characteristics of minimal brain dysfunction (MBD) children, arriving at fifteen somewhat overlapping categories. Hypoactivity and hyperactivity were included. Also pupils with a variety of scholastic disabilities in reading, arithmetic, spelling, writing and oral language were included. It would be difficult to find a child who did not possess some of the qualities listed by Clements. Thus the "minimal brain dysfunction" label became somewhat of a catch-all. It was a pseudomedical term, but in reality the symptoms were largely behavioral in nature. Using Clements' broad definition, it is estimated that at least 1.0 to 2.0 per cent and probably many more, school age children could be classified as having minimal brain dysfunction.[18]

Considerable confusion has resulted from the use of this term (brain-injured child), since, from its first application until the present, two problems have persisted: (1) there is insufficient evidence that children exhibiting the behavioral pattern described do in fact have damage to the brain, and (2) many children with known and independently verified brain damage (i.e., non-behavioral neurologic or anatomic evidence) do not exhibit the patterns of behavior presumably characteristic of "brain damage". At the risk of provoking a useless semantic storm, it must be noted that

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[18]Dunn, Exceptional Children in the Schools, p. 536.

attaching the adjective "minimal" to the term "brain damage" does not increase the descriptive accuracy of the term or add either to its scientific validity or its usefulness. Regardless of any adjectives, the over-riding obligation to demonstrate, in terms of replicable, valid, and clearly defined criteria, that the multiplicity or aberrant behaviors now attributed to "minimal brain damage" are, in fact, the result of damage to the brain, is a serious one.[19]

The Central Processing Dysfunction Definition

Chalfant and Scheffelin (1969) expressed an awareness of the need to formulate several definitions each of which would have relevance and function for different users. Their Task Force III Report focused attention upon the deviant behaviors that arise from dysfunction of the central processing mechanisms. More specifically, the term "central processing dysfunction" comprises disorders in the analysis, storage, synthesis and symbolic use of information.[20]

The Specific Learning Disabilities Definitions

The concept of learning disabilities has recently evolved to encompass the heterogeneous group of children

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[19]McCarthy and McCarthy, Learning Disabilities (Boston: Allyn and Bacon, Inc., 1969), p. 3.

[20]Lerner, Children with Learning Disabilities, p. 20.

not fitting neatly into the traditional categories of handicapped children. Because of the heterogeneous nature of this group of children, the concept of specific learning disabilities has been hard to define. Numerous difinitive labels have been used, employing such terms as "minimal brain dysfunction", or "central processing dysfunction", or "perceptually handicapped" children. Specific disabilities have been labeled "dyslexia" for severe reading disabilities, or "aphasia" for children who are delayed in learning to talk. Because the field of learning disabilities is of interest to psychiatrists, neurophysiologists, psychologists, speech pathologists, and educators, the problem has been viewed from these various perspectives. In general, however, the definitions fall into two broad categories: (a) those definitions involving functions of the central nervous system as they relate to the learning disability, and (b) those definitions placing an emphasis on the behavior or learning disorder without specific reference to central nervous system etiology (cause).[21]

Perhaps the one irrefutable characteristic attributed to children with learning disabilities is their wide variability of behavior.[22]

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[21]Kirk, Educating Exceptional Children, p. 42.

[22]R. J. Capobianco, "Diagnostic Methods Used With Learning Disability Cases," Exceptional Children 31 (December 1964):187.

Educators were reacting against labels that connotated a medical etiology. They realized the necessity for developing terms and definitions that had greater educational relevance. Examples included such terms as "educationally handicapped", "language disorders" and "perceptually impaired". Kirk in 1963 coined the term "learning disability" three years before Clements published his report using the term "minimal brain dysfunction". Kirk said:

> . . . a learning disability refers to a retardation, disorder, or delayed development in one or more of the processes of speech, language, reading, spelling, writing, arithmetic, resulting in possible cerebral dysfunction and/or emotional or behavioral disturbance and not from mental retardation, sensory deprivation or cultural or instructional factors.[23]

Kirk's definition is nearly the educational equivalent for Clements' "minimal brain dysfunctioning" definition.

Kirk believed that the concept of learning disability referred to a child who did not fit into exceptional categories but rather the child who suffered from exceptionality within himself.[24]

Two years after Kirk's 1963 definition and before Clements' report was published, Barbara Bateman, a former student of Kirk, published a definition of learning disorders which added a completely new dimension, namely the

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[23]Kirk and Becker, eds. Conference on Children with Minimal Brain Impairment (Chicago: National Society for Crippled Children and Adults, 1963), p. 41.

[24]Kirk, Educating Exceptional Children, p. 237.

necessity for a difference to exist between capacity and achievement. It stated:

> . . . children who have learning disorders are those who manifest an educationally significant discrepancy between their estimated intellectual potential and actual level of performance related to basic disorders in the learning process, which may or may not be accompanied by demonstrable central nervous system dysfunction, and which are not secondary to generalized mental retardation, educational or cultural deprivation, severe emotional disturbance, or sensory loss.[25]

While echoing the Strauss and Kirk contention that a child may or may not have an accompanying central nervous system dysfunction, and while adding little to restrict the field to severe disorders, Bateman borrowed an important dimension from the definitions of remedial education cases. For example, Harris has updated his classic descriptive definition of a reading disability as follows: Reading disability applies to retarded readers whose reading is significantly below expectancy for their age and intelligence and is also disparate with their cultural, linguistic, and educational experience.[26]

In 1967 several different definitions were proposed. The ACLD Conference formulated the following:

> A child with learning disabilities is one of adequate mental ability, sensory processes, emotional stability

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[25]Barbara Bateman, "An Educator's View of a Diagnostic Approach to Learning Disorders," in Jerome Hellmuth, ed., Learning Disorders. Vol. 1 (Seattle: Special Child Publications, 1965), p. 220.

[26]Dunn, Exceptional Children in the Schools, p. 539.

> who has a limited number of specific deficits in perceptual, integrative, or expressive processes which severely impair learning efficiency. This includes children who have central nervous system dysfunction which is expressed primarily in impaired learning efficiency.[27]

In the same year, the Advanced Institute of Northwestern University stated the following:

> A learning disability refers to one or more significant deficits in essential learning processes requiring special education 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 or written language, reading, math or 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.[28]

The National Advisory Committee on Handicapped Children issued the following definition in 1967:

> Children with special learning disabilities exhibit a disorder in one or more of the basic psychological processes involved in understanding or in using spoken or written language. These may be manifested in disorders of listening, thinking, talking, reading, writing, spelling or arithmetic. They include conditions which have been referred to as perceptual handicaps, brain injury, minimal brain dysfunction, dyslexia, developmental aphasia, etc. They do not include learning problems which are due primarily to visual, hearing or motor handicaps, to mental retardation, emotional disturbance or to environmental disadvantage.[29]

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[27] C. E. Kass, "Introduction to Learning Disabilities," in Larry Fass, ed., Learning Disabilities (Springfield: Charles C. Thomas, 1972), p. 7.

[28] Ibid., p. 8.

[29] Janet Lerner, Children with Learning Disabilities (Boston: Houghton Mifflin Company, 1971), p. 9.

Task Force II, the National Advisory Committee on Handicapped Children, stated:

> Children with learning disabilities are those: (1) who have educationally significant discrepancies among their sensory-motor, perceptual, cognitive, academic, or related developmental levels which interfere with the performance of educational tasks; (2) who may or may not show demonstrable deviation in central nervous system functioning; and (3) whose disabilities are not secondary to general mental retardation, sensory deprivation or serious emotional disturbance. These children are those: (1) who manifest an educationally significant discrepancy between estimated academic potential and actual level of academic functioning as related to dysfunctioning in the learning process; (2) who may or may not show demonstrable deviation in central nervous system functioning; and (3) whose disabilities are not secondary to general mental retardation, cultural, sensory and/or educational deprivation or environmentally produced serious emotional disturbance. Any educational classification of children must always be secondary to, and for the purpose of, providing maximally effective learning environments.[30]

When the United States Office of Education became involved in providing financial support for the special education of children with learning disorders, it was obvious that a definition would be needed by that organization. The National Advisory Committee on Handicapped Children (1968) of the United States Office of Education, headed by Kirk, in its first annual report, tendered one that was later incorporated into the initial authorizing legislation used by that agency, entitled Public Law 91-320, The Learning Disabilities Act of 1969. This definition stated:

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[30]Norris G. Haring, ed., "Minimal Brain Dysfunction in Children," National Project on Learning Disabilities in Children (Washington, D. C. : PHS Publication # 2015 U. S. Department of Health, Education and Welfare, N. & SDCP Monograph, 1969), p. 3.

> Children with special (specific) learning disabilities exhibit a disorder in one or more of the basic psychological processes involved in understanding or using spoken or written language. These may be manifested in disorders of listening, thinking, talking, reading, writing, spelling or arithmetic. They include conditions which have been referred to as perceptual handicaps, brain-injury, minimal brain dysfunction, dyslexia, developmental aphasia, etc. They do not include learning problems which are due primarily to visual, hearing or motor handicaps, to mental retardation, to emotional disturbance or to environmental disadvantage.[31]

This definition can be viewed as a refinement and elaboration of Kirk's since it spelled out examples of the conditions to be included, such as dyslexia and developmental aphasia, among others. The inherent problems in the USOE definition center around the following six related issues: (1) The definition is loose, with no quantitative restriction on the degree of severity of the learning disabilities to qualify for special education for SLD children. (2) The Bateman contribution from remedial education of a differential between capacity and achievement is not included. (3) The term "specific" tends to conflict with "one or more" in the definition. (4) The miscellaneous collection of children and conditions included in the definition precluded a classical syndrome, or even common characteristics, to make the group a cohesive whole. (5) The types of conditions included under the definition are left open; only examples are given. (6) Children with traditional handicapping conditions are completely excluded,

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[31]Gearheart, Education of the Exceptional Child, p. 190.

yet such pupils could also have one of the specific learning disabilities; while the primary disability of certain children may be emotional disturbance or mental retardation, the definition just given does not recognize that these pupils with traditional disability labels may also have a major specific learning disability such as reading. It would appear that the United States Office of Education definition was dictated more from administrative than professional considerations, keeping as it does the areas of exceptionality mutually exclusive so as to reduce conflict and competition.[32]

Charles McDonald asked prominent educators to define the term learning disabilities or learning disorders. Cited are several of the comments received.

Trippe said:

> . . . this term refers to kids, regardless of etiology, who have either specific or general difficulties in learning what they are expected to learn and who fall further and further behind. It is synonymous with marked underachievement. I don't see it as a population of children or another discrete category of handicapped children. Rather it is a new way of looking at children who have difficulties in school. It is part of a school based classification system which includes behavior disorders. It thus cuts across traditional categories of handicapped children and represents a departure from the medical model to a more appropriate school based model.[33]

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[32]Dunn, Exceptional Children in the Schools, pp. 539-540.

[33]Trippe in Jerome Hellmuth, ed., Learning Disorders, Vol. 3 (Seattle, Washington: Special Child Publications, 1968), p. 374.

Kass said:

> Children with learning disorders are children, of any intelligence level, who have problems in one or more of the processes involved in sensory perception, cognition, and modes of performance leading to underachievement in educational performance as related to personal aptitude.[34]

Chalfant replied:

> A learning disability refers to an educationally significant discrepancy between estimated intellectual potential and actual level of performance in one or more of the processes of speech, language, perception, behavior, reading, spelling or arithmetic.[35]

Cauley's definition was the following:

> A learning disability is a discrepancy between achievement potential (developmental level based on the relationship of an individual's intelligence to his chronological age) and achievement level (attainment in a given area as measured by an achievement test).[36]

Smith defined a learning disabled child as:

> . . . any child enrolled in a public school (including special rooms) who is six months below his age norm on a standardized reading test.[37]

When questioned, Baer replied:

> A child with a learning disability is any child who demonstrates a significant discrepancy in acquiring the academic and social skills in accordance with his assessed capacity to obtain these skills. In general, these discrepancies are associated with specific disabilities such as: gross motor, visual motor, auditory memory, auditory discrimination, visual memory, visual discrimination and other language related disabilities.[38]

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[34]Kass in Hellmuth, Learning Disorders, p. 374.

[35]Chalfant in Hellmuth, Learning Disorders, p. 374.

[36]Cauley in Hellmuth, Learning Disorders, p. 375.

[37]Smith in Hellmuth, Learning Disorders, p. 375.

[38]Baer in Hellmuth, Learning Disorders, p. 375.

A definition from the Gateway School read as follows:

> Learning disabilities are the presumptive product of disturbances in the normal time table of development. Uneven levels of functioning, with performance in some areas within or above age level expectancy and in others below, are characteristic of such disruption.[39]

Rabinovitch said:

> We use the term "learning disorders" to include all children whose academic learning is inadequate relative to chronologic age regardless of the etiology. Learning disability cannot be viewed as a distinct clinical entity in itself, but must be approached as a symptom reflecting disorder in one or more of the many processes involved in academic learning. Principal among these are general intelligence, specific capacities, developmental readiness, emotional freedom to learn, motivation and opportunity.[40]

Trubey stated:

> Children with "learning disorders" are those who--due to brain damage, sensory deprivation, congenital anomaly, mental retardation or psycho-emotional disorder--fail to respond appropriately or in the usual way to common environmental stimuli and reinforcers, or who possess any disruption in the ability to form percepts and concepts according to classical theory. The term should not be applied to some mystic static phenomenon but to a dynamic behavioral pattern which is alterable by either removing or circumventing the factors contributing to the disruption of the normal learning process.[41]

When queried, Frierson said:

> Learning disability might best designate a demonstrated inability to perform a specific task normally found

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[39]Gateway School in Hellmuth, Learning Disorders, p. 375.

[40]Rabinovitch in Hellmuth, Learning Disorders, p. 375.

[41]Trubey in Hellmuth, Learning Disorders, p. 376.

> within the capability range of individuals of comparable mental ability. The acceptance of this usage would encourage educators to describe school learning disabilities in precise, descriptive terms rather than in speculative terms. Research specialists, on the other hand, would continue to infer the existence of a learning disorder based upon theoretical or experimental findings and would, in addition, demonstrate the empirical relationships which exist between known disorders and observed disabilities.[42]

Jeanne Mc Carthy called the learning disabled child "hard-to-reach". She continued, ". . . the child has the capacity to learn, but for one reason or another, one or more of his channels for learning is blocked."[43]

Kelly's definition was:

> A learning disability is a lack of achievement in a specific learning task that is within the range of achievement of individuals with comparable mental ability.[44]

Myklebust believed that children with learning disabilities have a major involvement. The major involvement consists of a deficiency in learning despite adequate intelligence, hearing, vision, motor capacity, and emotional adjustment. These children differ (especially from the mentally retarded) in that normal capacity for learning exists, and in that normal outcome is anticipated.[45]

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[42]Frierson in Hellmuth, Learning Disorders, p. 378.

[43]Jeanne M. McCarthy, "How to Teach the Hard-to-Reach," Grade Teacher (May/June 1967):97.

[44]Leo Kelly, A Dictionary of Exceptional Children (New York: MSS Educational Publishing Company, Inc., 1971), p. 116.

[45]Helmer R. Myklebust, Progress in Learning Disabilties, Vol. I (New York: Grune & Stratton, 1968), p. 2.

Myklebust collaborated with Kass and elaborated on his original statement:

> Learning disabilities refers to one or more significant deficits in essential learning processes requiring special education techniques for 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.[46]

A child is said to have a learning disability if his school achievement is more than one year below his mental age, and if he cannot get along or profit from attendance in a regular public school class despite normal intellectual potential (i.e., an absence of mental retardation) and a lack of gross motor impairment. The child's learning disability might result from any one or several of the following: Immaturity or developmental lags, neurological impairment, severe early deprivation, brain injury, genetically determined cerebral dysfunction, serious emotional disturbance, minimal brain malfunction, or other reasons.[47]

Haring and Ridgeway believed that:

> The child with a learning disability is characterized by an educationally significant discrepancy between his estimated potential for learning and his day to day

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[46]Corrine Kass and Helmer Myklebust, "Learning Disability: An Educational Definition," Journal of Learning Disabilities 7 (July 1967):379.

[47]Elizabeth Munsterberg Koppitz, Children with Learning Disabilities (New York: Grune & Stratton, 1971), p. 1.

> level of functioning which is related to basic disorders in the learning process that may or may not be accompanied by demonstrable central nervous system dysfunctioning and which is not secondary to generalized mental retardation, severe emotional disturbance, extreme environmental or educational deprivation, blindness or deafness. Children with normal intelligence, hearing, sight and emotional development may possess learning disabilities which conventional psychological evaluations could fail to identify.[48]

The Johnson-Myklebust approach to learning disabilities theoretically emphasizes neurological relationships as explanations; in practice it is a behavioral approach with an emphasis on psychoeducational diagnosis of specific disabilities followed by remediation of the disabled behavioral responses. The emphasis is also on auditory-vocal disabilities in school-age children. Myklebust prefers the term "psychoneurological learning disabilities". Although his assessment of children's problems is primarily at a behavioral level, he feels that disorders of function are related to lack of integrity of the central nervous system and that the term more adequately relates the brain to behavior. He refers to psychoneurological learning disability as the result of deficits in one of the language development levels.[49]

To validate the diagnosis of a psychoneurological learning disability, neurological evidence must be secured.

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[48]Norris Haring and Robert Ridgeway, "Early Identification of Children with Learning Disabilities," in Readings for the Psychology of the Exceptional Child, Marvin L. Denbury, ed. (New York: MSS Information Corporation, 1974), pp. 5-6.

[49]Kirk, Educating Exceptional Children, p. 53.

Such evidence has been procured in two ways: from a neurological examination and from an electroencephalographic study. These diagnostic studies are made independent of the behavioral findings.[50]

Friedus was influenced by Strauss and Lehtinen. As a general principle in teaching, she likens the child to a computer in which the child must (a) attend to and (b) receive information through the senses, then (c) integrate this information with other information, (d) organize the perceptual with the motor activities, and (e) produce an adequate response.[51]

A physician, R. S. Paine, described a learning disability as being related to " . . . subtle irregularities of perception, gnosis, memory, thought, and praxis. . . ." Each such child is affected in different proportions in different areas of function, yet certain common themes and combinations are encountered again and again.[52]

Anderson emphasized that the learning disability viewed clinically by the counselor or teacher, is the end product of an interaction between a basic neurological deficit and the child's conception of himself. The child's style of life and self-concept is derived from his estimate

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[50]Kirk and Becker, eds. Conference on Children with Minimal Brain Impairment, p. 31.

[51]Kirk, Educating Exceptional Children, p. 53.

[52]Anderson, The Child with Learning Disabilities and Guidance, p. 2.

of his position as an individual who has a deficit in an area or areas of function considered important by society.[53]

Currently the most widely used definition is the one explicitly stated in P.L. 91-230 enacted on April 18, 1970. The acceptance accorded this HEW definition of learning disability is indicated by the fact that forty-nine states and the Association for Children with Learning Disabilities (ACLD) are using the HEW definition. This acceptance, however, may not necessarily imply sanction by practitioners of special education, i.e., directors, social workers, psychologists, speech correctionists or special education teachers. Because the criteria for securing federal funding are based on the HEW definition, statewide acceptance of the definition is predictable. The HEW definition is as follows:

> The term "children with specific learning disabilities" means those children who have a disorder in one or more of the basic psychological processes involved in understanding or in using language, spoken or written, which disorder may manifest itself in imperfect ability to listen, think, speak, read, write, spell or do mathematical calculations. Such disorders include such conditions as perceptual handicaps, brain injury, minimal brain dysfucntion, dyslexia, and developmental aphasia. Such terms do not include children who have learning problems which are primarily the result of visual, hearing or

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[53]Ibid..

motor handicaps, of mental retardation of emotional disturbance or of environmental disadvantage.[54]

Summary

This chapter presented a review of a number of definitions of learning disabilities. A variety of descriptive characteristics evolved. Characteristics which are often mentioned include disorders in one or more of the processes of thinking, conceptualization, learning, memory, speech, language, attention, perception, emotional behavior, neuromuscular or motor coordination, reading, writing, arithmetic, discrepancies between intellectual achievement potential and achievement level, and developmental disparity in the psychological processes related to education. All of the definitions have a common core even though their emphasis on the central nervous system may be different. The common areas of agreement among different authors are:

1. The learning problem should be specific and not a correlate of such other primary handicapping conditions as general mental retardation, sensory handicaps, emotional disturbance, and environmental disadvantage.

2. The children must have discrepancies in their own growth (intraindividual differences) with abilities as well as disabilities.

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[54] R. W. Vaughn and L. Hodges, "A Statistical Survey into a Definition of Learning Disabilities: A Search for Acceptance," Journal of Learning Disabilities 10 (December 1973):43-44.

3. The deficits found in a child must be of a behavioral nature such as thinking, conceptualization, memory, speech, language, perception, reading, writing, spelling, arithmetic, and related abilities.

4. The primary focus of identification should be psycho-educational.[55]

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[55] Kirk, Educating Exceptional Children, pp. 43-44.

CHAPTER III

CONCLUSION

The learning disabled child has created a great deal of discord. Leaders in the field, even in disagreement, are speaking in softer voices, differences are narrowing, heads and emotions are cooling. The child has acted as a catalyst in bringing together such groups as parents, educators, child psychiatrists, pediatricians, pediatric neurologists, child psychologists, optometrists, language pathologists, social workers, nurses, occupational therapists, physical therapists and others--if not yet working as well-oiled teams with a single goal, that of helping the children, then at least willing to sit, think, talk, and work together.[56] They seem to be mindful of the exhortation of Pearl Buck: ". . . the test, I say again and again, of any civilization is the measure of consideration and care which it gives to its weakest members."[57]

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[56] Sam Clements, "A New Look at Learning Disabilities," Lester Tarnopol, ed. Learning Disabilities Introduction to Educational and Medical Management (Springfield: Charles Thomas, 1969), p. 39.

[57] Mary Beth Frey, "ABC's For Parents," Larry Fass, ed. Learning Disabilities (Springfield: Charles Thomas, 1972), p. 254.

A Proposed Definition

The writer, after extensive research, was unable to accept a definition of learning disabilities. The proposed definition of Lloyd Dunn has been submitted as one having credibility. Its goals are to prevent large numbers of pupils from being labeled as having specific learning disabilities and to provide a more functional basis for this new field to mesh with remedial education and the more traditional areas of special education. Obviously, this proposed definition is far from operational in nature, but it moves in that direction. It deals with some but not all of the problems which the United States Office of Education definition has presented.

> Children with major specific learning disabilities (MSLDs) are those 1.0 to 2.0 percent of the school population (1) who display one primary severe or moderately severe discrepancy between capacity and performance in a specific basic learning process involving perception, conception, or expression associated with the areas of oral and written language or mathematics; (2) yet whose MSLDs are neither mental retardation nor any of the other traditional handicapping conditions; (3) but who may have one or more additional, secondary traditional or specific learning disabilities to a milder degree; (4) none of whom have MSLDs that can be adequately treated in the regular school program when only remedial education is provided as an ancillary service; (5) not more than one half of whom have MSLDs that can be adequately treated in the regular school program even when special education consultant-helping teacher services are extensively provided; (6) half or more of whom, therefore, will require more intensive special education instruction under such administrative plans as the resource room, the combined resource room and special class, the special class, and the special day and boarding school; and (7) yet any of whom may also require other remedial and special education services to deal with their secondary traditional or specific learning disabilities.[58]

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[58] Lloyd M. Dunn, ed. Exceptional Children in the Schools, p. 541.

It will be immediately noted that this definition (1) has built in a low prevalence figure to restrict the field; (2) has adopted the term "major specific learning disability" (MSLD) to leave a place for associated secondary traditional and specific learning disabilities; (3) has not implied any neurological dysfunctions; (4) and has specified that cases which can be handled by remedial education should not be classified as MSLD. Thus, this new proposed definition is designed to encompass primarily children with severe learning disorders who were traditionally assumed by physicians and psychologists to have neurological dysfunctions. These medical or pseudomedical labels included the following: (1) Strauss syndrome; (2) aphasia (severe inability to understand receptive and/or to recall needed expressive oral language); (3) dysarthria (voice control disability); (4) visual perceptual disability, including visual agnosia (disorder of identification, organization, or interpretation of visual stimuli); (5) auditory perceptual disability, including auditory agnosia (disorder of identification or interpretation of auditory stimuli); (6) dyslexia (severe reading disorder); (7) dysgraphia (extreme handwriting problem); and (8) dyscalculia (disorder in quantitative thinking).

In the years ahead one of the most serious challenges confronting special and remedial education will be to establish a compatible interface. The next decade should see one of three possibilities developing: (1)

special educators could make additional inroads in taking over cases usually served by remedial educators; (2) there could be a rather well-defined wall established between them; or (3) there could be a melding of these two related fields. One can only hope that this last option will come about.[59]

Summary

The underachieving child, or child with learning disabilities, is forcing special educators and others to pay far closer attention to the learning characteristics of children. As focus is placed on these learning variables, the discovery is made that learning disabilities do cut across all of the existing medically oriented categories. In fact, there are times when these children make the existing categories look absurd and one wonders what educational relevance they have. It is easy to see their medical, legal, political and professional relevance, but it certainly is sometimes difficult to see their educational relevance; that is, their relevance for the particular learning disabilities experienced by children. Exceptional children are basically like other children. It must

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[59] Ibid., p. 542.

always be remembered that the education of exceptional children has basic concepts and goals in common with the education of all children.[60]

The Road Not Taken

Two roads diverged in a yellow wood,
And sorry I could not travel both
And be one traveller, long I stood
And looked down one as far as I could
To where it bent in the undergrowth,

Then took the other, as just as fair,
And having perhaps the better claim,
Because it was grassy and wanted wear;
Though as for that passing there
Had worn them really about the same,

And both that morning equally lay
In leaves no step had trodden black,
Oh, I kept the first for another day!
Yet knowing how way leads on to way,
I doubted if I should ever come back.

I shall be telling this with a sigh
Somewhere ages and ages hence,
Two roads diverged in a wood, and I--
I took the one less travelled by,
And that has made all the difference.

Robert Frost[61]

The child with a learning disability, however specifically or generally defined, has taken the path chosen by fewer travelers. It is the responsibility of

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[60] Charles McDonald, "Problems Concerning the Classification and Education of Children with Learning Disabilities," in Jerome Hellmuth, ed., Learning Disorders, p. 383.

[61] Robert Frost, "The Road Not Taken" in Selected Poems (New York: Henry Holt and Company, 1928), p. 163.

the educator to walk beside him and hopefully bring him to the realization that he, as well as the path chosen, have exceptional worth.

APPENDIX

APPENDIX

The following information may prove helpful to the reader.

ASSOCIATIONS

Association for Childhood Education International
3615 Wisconsin Ave. N.W.
Washington, D. C. 20016

Association for Children with Learning Disabilities
2200 Brownsville Road
Pittsburgh, Pennsylvania 15210

California Association for Neurologically Handicapped Children
11291 McMab Street
Garden Grove, California 92641

Canadian Association for Children with Learning Disabilities
687 Briar Hill Road
Toronto 19, Canada

Mental Health Association of Waukesha County
547 - 3388

National Easter Seal Society for Crippled Children and Adults
2023 West Ogden Avenue
Chicago, Illinois 60612

National Special Education Information Center
Write to "Closer Look",
Box 1492
Washington, D. C. 20013

State Department of Public Instruction
Division for Handicapped Children
126 Langdon Street
Madison, Wisconsin 53702
(608) 266 - 1781

The Council for Exceptional Children
1411 South Jefferson Davis Highway
Arlington, Virginia 22202
Publication: Exceptional Children

The Orton Society
8415 Bellona Lane
Towson, Maryland 21204
Publication: Bulletin of the Orton Society

The Wisconsin Society for Brain-Injured Children, Inc. (ACLD)
6700 North Port Washington Road
Glendale, Wisconsin 53217
(414) 351 - 0451

Wisconsin Association for Mental Health
Post Office Box 1486
Madison, Wisconsin 53701
(608) 256 - 9041

BILLS

Education of All Handicapped Children Act, S6
House of Representatives bill, HR 7217

JOURNALS

Academic Therapy, a Quarterly
Academic Therapy Publications
1539 Fourth Street
San Rafael, California 94901
also publishes a newsletter, "Interior"

The Journal of Learning Disabilities
The Professional Press
5 North Wabash Avenue
Chicago, Illinois 60602

THE TASK FORCE MONOGRAPHS

Task Force One: Clements, Sam D. ed., "Minimal Brain Dysfunction in Children: Terminology and Identification," NINDB Monograph # 3 PHS Bulletin # 1415, Washington U.S. Dept of HEW, 1966 $0.20.

Task Force Two: Haring, Norris G., ed., "Minimal Brain Dysfunction in Children: Educational, Medical and Health Related Services," N & SDCP Monograph PHS Publication # 2015 U. S. Dept. of HEW 1969 $1.00.

Task Force Three: Chalfant, Jas. C. and Scheffelin, Margaret A. eds., "Central Processing Dysfunctions in Children: A Review of Research," NINDS Monograph # 9 U. S. Dept of HEW, 1969 $1.25.

BIBLIOGRAPHY

Books

Anderson, Robert P. The Child with Learning Disabilities and Guidance. Boston: Houghton Mifflin Company, 1970.

Bateman, Barbara. "An Educator's View of a Diagnostic Approach to Learning Disorders." in Learning Disorders. Vol. 1. Edited by Jerome Hellmuth. Seattle: Special Child Publications, 1965.

_____. Interpretation of the 1961 Illinois Test of Psycholinguistic Abilities. Forward by Sister Joanne Marie Kliebhan. Seattle: Special Child Publications, 1968.

Clements, Sam D. "A New Look at Learning Disabilities." in Learning Disabilities Introduction to Educational and Medical Management. Edited by Lester Tarnopol. Springfield: Charles C. Thomas, 1969.

Dunn, Lloyd, ed. Exceptional Children in the Schools. New York: Holt, Rinehart and Winston, Inc., 1973.

Frey, Mary Beth. "ABC's for Parents." in Learning Disabilities. Edited by Larry Fass. Springfield: Charles C. Thomas, 1972.

Frost, Robert. Selected Poems. New York: Henry Holt and Company, 1928.

Gearheart, B. R., ed. Education of the Exceptional Child. Scranton: Intext Educational Publishers, 1972.

Hallahan, Daniel and Cruickshank, William. Psychoeducational Foundations of Learning Disabilities. Englewood Cliffs: Prentice-Hall, Inc., 1973.

Haring, Norris and Ridgway, Robert. "Early Identification of Children with Learning Disabilities." In Readings for the Psychology of the Exceptional Child. Edited by Marvin L. Denburg. New York: MSS Information Corporation, 1974.

Johnson, Doris J. and Myklebust, Helmer R. Learning Disabilities Educational Principles and Practices. New York: Grune and Stratton, 1967.

Kass, C. E. "Introduction to Learning Disabilities." In Learning Disabilities. Edited by Larry Fass. Springfield: Charles C. Thomas, 1972.

Kelly, Leo. A Dictionary of Exceptional Children. New York: MSS Educational Publishing Company, Inc., 1971.

Kirk, Samuel. Educating Exceptional Children. Boston: Houghton Mifflin Company, 1972.

_____ and Becker. Conference on Children with Minimal Brain Impairment. Chicago: National Society for Crippled Children and Adults, 1963.

Koppitz, Elizabeth Munsterberg. Children with Learning Disabilities. New York: Grune and Stratton, 1971.

Lerner, Janet W. Children with Learning Disabilities. Boston: Houghton Mifflin Company, 1971.

McCarthy, James and McCarthy, Joan. Learning Disabilities. Boston: Allyn and Bacon, 1969.

Mc Donald, Charles. "Problems Concerning the Classification and Education of Children with Learning Disabilities." In Learning Disorders. Vol. 1. Edited by Jerome Hellmuth. Seattle: Special Child Publications, 1968.

Mykelbust, Helmer R. Progress in Learning Disabilities. Vol. 1. New York: Grune and Stratton, 1968.

Strauss, A. and Lehtinen, L. Psychopathology and Education of the Brain Injured Child. Vol. 1. Fundamentals and Treatment of the Brain-Injured Child. New York: Grune and Stratton, 1957.

Tarnopol, Lester, ed. Learning Disorders in Children. Boston: Little, Brown and Company, 1971.

Monograph

Haring, Norris. ed. "Minimal Brain Dysfunction." National Project on Learning Disabilities in Children. Washington: PHS Publication # 2015. U.S. Department of Health, Education and Welfare (N & SDCP Monograph, 1969).

Periodicals

Capobianco, R. J. "Diagnostic Methods Used with Learning Disability Cases." Exceptional Children 31 (December 1964):187-193.

Kass, Corrine and Myklebust, Helmer. "Learning Disability: An Educational Definition." Journal of Learning Disabilities 2 (July 1969):377-379.

McCarthy, Jeanne. "How to Teach the Hard-to-Reach." Grade Teacher (May/June 1967):97-101.

Vaughn, R. W. and Hodges, L. "A Statistical Survey into a Definition of Learning Definitions: A Search for Acceptance." Journal of Learning Disabilities 6 (December 1973):68-74.