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ABSTRACT

This document, developed by the Ninth Institute on Rehabilitation Issues Prime Study Group on Specific Learning Disabilities (SLD), is intended to provide basic information and guidelines to state agencies for implementing meaningful services to SLD clients. The publication is organized into five sections, with each section divided into objectives, a summary, a discussion, implications, and references. The first section presents an historical and philosophical review of SLD, discussing the handicapping conditions referred to as SLD, the legislation affecting this population, and efforts in vocational rehabilitation for these clients. Section 2 describes the SLD population, while section 3 discusses various administrative issues in vocational rehabilitation of SLD clients. In the fourth section, program planning for SLD clients is covered. This section contains five units detailing referral and screening of SLD clients, diagnosis and assessment of SLD clients, eligibility and severity of clients' problems, program planning, and job placement and follow-up. The final section presents tentative guidelines for rehabilitation trainers to use in planning, designing, and conducting training programs on rehabilitation of clients with SLD. Document appendixes include a list of study group members, Pennsylvania vocational rehabilitation guidelines for serving SLD, a learning disabilities checklist, a learning disabilities history form, information sources, and use of neuropsychological information. A bibliography completes the publication. (KC)

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Report from the Study Group on Rehabilitation of Clients with Specific Learning Disabilities

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Ninth Institute on Rehabilitation Issues
June 1-3, 1982
St. Louis, Missouri

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**Arkansas Rehabilitation
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Arkansas Rehabilitation Services

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Chairperson's Comments

The development of this initial manual regarding services for Clients with Specific Learning Disabilities was both a challenge and an educational experience. Vocational rehabilitation again is confronted with a new clientele, which will demand new techniques and programs specifically directed to meet the unique rehabilitation needs of SLD individuals. Expanding services to new population groups, however, has occurred throughout the 60-plus year history of the state-federal vocational rehabilitation program. The challenge presented by these clients for beneficial services, however, will be met as have other challenges in the past.

The Prime Study Group has now responded to the charges developed for this document by the National IRI Planning Committee. For the many contributions made by each member and for the many hours of time and effort outside their normal areas of responsibility, I extend my sincere thanks and gratitude. The members of the Prime Study Group were Bill Baker, Robert Brabham, Sam Clements, Dave Coakley, Brenda Coleman, Susan Kidder, Tim Milligan, Barry Newill, Frank Perdue, and Richard Switzer. A very special thanks to Dr. Douglas Rice of the Arkansas Rehabilitation Research and Training Center for his leadership in keeping the study group on task and in meeting all deadlines. Many others have made real contributions in completing the study. Appreciation is extended to Bill Edrington, Janie Marks, Julee Holmes, and Ruth Gullett of ARR&TC for their support and assistance. Sincere thanks to Dorla Dixon who typed and retyped many preliminary copies of this document in preparation for final printing.

In this study we have attempted to address the major issues and provide some answers to the many questions regarding initiating services to Clients with Specific Learning Disabilities. It is the hope of the Prime Study Group that this manual will be viewed as a beginning effort in serving SLD clients and will encourage the development of more and better services to this deserving population.

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Introduction to the Study

Rehabilitation of Clients with Specific Learning Disabilities

Introduction to the Study

It could be safely stated that clients with Specific Learning Disabilities (SLD) have always been served by rehabilitation agencies. These clients, however, were served on the basis of other physical or mental disabilities rather than SLD as the major handicapping condition. Although it would be difficult to substantiate, success, in all probability, was limited with these particular individuals since the services provided were not directed toward the clients' learning disabilities. It is interesting to note that until 1980 SLD was not recognized as a rehabilitation problem or a handicap to vocational adjustment.

Recent federal regulations and program guidelines have focused attention on rehabilitation services for SLD clients. As a result of these federal initiatives, state rehabilitation agencies are faced with many issues and concerns including identification, severity of disability, and delivery of effective services. These issues are not at all new to the area of human services. Education, as an example, has struggled for many years to provide meaningful services to SLD individuals in the absence of appropriate diagnostic procedures, adequate funding, and highly trained personnel. Though much remains to be done in this area, public and private schools have made considerable progress in programs for SLD students.

Advocacy groups have brought the problems and needs of SLD individuals to the attention of the public and local, state, and federal governments. As a result, specific charges have been issued to education, rehabilitation, and other agencies that SLD individuals must be served more effectively. This initial effort by the IRI Prime Study Group, hopefully, is a significant step in that direction.

Functional Description

There is no one definition of Specific Learning Disabilities that is acceptable to all parties involved. For this reason, SLD is defined in many different ways. For the purpose of this study, however, the Prime Study Group followed the descriptions given below:

Individuals who have a disorder in one or more of the central nervous system's processes involving perceiving, understanding and/or using concepts through verbal (spoken or written language) or nonverbal means. This disorder manifests itself with difficulties in one or more of the following areas: attention, reasoning, memory, communicating, reading, writing, spelling, calculation, coordination, social competence and emotional maturity. These disorders may constitute, in an adult, an employment handicap.

Vocational Rehabilitation Center
of Allegheny County, 1981. R.S.A. Funded
Grant on Specific Learning Disabilities

Language/learning disability (L/LD) is a condition that refers to persons of average or better than average intelligence who do not achieve at expected academic levels (relating I.Q. and academic achievement as determined by professionally interpreted, standardized test results). L/LD is associated with structural or functional deficits of the central nervous system primarily the cerebral cortex.

Texas Rehabilitation Commission

Specific learning disabilities are defined as those disorders of one or more of the cognitive processes involved in understanding, perceiving and/or using language or concepts (spoken or written). The disorder may manifest itself in problems related to listening, thinking, speaking, reading, writing, spelling, or doing mathematical calculations. Specific Learning Disabilities do not include individuals who have hearing problems which are primarily a result of visual, hearing or motor handicaps; or mental retardation; or environmental, cultural or economic disadvantage.

Pennsylvania Bureau
of Vocational Rehabilitation

The Ninth Institute on Rehabilitation Issues (IRI)

The 1981 National IRI Planning Committee from various rehabilitation disciplines reviewed a large number of relevant topics suggested for study. After careful consideration of all topics, the three issues selected are stated below:

Rehabilitation of Clients with Specific Learning Disabilities

Arkansas Rehabilitation Research and Training Center, Sponsor

Marketing: An Approach to Placement

University of Wisconsin-Stout Research and Training Center, Sponsor

Marketing: A Strategy to Promote the Rehabilitation of Handicapped Individuals

West Virginia University Research and Training Center, Sponsor

Specific Charges: Prime Study Group on SLD.

1. To provide information that will assist state agencies and others in identifying, assessing, and implementing rehabilitation services to SLD clients with consideration to legislation, funding, organization, program evaluation, and innovative models;
2. To develop a resource manual that can be utilized by state rehabilitation agencies and/or other rehabilitation practitioners to expand and broaden services to SLD clients; and
3. To create a resource document that can be used by staff development personnel, RCEPs, rehabilitation educators, and other rehabilitation trainers to increase knowledge and awareness of LD clients.

In addition to the charges given to the Prime Study Group, the planning committee suggested that the content of the document address such areas as the SLD population, administrative issues and concerns, case processing (including referral, diagnosis, services, and employment), and utilization of the manual by rehabilitation trainers.

Need for the Study

Rehabilitation services for Specific Learning Disabled Clients is an area of tremendous interest and concern for state agencies. Facing reductions in appropriations and at the same time mandated to expand services to this clientele, all agencies find themselves in a dilemma as to how this challenge can be met. Many unanswered questions confront agency administrators and program directors related to eligibility, diagnosis, and services. Further, such issues as the role of education and other service organizations remain nebulous to administrators who realize that more must be done with less at this time. These and other relevant concerns are discussed in the study.

It must be realized that much research still needs to be carried out in this area, along with materials development, program evaluation, and training of staff. Furthermore, agencies should identify and utilize other resources in the area of SLD that have proven successful to enhance the service delivery system.

Conclusion

This document, developed by the Ninth IRI Prime Study Group on Specific Learning Disabilities, is intended to provide basic information and guidelines to state agencies for implementing meaningful services to SLD clients. The interest in this area is evident from the different groups—RSA, NIHR, consumer organizations, rehabilitation education, and state agencies—that recommended SLD as an IRI study topic. The goal of the manual is to provide these agencies and organizations with the best information available regarding services to SLD clients.

Several states have had programs for this population for several years, and the benefits of their experience are discussed at various points. It is the hope of the Study Group that we have addressed our charges and the suggested content areas and that this document will prove useful to state agencies and other organizations concerned with serving SLD individuals.

References

Commonwealth of Pennsylvania Bureau of Vocational Rehabilitation. **Guidelines for serving the learning disabled.** Harrisburg, Pennsylvania: (n.d.)

Vocational Rehabilitation Center of Allegheny County, Pittsburgh, Pennsylvania. RSA Funded Grant on Specific Learning Disabilities, 1981.

Vocational rehabilitation process for specific learning disabilities. Austin, Texas: Texas Rehabilitation Commission (n.d.)

Section I

A Historical and Philosophical Review of SLD

A Historical and Philosophical Review of SLD

Objectives

1. To review the history of the concepts and categories pertaining to the handicapping conditions referred to as Specific Learning Disabilities (SLD).
2. To review the general legislative history of SLD relevant to vocational rehabilitation.
3. To review past and present vocational rehabilitation efforts in serving individuals with SLD.
4. To discuss the implications of serving SLD individuals for vocational rehabilitation agencies.

Summary

Prior to 1980 the major emphasis for services to SLD individuals was primarily children and adolescents. Only recently was SLD "medically recognized" as a discrete disability entity by the American Psychiatric Association and the World Health Organization. As a result of this recognition, SLD now meets the first eligibility criterion for vocational rehabilitation services, and a number of preparations have been made to provide meaningful services to this clientele. The Rehabilitation Services Administration (RSA) has, for instance, convened a national Task Force on SLD to address the issues of eligibility, diagnostic procedures, provision of vocational rehabilitation services, and development of an action plan to address these issues. RSA also has issued a series of informative memoranda to further clarify these issues.

Discussion

The human services delivery system has traditionally encountered problems in providing services to persons with Specific Learning Disabilities. These problems are caused by the absence of a standardized definition, imprecise diagnostic procedures, the disability's many manifestations, and complications caused by other disabilities existing in conjunction with the Specific Learning Disability.

In the past, most attention was directed toward school age children by the public school system. The vocational rehabilitation system did not officially recognize Specific Learning Disability as a disabling condition until recently, as a result of the World Health Organization and American Psychiatric Association classifying SLD as a "medically recognized" disability. The Rehabilitation Services Administration soon took steps to gain a better understanding of this disability and to provide assistance to the state vocational rehabilitation agencies. Some of these major efforts were:

1. Creation of a national task force on Specific Learning Disabilities to explore the issues associated with learning disabled individuals as well as to develop an action plan for Specific Learning Disabilities.
2. Development of a model definition of Specific Learning Disabilities for vocational rehabilitation purposes.
3. Establishment of an RSA-300 disability reporting code (524) for Specific Learning Disabilities.
4. Funding of a short-term conference, national in scope, to train key state agency personnel in serving learning disabled persons.
5. Identification of specific learning disabled persons as a priority group to be served under the Discretionary Grant Authority of Special Projects and Demonstrations for the provision of vocational rehabilitation services to severely handicapped persons.
6. Identification and dissemination of information regarding models for evaluating and diagnosing Specific Learning Disabilities as well as models of service delivery.

In the past, many disabled individuals did not "fit" the vocational rehabilitation (VR) system, and, consequently, were ineligible for VR services. People with Specific Learning Disabilities, by

the very nature of their abilities and disabilities, could not be placed into the existing discrete categories, such as blind, deaf, mentally retarded, emotionally disturbed, or physically handicapped. They are sighted, yet may not correctly interpret visual stimuli. They may hear, yet fail to discriminate specific sounds, sound blends, or even words. They have normal intelligence, yet are "retarded" in the attainment of basic skills (Szuhay, Newill, Scott, Williams, Stout, & Decker, 1980).

The field of Specific Learning Disabilities traditionally has focused on the child and early adolescent, almost ignoring the adult. Little mention of the adult learning disabled is evidenced in the literature on SLD (Russell, 1974). Since most literature related to SLD focuses on educationally related activities, it is understandable that attention has centered on children and adolescents. Yet many of these children and adolescents need more than traditional education services to survive as adults in the world of work (Washburn, 1975).

Over the past 15 years, there has been extensive discussion concerning the provision of VR services to individuals with Specific Learning Disabilities. On one side of the discussion have been educators, concerned parents of SLD children, and advocates who repeatedly requested services from the VR programs. The other party to these dialogues, which at times escalated into confrontations, was comprised of VR program policy makers and administrators who steadfastly maintained that **persons with SLD could not be served by the program since SLD was not perceived as a medical disability—one of the key legal requirements for VR eligibility consideration.**

State agency service providers that attempted to respond to the needs of the SLD population within the confines of the law and regulations were caught in a double bind. While some SLD individuals were served by state VR agencies on the basis of other physical or mental disabilities, many other SLD persons were frustrated in their efforts to obtain VR services. This dilemma continued for nearly two decades with no change in RSA policies or the intensity of efforts to bring about a change in policies.

Recent events, however, brought about dramatic changes. In April 1980, the Rehabilitation Services Administration, in response to several policy inquiries, conducted a review of its long-standing policy regarding eligibility of individuals with SLD. This review reaffirmed the existing policy that VR eligibility could be based on a Specific Learning Disability **only** if it could be shown that the functional limitation was the result of or associated with a physical or mental disability (RSA-PI-80-9). **This reaffirmed that VR eligibility had to be tied to a medically recognizable disability and that a learning disability was not recognized in and of itself to be a medical disability. Rather, it was perceived to be an educational disability.**

When comments were received on the proposed regulations developed to carry out the 1978 amendments, this long-standing dialogue once again intensified. Numerous letters that urged RSA to revise its SLD policies were received from parents, teachers, counselors, SLD persons, advocates, and other concerned individuals. In response to these concerns, RSA convened a task force in May 1980 to explore these issues. Of particular interest were the issues dealing with program eligibility, diagnostic procedures, and the provision of rehabilitation services.

With the publication of the third edition of the **Diagnostic and Statistical Manual of Mental Disorders**, by the American Psychiatric Association, and the 1980 Edition of the **International Classification of Diseases**, by the World Health Organization, the medical community for the first time recognized Specific Learning Disabilities as a medical disability.

The task force, comprised of state agency personnel, federal staff, experts in the SLD field, representatives of learning disabled advocacy groups, and SLD consumers, was given the mandate to develop a comprehensive action plan to improve and expand rehabilitation services to persons with SLD.

The resolution of this disability issue, however, created significant program management challenges to the VR program, such as:

How should SLD be defined in VR operational terms?

How is SLD best diagnosed?

Who is qualified to diagnose suspected SLD?

What VR Services are most appropriate for SLD clients?

What special competencies should VR counselors possess to serve SLD persons?

What type of community resources can be utilized in serving SLD clients?

What specific role should vocational rehabilitation plan in the delivery of services to the SLD?

The RSA task force on SLD completed a comprehensive action plan that was approved by the RSA Management Council on October 14, 1980. Some of the key features are as follows:

1. The development of comprehensive policy guidelines to state VR agencies to ensure that state agency policies, procedures, and practices are consistent with the recent changes in national policy.
2. The development of a VR operational definition of Specific Learning Disability.
3. The development of program guidance and training material focusing on models of evaluation, vocational implications, successful model service delivery programs, and counseling techniques
4. The utilization of the RSA Discretionary Grant Authorities to increase the VR professional's knowledge and experiences in working with persons with Specific Learning Disabilities.

In June of 1980, the Client Services Committee of the Council of State Administrators of Vocational Rehabilitation (CSAVR) surveyed the state vocational rehabilitation agencies regarding their policies and practices of serving individuals with SLD. Since at that time a separate RSA-300 disability code had not been established for SLD, accurate data and information regarding services to persons with SLD could not be obtained.

In 1981, the RSA Commissioner approved the following program development initiatives:

1. For VR program purposes, individuals who have a disorder in one or more of the psychological processes involved in understanding, perceiving, or using language or concepts (spoken or written)—a disorder which may manifest itself in problems related to listening, thinking, speaking, reading, writing, spelling, or doing mathematical calculations—would be eligible to receive vocational rehabilitation services if they satisfy the following criteria:
 - a. Their psychological processing disorder is diagnosed by a licensed physician and/or a licensed or certified psychologist skilled in the diagnosis and treatment of such disorders.
 - b. The disorder results in a substantial handicap to employment.
 - c. There is a reasonable expectation that vocational rehabilitation services may benefit the individual in terms of employability.Individuals who have learning problems which are caused by visual or hearing impairments, motor handicap, mental retardation, or emotional disturbance may be eligible for vocational rehabilitation services under other disability categories.
2. RSA-300 disability code #524 has been designated for individuals disabled by a specific development disorder. This code is for disorders of specific areas of development not due to another disorder.
3. RSA training program funds will be used to expose VR personnel to the current state-of-the-art on VR and the learning disabled. A national short-term training project entitled "Vocational Rehabilitation of the Learning Disabled Client" was conducted by San Diego State University on July 28-30, 1981, for state VR agency personnel.

4. Flowing from the approval of the **Action Plan on Learning Disabilities**, RSA used three components to create program development materials:
 - a. **The Learning Disabilities Advisory Board** - consisting of professionals who have a work history in the field of learning disability and whose function will be to serve the task force in an advisory capacity;
 - b. **The LD Task Force** - consisting of the original members of the RSA Task Force on Learning Disabilities whose function is to continue to oversee the development of a long range plan for VR services; and
 - c. **The LD Work Group** - consisting of a smaller number of individuals whose function is to produce program development materials for issuance to state VR agencies on the provision of services to the LD individual.
5. Successful models of evaluation to diagnose the vocational implications of a learning disability and successful models of service delivery will be identified and incorporated into RSA program development materials. The LD Task Force was able to identify models of service delivery for the vocational rehabilitation of the LD adult that have been formulated into operational manuals in state VR agencies. The models that have been identified will be reviewed by the LD Advisory Board, the Task Force, and the Work Group in the production of program development materials.

Recent VR developments include:

1. A project undertaken by the University of Scranton entitled **Field Investigation and Evaluation of Learning Disabilities**.
2. A jointly developed project in Pennsylvania by the Bureau of VR, the Association for Children with Learning Disabilities, and the VR Center of Allegheny County.
3. The Texas Rehabilitation Commission developed a training manual for VR counselors that is specifically intended for serving the SLD.
4. The New York DVR project "Diagnostic Vocational Evaluation and Personal Adjustment Training for the Neurologically Impaired," operated by NY ALD Chapter.

A common characteristic that seems indicative of successful rehabilitation in all these projects is the use of a multidisciplinary team.

Following the RSA National Short Term Training Program "Vocational Rehabilitation of the Learning Disabled Client," conducted by San Diego State University in Denver, Colorado, the Rehabilitation Services Administration issued the following information memoranda from the Task Force on Learning Disabilities to state VR agencies.

1. **RSA-IM-81-37** (7-14-81) This memo describes the results of the CSAVR survey of 83 vocational rehabilitation agencies that sought state agency input on current policy and practice relating to persons with specific learning disabilities.
2. **RSA-IM-81-38** (7-20-81) This memo describes the do's and don'ts of working with individuals with SLD within the context of vocational rehabilitation, as written by a district psychologist, Stockton District Office, California Department of Rehabilitation.
3. **RSA-IM-81-39** (7-27-81) This memo describes an article, written by the Educational Consultant to the California Department of Rehabilitation, regarding attitudes of serving individuals with SLD, a new policy developed by the California Rehabilitation Department, and the results of services to the SLD under the aegis of the new policy.
4. **RSA-IM-40** (7-27-81) This memo summarizes and describes the proposed model for vocational service delivery to the SLD as proposed in the Field Investigation and Evaluation of Learning Disabilities (FIELD) Project, Pennsylvania Office of Vocational Rehabilitation.

5. **RSA-IM-81-41** (7-27-81) This memo describes the California State Department of Rehabilitation's guidelines for serving individuals with SLD.

The intent of these memoranda was to provide additional background information on the topic of specific learning disabilities so that a more comprehensive understanding could be developed and maintained by the vocational rehabilitation professional.

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- Washburn, W.Y. Where to go in vocational education for secondary learning disabled students. **Academic Therapy**, 1975, **11**, 31-35.

Section II

Description of the SLD Population

Description of the SLD Population

Objectives

1. To present a brief history of the development of the concept and the diagnostic category of Specific Learning Disabilities (SLD) and its relationship to other corresponding diagnostic categories, particularly minimal brain dysfunction (MBD).
2. To offer various related terms and definitions pertinent to these diagnostic categories.
3. To outline and discuss three common subgroups within the single diagnostic category referred to as SLD with implications for vocational rehabilitation.
4. To address the issue of prevalence of these disorders in the adult population.

Summary

The early 1960s is acknowledged as the beginning of the contemporary history of the handicapping condition SLD. During this period, the term SLD became the preferred **educational** designation for the previously established diagnostic category of minimal brain dysfunction. Although disabilities in specific areas of learning are prominent features of MBD, SLD actually is only one of many consequences of the disorder. The early work in this field concentrated on school age children, and it has been only since the late 1970s that SLD adults have received separate professional attention.

As with children, SLD/MBD adults tend to fall into three distinguishable subgroups. Each subgroup presents a different developmental history, a unique school history, and a different set of symptoms that affect learning and behavior. Each requires separate forms of treatment, including an individualized vocational rehabilitation program.

1. **"Pure" Hyperkinetic Type** - Individuals of this type are characterized primarily with behavioral (personality) deviations related to the symptom triad of hyperactivity, attention deficits, and impulsivity. Irregularities in learning in this group, if any, result from the cluster of behavioral symptoms. There is more a "job performance" or an "accomplishment" deficit.
2. **"Pure" Learning Disability Type** - These individuals are described as persons with complicated cognitive/language processing disabilities that result in severe reading (developmental dyslexia) and spelling (developmental dysorthographia) disorders. They show few, if any, of the behavioral symptoms characteristic of the "Pure" Hyperkinetic Type. The learning deficit can be so specific as to involve only one performance area, e.g., mathematics (developmental dyscalculia) or the inability to carry a tune (dysmusica).
3. **Mixed Type** - These individuals, representing the largest subgroup, exhibit a varying combination of symptoms from both the behavioral and the cognitive/language processing areas of deficit. These symptoms, however, are not usually to the degree of severity of the two "pure" types.

Discussion

A. Historical Evolution

The modern history of the handicapping condition referred to as Specific Learning Disabilities is recognized as beginning in the early 1960s when a sparse number of articles began to appear in professional journals. Children were described as those whose general intelligence was in the average range but who experienced great difficulty in learning specific academic skills and displayed a wide array of behavioral irregularities.

The combination of characteristics observed in these youngsters did not fit any existing category of handicapping condition. It was recognized that these children were "different" and in need of special consideration. They were generally unsuccessful in academic achievement in the regular classroom when taught by the usual methods. Their behavior was difficult to predict and often disruptive to the learning environment. These children did not, however, seem appropriate for placement in special education classrooms, which at that time were almost exclusively for mentally retarded and severely physically handicapped students.

Independently and almost simultaneously, attention was being directed to this group of "special" children by a wide variety of care-giving disciplines, including clinical psychology, child psychiatry, language pathology, pediatric neurology, occupational therapy, and special education. Each discipline approached and described the children and their problems from its own perspective. Certain symptoms were highlighted over others in keeping with the clinical focus of the particular discipline. The result was a confusion of terms, descriptions, and treatment recommendations.

In an attempt to clarify the situation as it existed in 1964 regarding this group of children, a special three-phase project was co-sponsored by the National Institute of Neurological Diseases and Blindness, the National Easter Seal Society, the United States Public Health Service, and the United States Office of Education. This undertaking came to be known as the National Project on Minimal Brain Dysfunction/Specific Learning Disabilities in Children and resulted in the publication of three interrelated monographs (Clements, 1966; Haring & Miller, 1969; Chalfant & Scheffelin, 1969).

Although the primary target group of the National Project was children and the concepts of early identification and intervention, there was stated recognition of the existence of a very large population of adults with these disorders and references to their special needs. The Phase Two Monograph (Haring & Miller, 1969) includes sections on vocational rehabilitation and other long range services for SLD/MBD adults.

B. The SLD Adult

It was not until the late 1970s, however, that professional attention began to concentrate on the diagnosis and treatment of adults with SLD/MBD as an entity separate from that of children with these disorders (Wood, Reimherr, Wender & Johnson, 1976; Mann & Greenspan, 1976; Bellack, 1977). It was made apparent that the childhood symptoms and problems created by SLD/MBD do not terminate with adolescence, but persist into adult life often concealed by a number of different diagnostic labels including those which are psychiatric in nature. Clinicians and investigators concerned with these adult disorders concluded that correct diagnosis is possible and that treatment planning should be geared to pertinent diagnostic findings.

Among the common characteristics of the adult population found in the literature are a basic impairment in the ability to focus attention; a history of early learning disabilities; current complaints of diffuse symptoms with elements of anxiety and depression; reported feelings of inadequacy and low self-esteem; continued difficulty with basic academic skills, which limits vocational opportunities; a variety of negative consequences in daily living as a result of behavioral disorganization; attention deficits; poor impulse control; and self-reported difficulty in developing sensitive and lasting relationships with others. As with any listing of common characteristics, individual differences will be found in this population.

The diagnosis of SLD/MBD in adults may sometimes become intricate because some of the accompanying symptoms seem to fit into other diagnostic categories as well, such as alcohol abuse, drug abuse, hysteria, mental subnormality, depressive illness, impulsive personality, explosive personality, and sociopathic personality.

In the adult client, the presence of any of the major symptoms associated with MBD/SLD in childhood should alert the clinician to carefully investigate and record the client's extended history, including personal interviews with the client's parents when possible. Information gleaned from the client's history, including prenatal, birth, developmental, and academic information, can be of great value in substantiating the diagnosis. The value of inquiries into the possibility of a family history of learning disabilities or the behavioral elements associated with MBD should not be overlooked.

C. Definitions and Relationships among Terms

A review of the American literature, as reported in the Phase One Monograph of the National Project on MBD/SLD (Clements, 1966), revealed a total of thirty-eight different terms that have

been used to describe or distinguish these conditions. Most of the terms can be grouped into two categories: (1) those terms that emphasize the **physiological/neurological etiology** of the disorders, e.g., organic behavior disorder, minor brain damage, minimal cerebral damage and (2) those terms which stress a particular **symptom or consequence** of the disorder, e.g., hyperkinetic impulse disorder, dyslexia, perceptually handicapped, and learning disabilities. The term Minimal Brain Dysfunction was selected by the National Project as being the most appropriate and descriptive for the group of disorders under consideration.

At the time, educators voiced concern that the term MBD was too "medical" and implied the necessity of a physician and various medical procedures for diagnosis, which might prevent or delay the development of educational programming for already identified children. The term Specific Learning Disabilities was preferred and selected by educators as an alternate term to designate the handicapping condition. Public Law 94-142, the Education for All Handicapped Children Act, includes SLD as one of the handicapping conditions for which public schools must provide a free and appropriate education.

However, researchers and clinicians continue to use the terms MBD and SLD, and the literature on the SLD adult seems to have settled on the interchangeable use of the terms. Formal definitions for both have been developed as follows:

Minimal Brain Dysfunctions

The term refers to individuals of near average, average or above average general intelligence with certain learning and/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. These 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. The definition allows for the possibility that early severe sensory deprivation could result in central nervous system alterations which may be permanent. During the school years, a variety of learning disabilities is the most prominent manifestation of the condition which can be designated by this term.

From: **Minimal Brain Dysfunction
in Children—Terminology
and Identification**
(Clements, 1966)

Specific Learning Disabilities

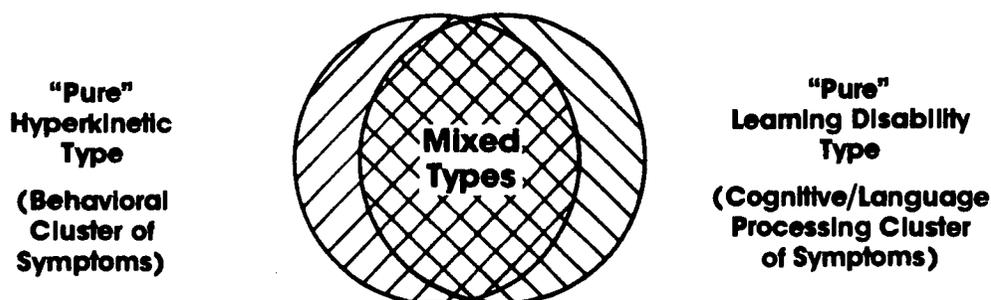
Children with Specific Learning Disabilities exhibit a disorder in one or more of the basic psychological processes involved in understanding or in using spoken or written language. These may be manifested in disorders of listening, thinking, talking, reading, writing, spelling, or arithmetic. They include 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.

From: The National Advisory
Committee on Handicapped
Children, U.S. Office of
Education, Washington, DC,
1967

The relationship between the terms SLD and MBD merits further clarification. Specific Learning Disabilities has come to be used as the educational and vocational rehabilitation term. Minimal brain dysfunction is more commonly used in clinical settings and as the

medical designation for the condition of which SLD is but one of the characteristics. The formal definition for SLD was designed for children and concentrates on academic outcomes of impaired functioning in central nervous system processing. The definition for MBD is not age related and includes both the behavioral and learning components of the disorder as well as the neurodevelopmental and etiologic aspects. The overlapping of the terms becomes more apparent when a global view of these conditions is considered:

Minimal Brain Dysfunctions



The above overlapping circles represent three distinguishable groups of SLD disorders of which diagnosticians, vocational rehabilitation counselors, and treatment planners should be aware. It is important to note that the descriptive adjective "pure" in these subgroup terms is used to emphasize the most prominent feature(s) or symptom(s) of the particular type.

The part of the circle on the left that is labeled "Pure" Hyperkinetic Type represents the small percentage of individuals (perhaps no more than 5% of the total group) who have a marked degree of the behavioral cluster of symptoms, which includes hyperactivity, impulsiveness, disorganization, short attention span, and other attentional deficits. They do not exhibit any major deficits in academic skills, such as reading, spelling, and arithmetic. Their impaired ability to concentrate and to organize and sustain activities results in what might be called a deficit in job performance and accomplishment.

The part of the circle on the right and labeled "Pure" Learning Disability Type indicates that there is another small percentage of individuals (perhaps again no more than 5% of the total group) who have a severe form of learning disability, such as developmental dyslexia, wherein the cognitive/language processing cluster of symptoms is predominant, e.g., without the behavioral components of hyperactivity, impulsivity, and short attention span.

The overlap area of the two circles corresponds to individuals who have features of both "Pure" forms in a variety of mixes ranging from mild to severe. The "Mixed" Type represents the largest segment of the disorder (approximately 90% of the total group referred to as SLD/MBD). The mix of symptoms includes diverse degrees of hyperactivity, attention deficits, reading difficulties, and spelling difficulties. It was primarily for this "Mixed" group that the educational category of SLD was originally developed.

The two "Pure" forms (Hyperkinetic Type and Learning Disability Type) are neither new concepts nor new diagnostic categories. They or their equivalents were described in the literature over a half century ago (Hinshelwood, 1917; Homan, 1922; Kramer & Pollnow, 1932; Kahn & Cohen, 1934; Orton, 1937; Strauss & Lehtinen, 1947). The contributions of these early authors, now considered as significant pioneering works, contributed to the reorganization of accumulated theories and knowledge that resulted in the concepts now embodied in the diagnostic categories of SLD and MBD.

At the present time, the definition developed by the National Advisory Committee on Handicapped Children in 1967 and incorporated into federal legislation (Public Law 94-142 of 1977) remains the benchmark definition for SLD. It forms the operational base for federal and

state laws governing this handicapping condition for **children** and is used as a guideline for public school SLD programs.

The term "dyslexia" is often used as a substitute term for SLD. This is unfortunate. Despite its emotionally "neutral" sound and descriptive nature, it is too imprecise as a diagnostic category. By derivation, the term "dyslexia" simply means an impairment in the ability to read. The term does not incorporate such vital aspects as severity, nature, or cause of the impairment. To help clarify this issue and to distinguish two very different conditions, the World Federation of Neurology (Reading Disorders in the United States, Note 1) has defined a **general** and a **specific** form of dyslexia as follows:

Dyslexia: A disorder in individuals, who despite conventional classroom experience, fail to attain the language skills of reading, writing and spelling commensurate with their intellectual abilities.

Specific Developmental Dyslexia: A disorder manifested by difficulty in learning to read despite conventional instruction, adequate intelligence and socio-cultural opportunity. It is dependent upon fundamental cognitive disabilities which are frequently of constitutional origin.

This latter form, Specific Developmental Dyslexia, is considered a severe learning and handicapping disability and is incorporated into the concept of MBD. It is referred to as one of the "Pure" Learning Disabilities Types.

The current **Diagnostic and Statistical Manual of Mental Disorders - Third Edition (DSM III)** (Note 2) contains additional categories, clinical descriptions, and diagnostic criteria basic to the identification of the adult SLD/MBD client. Two sections, in particular, bear direct relationships to these disorders: the section on Attention Deficit Disorder (ADD) and the section on Specific Developmental Disorders (SDD).

Although **DSM III** suggests that ADD is a replacement category for MBD, it is not. Attention Deficit Disorder would be seen as just one of the major symptoms associated with the global and continuum concept of MBD. More importantly, ADD incorporates as a predisposing factor several forms of "major" brain dysfunction including mental retardation, cerebral palsy, and the epilepsies. The adjective "minimal" in the term MBD was purposefully selected to distinguish it from the major forms of brain disorders, and particularly mental retardation, since average or above average general intelligence is one of the basic diagnostic criteria for MBD.

Two major types of ADD are included in the **DSM III**: with Hyperactivity and without Hyperactivity. Whereas, ADD with Hyperactivity does link with the Pure Hyperkinetic Type of MBD, a third **DSM III** category, ADD Residual Type, which appears to be the adult equivalent of the disorder, fails to include hyperactivity, which remains in some adults as a debilitating symptom. A more realistic version for adults would have been to preserve both ADD types, i.e., with Hyperactivity and without Hyperactivity, with the designation Residual Type to indicate the adult equivalent of these disorders.

The SDD section in **DSM III** corresponds to the various types of specific disorders of learning. Although these appear in the section entitled "Disorders Usually First Evident in Infancy, Childhood and Adolescence," it is noted that such conditions can frequently continue into adulthood. The descriptive material in the SDD section is of considerable value in understanding the specificity of various disorders of learning and in establishing diagnostic codes for a particular client.

D. Other Definitions of Learning Disabilities

Other definitions for these disorders have been proposed by various groups. The following are examples:

Individuals who have a disorder in one or more of the central nervous system processes involving perceiving, understanding and/or using concepts through

verbal (spoken or written language) or nonverbal means. This disorder manifests itself with difficulties in one or more of the following areas: attention, reasoning, memory, communicating, reading, writing, spelling, calculation, coordination, social competence and emotional maturity. These disorders may constitute, in an adult, an employment handicap.

Vocational Rehabilitation Center
of Allegheny County, 1981. R.S.A.
Funded Grant on Special Learning
Disabilities

Language/learning disability (L/LD) is a condition that refers to persons of average or better than average intelligence who do not achieve at expected academic levels (relating I.Q. and academic achievement as determined by professionally interpreted, standardized test results). L/LD is associated with structural or functional deficits of the central nervous system, primarily the cerebral cortex.

Texas Rehabilitation Commission

Specific Learning Disabilities are defined as those disorders of one or more of the cognitive processes involved in understanding, perceiving and/or using language or concepts (spoken or written). The disorder may manifest itself in problems related to listening, thinking, speaking, reading, writing, spelling, or doing mathematical calculations. Specific Learning Disabilities do not include individuals who have learning problems which are primarily a result of visual, hearing or motor handicaps; or mental retardation; or of environmental, cultural or economic disadvantage.

Pennsylvania Bureau of
Vocational Rehabilitation

Learning Disabilities is a generic term that refers to a heterogeneous group of disorders manifested by significant difficulties in the acquisition and use of listening, speaking, reading, writing, reasoning, or mathematical abilities. These disorders are intrinsic to the individual and presumed to be due to central nervous system dysfunction. Even though a learning disability may occur concomitantly with other handicapping conditions (e.g., sensory impairment, mental retardation, social and emotional disturbance) or environmental influences (e.g., cultural difference, insufficient/inappropriate instruction, psychogenic factors), it is not the direct result of these conditions or influences.

National Joint Committee for
Learning Disabilities, 1981.

The last quoted definition is a curious one. It seemingly attempts to establish a "new," all inclusive, generic category by omitting the qualifying word "specific" from the term. In so doing, the result appears to be yet another term and definition for brain damage/brain dysfunction, both major and minimal.

E. Common Characteristics and Clinical Manifestations of SLD Adults

The following list is a summary of the salient features of the condition:

1. Common Characteristics

- a. Average or Above Average General Intelligence: This indicator is usually interpreted as a measured I.Q. in the average or above range on **either** the Verbal Scale or the Performance Scale of the Wechsler Intelligence Scale. The "either" distinction is an important one in that the SLD/MBD adult of the "Pure" Hyperkinetic Type most commonly achieves a higher verbal I.Q. score than performance I.Q. score. The reverse is true for the SLD/MBD adult of the "Pure" Learning Disability Type in that they consistently achieve a higher performance I.Q. score than verbal I.Q. score. For the Mixed Type of SLD/MBD adult, the common Wechsler profile is equivalent verbal

and performance I.Q. scores with high/low scattering of scaled scores **within** both the Verbal and the Performance Scales.

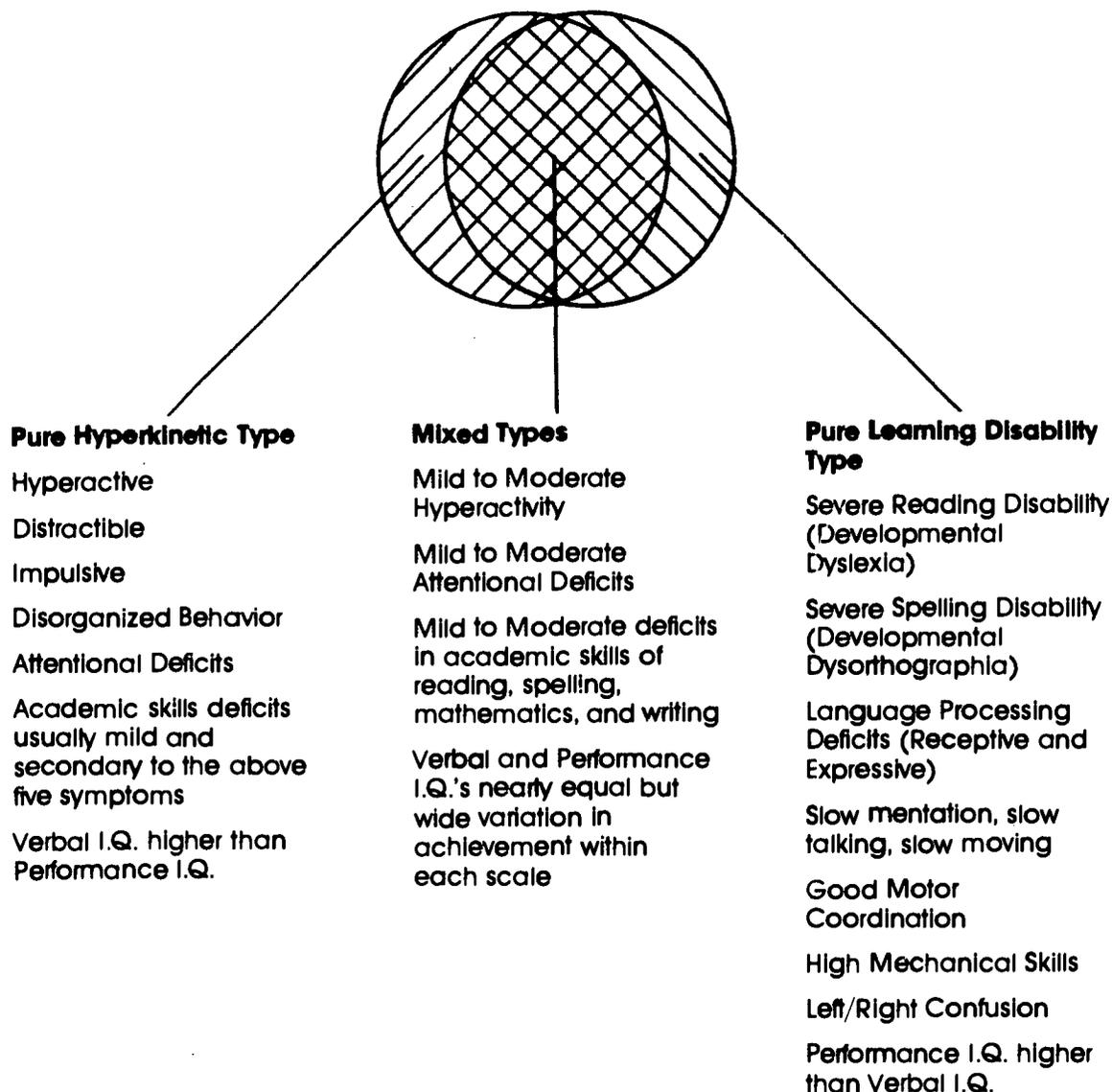
b. Specific Learning Disabilities in one or more of the following:

- (1) Reading Disability (sometimes referred to as Dyslexia).
- (2) Spelling Disability (Dysorthographia).
- (3) Arithmetic Disability (Dyscalculia).
- (4) Handwriting Disability (Dysgraphia).

A disability in learning is most often recognized as a significant discrepancy between the actual level of ability in a particular academic skill area and the level of ability one would expect, based on the client's measured intelligence and history of learning opportunities.

- c. Perceptual Deficits:** This feature relates to impaired processing of information through one or more of the primary channels for learning, i.e., visual, auditory, and motor. Assessment data can be used to determine the preferred learning style of the client, based on strength of performance on problem solving tasks that rely more on one sensory modality than another.
- d. General Coordination Deficits:** Impairments in motor execution, motor control, and motor modulation may affect performance on tasks that require fine motor skills or tasks that require gross motor coordination, or both.
- e. Abnormal Motor Activity Level:** Activity should be considered on a continuum with hyperactivity at one end of the scale and hypoactivity at the other. Most individuals in the general population falls somewhere in the middle of such a scale. Individuals with SLD/MBD often represent the end points. Individuals with symptoms of the "Pure" Hyperactive Type show behavior consistent with the Hyperactive end of the continuum. Those individuals representing the "Pure" Learning Disability Type commonly show behavior consistent with the hypoactive end of the scale, e.g., slow verbal expression, slow mentation, and slow motor movement. It is the **contrast** between the two end types that is so dramatic. The motor hyperactivity associated with this disorder tends to be random, disorganized, and unproductive. Varieties of impulsive behavior are a companion feature of the hyperactive individual.
- f. Attention Deficits:** Deficits in the attention process include several components: attention span, width factor, distractibility, and mental fatigue. Attention span refers to the ability to concentrate on an activity for the length of time appropriate for an individual's age. The width factor refers to the number of units of information capable of being held in the mind at any one time. In complex situations, an SLD/MBD person's attention flits back and forth from one unit of information to another, and the individual is unable to synthesize the total interaction. The individual will mentally hold on to only one or two fragments of the sequence and may then respond incorrectly to the whole on the basis of those fragments. Frustration often causes the individual to give up, become restless, and daydream. Distractibility refers to the relative ease with which attention can be drawn away from the task at hand by auditory and/or visual stimuli in the environment. A short attention span, narrow width factor, and high distractibility result in quick mental fatigue, an unpleasant sensation that disrupts the learning or work activity.
- g. Language Processing Deficits:** This appears as a prominent feature in those individuals of the "Pure" Learning Disability Type and to a lesser degree in the Mixed Types. There is difficulty in understanding and remembering verbal information (receptive language processing) and/or in expressing ideas, opinions, thoughts, etc. (expressive language processing). Reading and spelling disorders are just two of numerous different forms of deficits in the processing of language.

2. Clinical Manifestations SLD/MBD



3. SLD/MBD and DSM III Diagnostic Categories

The following **DSM III** Diagnostic Categories and Codes associated with SLD/MBD may be considered for use. Multiple diagnoses may be recorded in order to attain a more complete description of the individual client. When multiple diagnoses are used, the area of most serious impairment is listed first.

SLD/MBD Type	DSM III Code
"Pure" Hyperactive	314.80 - Attention Deficit Disorder, Residual Type
	314.01 - Attention Deficit Disorder with Hyperactivity

"Pure" Learning Disability	315.00 - Developmental Reading Disorder
	315.10 - Developmental Arithmetic Disorder
	315.31 - Developmental Language Disorder (indicate Expressive Type; Receptive Type; or both)
	315.50 - Mixed Specific Developmental Disorder (use when several skill areas are impaired to relatively the same degree).
"Mixed"	Any of the Specific Developmental Disorders which are appropriate as above, i.e., 315.00; 315.10; 315.31; 315.50.
	314.00 - Attention Deficit Disorder without Hyperactivity
	314.01 - Attention Deficit Disorder with Hyperactivity
	314.80 - Attention Deficit Disorder, Residual Type

F. Prevalence of the Disorder

The blurring of the disorders of SLD/MBD created by terminology and definitions is reflected in the relatively few prevalence studies that have been done (Belmont, 1980). For the most part, the prevalence studies that have been conducted defy comparison because of differences in definition, identification procedures, and populations studies. Some studies concentrate on the cognitive aspects of the condition, e.g., reading; some on behavioral components, e.g., hyperactivity; but very few include both major features. The majority of studies involve children of elementary school age.

The incidence rate of SLD has been variously estimated from 1 to 30% of the population based on studies of school children (Lerner, 1981). The prevalence of MBD has been estimated to be 5 to 10% of the population (Wender, 1971). Clinicians, on the other hand, talk in terms of a 10% incidence rate for SLD/MBD in the total population when all cases, mild, moderate, and severe, are included. It is noteworthy that for legislative funding purposes associated with Public Law 94-142 (the Education for all Handicapped Children Act) it was recommended that 1% to 3% of the school population be considered as the prevalence estimates. It has been assumed that this rate of incidence refers to the very severely involved children.

A general finding which is consistent across studies is that there is a preponderance of males with SLD, MBD, hyperactivity, reading disability, etc. This high sex ratio of males to females has been observed for many conditions which produce learning and behavior disorders (Bentzen, 1963). A ratio of 5 males to 1 female is a common finding among the prevalence studies for SLD/MBD.

A current trend in research in the field of SLD/MBD deals with investigations of a highly defined specific component of the disorder, such as attention, information processing, hyperactivity, the reading process, and fine visual-motor production. This shift from a global view of the disorder to specific areas of deficit functioning is in keeping with the search for more definitive knowledge regarding brain-behavior relationships.

Implications for Vocational Rehabilitation

The vocational rehabilitation counselor will come into contact with clients representing the three major types of disorders subsumed under the categories of SLD/MBD. In developing the Individualized Written Rehabilitation Program (IWRP), the rehabilitation counselor should consider the outstanding characteristics of the major sub-groups of SLD in order to best match the program with the individual client.

- 1. The "Pure" Hyperkinetic Type:** These individuals often experience difficulty in finding and holding a job because of the symptoms of the disorder, which include poor attention, easy distractibility, difficulty in completing tasks, forgetfulness, impulsiveness, temper

difficulties, disorganization, hyperactivity, over-talkativeness, and often poor social perceptiveness. Such behaviors may thus lead to difficulties in work and social interactions with supervisors and other employees. Such individuals may be regarded as immature, demanding, and unreliable. Despite good intelligence, work skills, and willingness, these characteristics, particularly when severe, tend to pose problems for employment and rehabilitation. The natural work environment must be carefully considered for such an individual. Ideally, it would be one with a quiet atmosphere, few other employees, and as devoid of interfering noise and movement as possible. A "high pressure" type job with quotas, deadlines, interdependence among employees for task completion, and frequent changes in the nature and scope of the work may prove unsuitable, as would tasks that require the person to remain in one fixed position for long periods of time. Without careful evaluation, including extensive history taking, this group may be easily mislabeled with some vague form of psychiatric disturbance. Sufficient research has been done in the last few years (Wood, Reimherr, Wender & Johnson, 1976) to substantiate that the same medications used to moderate hyperactivity, impulsiveness, and attention deficits in children is equally effective with SLD/MBD adults. This adjunct to treatment may need to be considered for a particular client.

- 2. The "Pure" Learning Disability Type:** These individuals, particularly those with specific developmental dyslexia, have a unique cluster of traits that are valued by employers, including dependability, cooperativeness, good work habits, even-temper, and likeableness. Their mechanical skills are often among their greatest attributes, and they often seek employment where such talents are basic to the job. These people, however, often live in fear that their employer or fellow employees will discover that they cannot read, spell, or write and may even quit an otherwise appropriate job when unexpectedly called upon to perform such a task. Most are very sensitive about this deficiency in their abilities. Often, the fact that the individual cannot read or write is a highly guarded secret, sometimes known only by a spouse who must assume all family and household activities that require these skills. This added burden on the spouse and the feelings of inadequacy on the part of the client can put undue stress on a marriage, which in turn can affect the employment situation. Counseling both parties can be very beneficial in such instances (Lenkowsky & Saposnek, 1978) and can make a valuable contribution to the personal adjustment of the client.

Since reading is such an important vocational requirement, individuals with reading deficits cannot fill out job application forms, understand employee handbooks, follow written directions, etc. A major vocational rehabilitation concern with this group is that remedial tutoring in reading is only mildly effective, for such individuals rarely achieve a reading level of above 4th grade despite years of tutoring, high motivation, and extensive practice. The possible exceptions are those few pure dyslexic individuals whose general intelligence is in the "superior" or "very superior" range, in which case somewhat higher levels of reading are possible. Although some of these individuals can improve their reading and spelling skills, it is rare for their level of reading to rise to a point where it can become an avenue for learning. Such individuals learn a job best by seeing and doing. For all practical purposes, adults of the "Pure" Learning Disabilities Type should not be channeled into a job that will require competency in reading, spelling, and writing.

- 3. The "Mixed" Type:** Although this group represents the largest segment of the SLD/MBD category, it is possible that these individuals are less likely to seek vocational rehabilitation services than those of the other two major groups. The symptomatology of the "Mixed" type is not as extreme as the other two, and, although commonly underemployed, they often achieve some level of vocational and social adjustment that they find expedient. On the other hand, it is the "Mixed" group that may profit the most from vocational rehabilitation services. Once the diagnosis of "Mixed" Type of SLD/MBD has been established, vocational rehabilitation needs can be isolated and a personalized program implemented. Progress, in terms of attaining vocational

rehabilitation goals is likely to move along at a more rapid pace than for individuals of either the "Pure" Hyperactive or "Pure" Learning Disabilities types. The "Mixed" group tend to improve in academic skills when engaged in individual or small group tutoring programs. They respond well to job-related and personal counseling. They are usually motivated to improve their employment situation, but often require guidance in order to do so.

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Section III

Administrative Issues

Administrative Issues

Objectives

1. To acknowledge and bring to the foreground a variety of administrative issues that must be addressed by administrators of rehabilitation programs, particularly those in the State-Federal Program of Vocational Rehabilitation.
2. To point out ways that these issues can be effectively dealt with through administrative policies, guidelines, and regulations.
3. To encourage administrators to develop policies regarding services to individuals with Specific Learning Disabilities (SLD).

Summary

There are legitimate administrative issues that can and should be addressed prior to any initiation or expansion of vocational rehabilitation services to individuals with SLD.

1. Would an agency be overwhelmed by SLD referrals? As shown in this chapter, the numbers of such referrals eligible for vocational rehabilitation can be controlled to manageable levels.
2. What are the professional qualifications of psychologists and other diagnosticians necessary to evaluate the disability? Administrators are reminded that there must be a balance between ideal professional qualifications and the availability of professionals in various geographic areas.
3. What will be the cost of diagnostic services? Be prepared: it will usually be about double the usual psychological costs.
4. Will these clients be severely disabled? As with other disability groups, some will and others will not. It would be unwise for administrators to expect generalizations.
5. Can SLD clients really benefit from vocational rehabilitation services? To put it simply, yes. If properly diagnosed and evaluated, they can benefit greatly from the personal and social adjustment programs typically associated with most vocational rehabilitation service delivery systems. In addition, the "hands on" vocational services, including work adjustment/sheltered work opportunities, can appropriately be utilized with SLD individuals.
6. Policy needs to be developed in a variety of areas. For example, which services will be the responsibility of the VR agency and at what point do agency responsibilities end?
7. Evaluation of effectiveness will be crucial to see how well vocational rehabilitation programs address the needs of individuals with SLD.

Discussion

A. Number of Potential Referrals

At a time when all human service programs are faced with diminishing resources to serve an often increasing population, it may seem ironic that there is attention toward expanding services to another potential major disability group. Yet history has shown that the vocational rehabilitation (VR) program has become a social force in the development of handicapped workers by making significant changes at key times. Initially, VR programs were designed for workers disabled on the job; emotional problems were later included, as were mentally retarded individuals and alcoholics. These disabilities were not originally served but are now a substantial part of many VR caseloads. At other times in history, vocational rehabilitation made what must have been equally major changes. No doubt many valid arguments were made at those crucial junctures to avoid changing or expanding the program. However, changes were made that, in historical perspective, enhanced the present role of vocational rehabilitation. With that perspective in mind, a few considerations are worthy of deliberate and careful thought by state agency administrators.

First of all, planners and administrators should conduct a long term analysis of referral sources to determine apparent trends. Over the past 10-20 years there have been many changes in the state-of-the-art in medicine; occupational and industrial accidents and illnesses have changed dramatically; the average age of clients has changed; a variety of other changes are also obvious. It behooves agency administrators to carefully determine if their patterns of referrals are sufficient to insure that legitimate needs will continue to be addressed by VR and to consider if there will continue to be a valid need for vocational rehabilitation services if we are unwilling to add an additional referral base. This is an important issue that must be addressed deliberately and objectively on an individual basis by VR agencies. The agency that misjudges its own situation may be missing an opportunity for legitimate service delivery. The decision to move aggressively into the area of initiating or expanding services to SLD individuals should be made in a bigger perspective of vocational rehabilitation's future.

As indicated in Section I, there is considerable disagreement as to the size of the potential SLD population. Depending on the source of information, estimates range from 1% to more than 30% of the population being affected. Obviously, for any administrator to make an enlightened decision about the future of any agency, a more specific estimate must be obtained. In most agencies the number of SLD referrals should be rather limited, at least in the initial stages of vocational rehabilitation as appropriate programs for this clientele are developed.

Administrators who would be more comfortable employing a somewhat conservative approach to obtaining SLD referrals, i.e., one that would be manageable while additional understandings and diagnostic advances are being made, should be encouraged to do so for a variety of reasons. First, the standard considerations of "disability" versus "vocational handicap" also apply to these potential referrals, as they do to all other potential referrals. Secondly, the issue of whether substantial **vocational** rehabilitation services are needed and have a reasonable expectation of leading to gainful employment permits a proper and legitimate screening process whereby the numbers involved can be controlled to manageable levels. There are numerous considerations, political, economical, and logistical, that allow administrators to properly control their agency's movements in response to their management obligation to administer a balanced program—balanced in terms of equitable distribution of resources and in terms of disability target groups. It is the premise of this document that if administrators choose to increase services to SLD individuals, they may "safely" choose to do so. Administrators need not fear disastrous results for their initiatives, but do need to prepare management policies and guidelines.

It can be successfully argued that vocational rehabilitation agencies are currently serving a significantly larger number of learning disabled individuals than they may now realize. This is due in part to assessment and diagnosis and also in part to the liberal requirements of the law. The VR program permits a broad range of services for a variety of disabled individuals. It would be naive to assume that rehabilitation caseloads do not already include some individuals who would have been more correctly labeled as SLD. Such misdiagnoses should not be viewed as deliberate or unprofessional, but rather are the result of an emerging body of knowledge about SLD.

B. Administrative Issues in Diagnosis

1. "Quality Control" in Diagnosis

A major administrative issue to be addressed is the determination of an acceptable basis for diagnosis/assessment of SLD. (The professional aspects of diagnosis and evaluation are addressed in a later chapter.) An agency must decide what legal requirements it must meet and the professional information it needs, to develop meaningful IWRPs for SLD clients. An administrative decision on requirements must be reached, in advance, that permits a balance between what is ideal and what is realistic. For example, an administrator who determines that only the highest level of professionally

qualified persons may document a diagnosis of learning disability may decide that only a neuropsychologist should make the required diagnosis. If so, administrators must have determined that such professional services are available to the agency in all major locations and that those available do not have huge waiting lists or charge fees the agency cannot afford. It would be easy for administrators to adopt a policy too stringent to be realistic. It must be an administrative, as well as a psychological, decision as to what quality assurances shall be built into diagnostic requirements and qualifications of vendors for an agency. It would be unfortunate, and unnecessary, for administrators to adopt requirements that give false hopes to individuals when those requirements simply maintain the status quo despite any rhetoric to the contrary.

2. Costs of Diagnostic Services

The cost of diagnostic services will be highly influenced by decisions made about the qualifications of the professionals to diagnose SLD. Also, the cost of psychological batteries varies from location to location and is influenced by which psychological tests are administered. Administrators, in general, can expect the specialized psychological tests needed to establish SLD to cost approximately 2-3 times more than the clinical battery most commonly purchased. Plans for this economic fact of life should be made accordingly. However, compared to other diagnostic procedures, such as laboratory and in-hospital diagnostic evaluations, the cost may be significantly less.

3. Severity of Disability and/or Handicapping Condition

An additional area of consideration is the severity of the disability for many individuals diagnosed as having SLD. No generalizations should be made, and none should be expected. As with most clients of VR agencies, individual considerations will make this determination, not general characteristics. Agencies can maintain "control" over the numbers of referrals **accepted** for services by adopting an order of selection or by any other requirements which give priority to severely disabled persons. Not all individuals with a diagnosis of SLD should properly be considered severely disabled. Certain "soft" neurological signs are of diagnostic interest but may not have serious vocational implications. As in other disabilities, reliance on functional limitations and the vocational handicaps so imposed will be more important than a diagnostic label of SLD. Individuals with SLD may be judged, as may any other potential clients, on their unique and individual limitations, vocational handicaps, and chances for success.

C. Eligibility for Vocational Rehabilitation Services

Administrators are faced with difficult management decisions, many prompted by harsh economic realities. Agencies increasingly seek to serve those who are least likely to find needed services elsewhere. This goes beyond the required "similar benefits" requirement of law, but has become a consideration as to whether one individual is as severely in need of VR services as another. With decreasing funds, public scrutiny over all government services becomes more critical and cost conscious. Thus, critics are asking whether various recipients of services are in the category of the "truly needy" and are less likely to be supportive of programs if it appears that clients could "make it" independently without intervention by an agency. As a result, VR agencies are likely to seek out those most in need of services and those who have the potential to show the greatest use of such services in terms of employability. Therefore, all individuals who might meet the diagnostic criteria for SLD may not meet the additional criteria of benefiting from VR services.

It is important for administrators to realize, however, that many SLD individuals will fit precisely into the various categories that administrators seek to serve. Many SLD individuals will be eligible for VR services according to all legal requirements, and they will be among the clients of the agency who will benefit most from the rehabilitation approach of dealing with functional limitations through personal, social, and work adjustment training as may be found in vocational rehabilitation workshops, centers, and facilities.

D. Planning for Vocational Rehabilitation Services

1. Understand Each Other

The VR counselor needs a thorough understanding of SLD if appropriate plans are to be developed to address the deficits or limitations imposed by this disability. Administrators must insure that there is a two-way system of communication between staff and clients/advocacy groups. Many disappointments and criticisms can be traced to a lack of understanding about what each partner brings into a rehabilitation relationship.

Agencies must be able to communicate the role and function of VR as defined by law and as evolved by expertise. It must be understood that VR agencies will not be the answer to all the frustrations that SLD individuals have experienced in various settings, including public schools and colleges. Academic teaching techniques and classroom procedures are not among the qualifications of most rehabilitation professionals. This fact should be clearly admitted and dealt with forthrightly. Rehabilitation counselors are, on the other hand, generally better able to evaluate disabilities and their impact than are professionals in education. Together, such professionals may work effectively with SLD individuals to obtain the desired results. Rehabilitation professionals must not be viewed as or placed in a position to compete with educational experts. To compete is to lose expertise; to cooperate is to improve chances of success.

Rehabilitation professionals must be properly trained about the nature of SLD and vocational adjustment needs. Unfortunately, with many training budgets at low funding levels, this may prove to be a critical management issue. The complexity of the issues around which rehabilitation staff will need training will require extensive and interdisciplinary training sessions.

One potentially important area that should be addressed through professional training and staff development is that, by definition, SLD clients are **not** mentally retarded clients. Rehabilitation professionals should develop vocational goals and objectives with learning disabled clients with that consideration strongly in mind.

2. Remediation and/or Compensation for Limitations

It could be argued that VR's greatest success arises from helping handicapped individuals compensate for a functional limitation. The VR system assumes that after the greatest recovery possible, or after the best correction available, there remains a vocational handicap. The same will be true of SLD clients. Neither rehabilitation staff nor client/family should seek to initiate services with a view toward totally remediating the limitations. It should not be expected that the client will outgrow or otherwise totally overcome the disability; however, by working together the disability may be reduced to what may be referred to as a "controllable nuisance."

3. Provision of Substantial Services

SLD clients who will benefit from vocational rehabilitation services to a significant degree can be identified, and the issue of substantial vocational rehabilitation services, as required in Federal regulations, can be complied with in serving these clients. However, **only by adopting eligibility requirements that focus on functional limitations of vocational significance** can the requirements be met. It must be realized, and openly addressed in policy and procedure, that not all problems faced by SLD individuals are of vocational significance or constitute a handicap to employment. Vocational rehabilitation is not the appropriate or preferred agent to provide all services needed by this clientele.

The cost of services should not be significantly different from other cases of VR, especially if the considerations described as remediation/compensation were addressed.

4. Planning for Closure/Termination of Services

If an SLD individual wishes or needs to continue academic remediation for many years, or throughout life as some prefer, then it will be important for all parties in an IWRP to

understand that VR has a more limited sphere of interest, i.e., vocational rehabilitation. Administrators should develop policies pertaining to entry, occupational levels for professional training, maximum semesters of training, or other policies that serve to limit the involvement of VR to that which is necessary. Administrators should develop policies with measurable limits that encourage staff to have high expectations of their SLD clients and a clear idea of at what point services shall be terminated. It is hoped that all persons will continue to grow and adjust personally and socially beyond successful closure from VR services. Such expectations do not preclude closure, nevertheless, and the same should be true in services to SLD clients.

E. Research

Because the role of many VR agencies in the delivery of services to SLD individuals has been limited, there has been little research to demonstrate techniques and approaches that would be most effective. As the VR role is expanded and as academic teaching techniques change with better understanding of the nature of human learning and cognitive processes, specific learning disabilities should be a fertile field for dramatic advances in knowledge.

The National Institute of Handicapped Research (NIHR) has designated SLD for priority research. The possibility of a Research and Training Center to research the effectiveness of various strategies for delivering appropriate rehabilitation services to SLD individuals needs to be explored. Guidelines for grant proposals developed by NIHR should specifically address the rehabilitation of such individuals, especially as agencies reexamine their role and function in the face of budget changes and increased state responsibility for VR programs.

F. Program Evaluation

VR programs are being subjected to increasing scrutiny as to effectiveness, cost benefit analyses, and overall efficiency. It will be important for agency administrators to develop data systems where the results of any expanded efforts with SLD clients can be accurately monitored over an extended period of time. Even without any requirements for such data, VR administrators would be in a better position to analyze the results of agency efforts with an effective client data system early in the development of programs for SLD individuals. Such program evaluations should include an analysis of the referral sources, a comparative analysis of movement through the rehabilitation process (including time in various statuses, etc.) and the eventual outcome at time of closure and at specified follow-up periods after closure. Because of an inadequate data base, assumptions should not be made nor should expectations be based on previous experiences.

Implications for Vocational Rehabilitation

Vocational rehabilitation agencies can develop a variety of policies that will permit initiation/expansion of services to SLD individuals **without** unacceptable management problems or undue complications. These conditions can be met only by development and adoption of specific administrative policies. Administrators should adopt a policy that best serves the agency and the SLD citizens. **Policy is an agency matter.** It is important that each agency have such a policy articulated in writing, rather than by default or silence.

- 1. Definition of Specific Learning Disabilities:** Several definitions are possible and are described in this document. The agency should be specific and adopt a version best suited to its needs.
- 2. Legal Requirements for the Establishment of the Disability:** In developing agency policy concerning the diagnosis of SLD, the credentials and qualifications required must take into consideration state licensure laws of medicine, psychology, and state departments of education. Overly strict expectations as to credentials required may make implementation impossible.

The availability of rehabilitation staff and school psychologists is also an important consideration. Generally, an interdisciplinary team of rehabilitation experts, school staff,

and psychologists will be best able to determine an appropriate diagnosis and the functional limitations imposed by the disability.

3. **Interagency Agreements:** Services to SLD individuals will require the expertise of various agencies or organizations. Agreements should clearly define who will be responsible for which service, who will be responsible for payment, and so forth.
4. **Case Service Policies:** The VR agency should specify its role in educational services (academic remediation versus adjustment services) and limits of expenditures. Policy should also address criteria for termination of services (successfully as well as unsuccessfully). The advocacy role of the agency should be addressed as well as the limits to the expertise of the staff in serving SLD clients.
5. **Program Effectiveness/Evaluation:** The VR agency should initially develop a client data system that will permit an objective evaluation of the effectiveness, weaknesses, and strengths of a program of services to learning disabled individuals.

Section IV

Case Process

Unit 1

Referral and Screening of SLD Clients

Unit 2

Diagnosis and Assessment of SLD Clients

Unit 3

Eligibility and Severity

Unit 4

Program Planning for SLD Clients

Unit 5

Job Placement and Follow-up

Unit 1

Referral and Screening of SLD Clients

Objectives

1. To discuss the various referral sources and their ramifications.
2. To review the screening options.

Summary

The largest referral source of SLD clients to vocational rehabilitation will in all probability be the public school system. The SLD population represents a wide and varied set of complicated problems and complex behaviors; thus, VR counselors should utilize a preliminary screening process. This process is essential in order to identify those factors that would indicate the presence of a Specific Learning Disability as well as any other disabling condition that might be present.

Discussion

In June 1980 the Client Services Committee of the Council of State Administrators of Vocational Rehabilitation (CSAVR) surveyed state VR agencies on policy and practices relating to persons with SLD. Although the information collected could not be considered statistically valid and reliable due to the fact that the RSA-300 did not provide a discrete code for SLD, the data may provide clues to the status of individuals with SLD within the VR system. The following points represent some major findings of the CSAVR survey:

Schools were the largest source for referrals of specific learning disabled individuals to state VR agencies.

Self-referred SLD persons were the next highest source.

Most SLD individuals referred to VR were 17 to 18 years of age.

The next age range most frequently reported was 23 to 29 years of age.

Most individuals referred from either age category were more likely to be single than the average clientele.

Two-thirds of those referred were males.

Most individuals had no income at the time of referral.

Industrial fields of occupation seemed to be the primary source of employment followed by service occupations. At least 10% were placed in professional occupations.

Lerner, Evans, and Meyers (1977) surveyed SLD students in secondary schools. They noted that the crisis of adolescence is magnified in these youths and is complicated by a complex of behaviors, including poor motivation, faulty work habits, low self-esteem, and a history of failure. These behaviors combine to form a pattern of maladaptive work, social, and emotional habits that militate against success in and out of school.

The essential learning problems, such as inconsistent perception and language difficulties, compounded by the behavioral concomitants of learning disability, are compacted into maladaptive coping patterns by adolescence (Wallacy & McLoughlin, 1979). The constellation of problems and behaviors, apparent and aggravated in the adolescent, is entrenched by adulthood (Suhay, Newill, Scott, Williams, Stout, & Decker, 1980).

The Illinois Department of Rehabilitation Services (n.d.) addresses this problem in this way:

The problems of learning disabled individuals, difficult in childhood, may be amplified in adulthood. Additionally, problems of biological, physiological, and cognitive maturation, a natural part of adolescent development, are exaggerated in learning disabled youth. This multitude of behaviors, apparent and aggravated in the adolescent, is entrenched by adulthood.

The multitude of behaviors associated with learning disabilities compounds as the learning disabled individual grows older. Brain dysfunction and related perceptual motor, learning, and communication disorders constitute the first level of problems for learning disabled individuals. Other problems for learning disabled individuals consist of adaptive behavior patterns developed in efforts to cope with learning disability. Impulsiveness, perseveration, failure to achieve, inability to delay gratification, attentional deficits, and other behavioral aspects of the learning disability are no less a part of the disability, but their very nature may make them less likely to be recognized as related to the specific learning disability.

The expectation may be held by some state rehabilitation administrators that schools will overwhelm state VR agencies with large numbers of SLD referrals. However, this has not been the experience of California, Pennsylvania, and Texas VR agencies. The definition of SLD (discussed further in Unit 2 of Section IV, **Diagnosis and Evaluation**) is critical to this issue.

The VR system should utilize a preliminary screening process in order to confirm or deny that an individual demonstrates symptoms or behaviors indicative of SLD. The screening process conducted by the VR counselor is extremely important because of the possibility of misdiagnosis of SLD or the presence of other disabilities.

Additionally, state VR agencies should strive to develop effective operational relationships with all referral sources in order to resolve possible definitional differences and establish positive working relationships, which will result in each system working in a coordinated fashion with the client toward a common goal.

Implications

1. The school system will, in all probability, be the largest referral source of individuals with SLD. The number of referrals, however, may not be nearly as great as some administrators expect.
2. Because of the complexities of behaviors associated with SLD clients, VR agencies should develop an adequate screening process for identifying the rehabilitation potential of SLD clients who otherwise meet the criteria for eligibility.

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Unit 2

Diagnosis and Assessment of SLD Clients

Objectives

1. To review various diagnostic/evaluation procedures currently available.
2. To discuss policy accommodations regarding diagnostic/evaluation procedures.

Summary

A wide variety of diagnostic and evaluation techniques and instruments are available for the diagnosis of SLD. The SLD definition selected will influence the diagnostic procedures utilized.

Discussion

Adamson (1979) suggests that, when an SLD individual is being evaluated, a multidisciplinary team approach may be desirable. Such a team might include specialists in neurology, neuropsychology, psycholinguistics, reading, and communications. If this is not possible, existing diagnostic information from other records may have to suffice.

Whatever diagnostic approach is selected, it is important to identify in addition to the learning disability any possible accompanying contaminating factors such as medical problems, mental health problems, socioeconomic disadvantage, etc. (Hammill, 1976, 1977).

The literature reveals that there are assessment techniques that can be used with SLD adults. The literature further shows assessment measures for SLD adults fall into three categories: (a) informal tests and observational measures; (b) standardized psychological tests; and (c) neuropsychological test batteries (Suzhay, Newill, Scott, Williams, Stout, & Decker, 1980).

It is important to consider all aspects of the client's background. Environmental and familial dynamics are vital components of the diagnostic process since parents and significant others can influence for better or worse the SLD individual's self-image and feelings of adequacy. For this reason, informal and observational measures are an important part of psychodiagnosics. This process includes interviews, histories, structured tasks, anecdotal reports, and checklists (see Appendices A and B).

Achievement

- Wide Range Achievement Test
- Peabody Individual Achievement Test (PIAT)
- Metropolitan Achievement Tests
- Sequential Tests of Educational Progress (STEP)
- Peabody Picture Vocabulary Test (PPVT)
- Woodcock Reading Mastery Test
- Key Math Diagnostic Arithmetic Test
- Prescriptive Reading Inventory
- Diagnostics Reading Inventory

Perception

- Bender Visual Motor Gestalt

Behavior

- California Personality Inventory
- Minnesota Multiphasic Personality Inventory
- 16 Personality Factor Questionnaire

Since many of these standardized psychological tests were developed specifically for children and not to evaluate adults with SLD, professional experience suggests that they must be used in conjunction with other types of diagnostic and evaluation instruments.

A wide array of assessment options are available when diagnosing and evaluating an individual with SLD. Informed assessment techniques often offer pertinent information. Standardized psychological measures offer credibility, objectivity, and comparability, but their

validity for the adult SLD population is often approximate. Neuropsychological test batteries, which have the advantage of some validation research with SLD individuals, consist of tests in the following areas: motor; rhythm; tactile, visual, and auditory perception; speech (receptive and expressive); academic achievement including writing, reading (including reading comprehension), and mathematics; memory, intellectual processing; ability to learn; and reasoning.

The three neuropsychological test batteries that are widely recognized are the Halstead-Reitan Battery, the Luria-Nebraska Battery, and the McCarron-Dial Work Evaluation System. At this time, a few state agencies are utilizing neuropsychological testing to determine SLD for eligibility and planning purposes.

Implications

1. When diagnosing a Specific Learning Disability it is necessary to utilize a variety of instruments, disciplines, and techniques.
2. The definition of SLD will influence the various options that are utilized in structuring and completing the diagnostic process.
3. Sensitivity to additional disabling conditions must be identified and compensated for both in the diagnostic process and rehabilitation plan.

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Unit 3

Eligibility and Severity

Objectives

1. To emphasize state agency policy as it relates to basic eligibility requirements for SLD individuals.
2. To discuss the various functional dimensions in determining "severe disability."

Summary

Due to the variations in manifestation of a Specific Learning Disability, especially the degree of "severity," the criteria used in determining the functional limitations should receive major consideration for development and agency policy consideration.

Discussion

Prior to the Rehabilitation Regulations of 1981, individuals were not considered for VR services solely on the diagnosis of an SLD unless another physical or mental disability also existed. An appendix to the Department of Education's 1981 Regulations for State Vocational Rehabilitation and Independent Living Rehabilitation Programs permitted VR services to individuals on the basis of "a specific learning disability" (Thomas, 1981; U.S. Department of Education, 1981). The Regulations also define a "severely handicapped individual" as someone:

Who has one or more physical or mental disabilities resulting from amputation, arthritis, blindness, cancer, cerebral palsy, cystic fibrosis, deafness, heart disease, hemiplegia, hemophilia, respiratory or pulmonary dysfunction, mental retardation, mental illness, multiple sclerosis, muscular dystrophy, musculoskeletal disorders, neurological disorders (including stroke and epilepsy), paraplegia, quadriplegia and other spinal cord conditions, renal disease or another disability or combination of disabilities determined on the basis of an evaluation of rehabilitation potential to cause comparable substantial functional limitation.

The term, functional limitation is defined in **Functional Limitations: A State of the Art Review** (n.d.):

- (1) an inability to perform some life activity,
- (2) of relatively long duration,
- (3) caused by an interaction between an impairment and the environment,
- (4) related to one's vocational potential.

In this definition functional limitation is specifically related to vocational rehabilitation but may not be applicable to other agencies. In this case the definition would need to be modified.

Each state plan for vocational rehabilitation (U.S. Department of Education, 1981) "must assure that eligibility is based upon:

1. The presence of a physical or mental disability which for the individual constitutes or results in a substantial handicap to employment; and
2. A reasonable expectation that vocational rehabilitation services may benefit the individual in terms of employability."

Even though Specific Learning Disability is included within the list of severely disabling conditions, it cannot be considered a severely handicapping condition unless there is evidence of serious functional limitations and a need for multiple vocational rehabilitation services over an extended period of time.

Although diagnostic instruments and examinations provide considerable information about SLD individuals, such methods provide only part of the information needed to determine a client's eligibility for rehabilitation services. The manner in which the limitations of the SLD client constitute a substantial vocational handicap should be demonstrated. Therefore,

psychological and/or neuropsychological reports should contain specific information regarding functional limitations and, if appropriate, specific recommendations for prescriptive activities. It will be necessary for the rehabilitation counselor to ask very specific questions of the diagnostician regarding functional limitations.

These functional limitations should then be used in making the "reasonable expectation" determination. When determining eligibility for rehabilitation services, it will be helpful to consider such factors as the presenting symptomatology: relevant dynamics (gross mental disturbances, emotional reaction, psychosomatic features, prominent adaptive strengths, defense mechanisms, etc.); the client's milieu (appearance, mannerisms, behavioral patterns, developmental history, etc.); and the client's aspirations.

These factors can assist in evaluating the severity of the SLD client so that a determination of "severely handicapped" can be made. Considering the many and varied ways in which SLD can present itself, a clear understanding of the functional capacities and limitations are essential to the development of a first-rate Individualized Written Rehabilitation Program (IWRP).

After the functional components for determining severity have been established, agencies should establish appropriate policies to reflect those components. An evaluation strategy should be established to monitor and evaluate the effects of these policies.

Because of the variations in SLD itself, the numerous types of diagnostic instruments, the lack of definite criteria for determining severity, and the general variance in attitudes and available technology for service planning and implementation, it is extremely important to keep adequate and complete notes and documentation for each individual casefile. These records are especially important for planning, reviewing activities and results, and policy modification considerations. Complete documentation is also very important to the VR counselor and agency, should clients choose to exercise their right of appeal.

If, after all due considerations are made, the client is considered to be ineligible for VR services, referral to other appropriate agencies should be made by the vocational rehabilitation counselor.

Implications

1. SLD is included in the federal regulations to the Rehabilitation Act under the definition of "severely handicapped."
2. Even though SLD is included in the list of severe handicapping conditions within the federal regulations, SLD cannot be considered categorically as a severely handicapping condition.
3. Functional limitations need to be identified to document the severity of the handicapping condition and to plan the IWRP.
4. The methodology for determining severity should be incorporated into agency operating policy.
5. Complete casefile documentation is necessary and essential for planning, evaluation, and policy modification considerations.

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Unit 4

Program Planning for SLD Clients

Objectives

1. To identify specific elements to be considered in developing an appropriate Individualized Written Rehabilitation Program (IWRP) for SLD clients.
2. To discuss implications regarding vocational planning and special considerations for implementing and providing services.
3. To emphasize the necessity for development, coordination, and utilization of support systems.

Summary

Since this will be the first time most state VR agencies have formally provided services to SLD clients, many new problems will arise. Without question numerous different approaches and strategies will be proposed and tried before the most appropriate methods are determined. In addition, agencies may find that many of these methods will call for extended and multiple services, which in some cases may be beyond the resources of the agencies. It will, therefore, be essential that goals and objectives for each SLD client be specified and service delivery carefully planned in a well developed IWRP.

Few states have well established research programs that demonstrate effective techniques for vocationally rehabilitating SLD individuals. This lack of expertise in vocational planning for SLD clients may be due in part to the fact that education, the field traditionally responsible for SLD, has directed most of its energy to classroom instruction and learning techniques. In addition, few state VR agencies have neuropsychological consultants available. Most, however, have access to colleges and universities from which consultation may be obtained, and all states have associations for children and adults with SLD. These factors, to a large degree, will cause state agencies to depend heavily on the rehabilitation counselor to devise innovative approaches. Ultimately, it will be the counselor's responsibility to see that needed services are provided to SLD clients.

Discussion

The person with SLD often comes to the VR counselor with a history of failure in many areas and suspicion of authority figures. Consequently, from the start the counselor must develop a relationship built on mutual trust. A client will usually trust a counselor who genuinely understands the individual and familial problems caused by SLD and is able to communicate this understanding. This understanding is also important because persons with SLD are often overly dependent on their families and unable to assume adult roles. It may be desirable to involve the family to prepare the SLD client for leaving the protective home.

Rehabilitation personnel should be aware of the following problem areas of SLD clients:

Organization—SLD individuals often have coordination and spatial awareness problems, which may be reflected in their personal appearance and capacity to present themselves appropriately. Managing money and finding proper living arrangements may also be difficult. Often simple interventions, such as having the client make a list of tasks, will help circumvent many of these problems.

Understanding—An inability to understand the request of others and to follow directions are significant handicaps. The VR counselor will need to know how such problems affect the client's ability to travel to their job, be on time, manage money, and read directions. Other work adjustment problems may include academic skills, inefficiency, errors, accident proneness, difficulty with academic skills, problems in learning a sequence of tasks, and inadequate social skills.

The counselor should also remember that all people with SLD may have many strengths that can be used to the client's advantage in the rehabilitation process. Brown (1980) provides the following three examples:

Creativity—Incorrect perception leads to a slightly different way of looking at the world. Inability to think in an orderly way can lead to new solutions to problems.

Self-Discipline—An invisible handicap must be overcome while receiving little praise. This takes a lot of inner strength.

Overcompensation—Disadvantage can be turned to advantage. For example, some people with SLD overcome their disorganization by becoming superorganized.

Ancillary services may be needed to assist SLD individuals and may be provided by state VR agencies. Some of these services are as follows:

- Vocational capability assessment
- Tape recorders
- Reader services
- Special classes for Specific Learning Disabilities
- Independent living skills classes
- Work experience programs
- Adaptive environment
- Use of talking calculators
- Use of proctors-readers
- Use of braille watches
- Registration assistance
- Counseling
- Peer counseling

There are many differences and variations in styles of learning; therefore, counselors should not expect to see a typical or classic SLD client. The case work-up should proceed as for any other rehabilitation client. With many SLD individuals there are emotional overtures, which will demand all the skills of a competent counselor. This will require the counselor to provide the client with personal and/or work adjustment services prior to training or placement efforts.

A. Establishing Vocational Goals

The joint development of the IWRP by the counselor and client should contain two important considerations, which will significantly contribute to the client's probability of being rehabilitated: (1) matching the client's abilities/assets with job requirements and preferences, and (2) the selection of intermediate objectives/steps to attain the goal. The work related functional limitations of SLD clients are addressed by the intermediate objectives, which help remove or compensate for vocational limitations.

SLD clients and their counselors should study both the job market and specific jobs prior to actually developing the IWRP. These two important components of vocational planning, the job market and specific jobs, should be studied just as carefully as a potential employer studies a prospective employee (Brown, 1980). Counselors and clients should consider the following job aspects prior to deciding on a training area or vocational placement: (1) the actual job, (2) the work supervisor, (3) the work environment of the job, and (4) the company's values.

1. The Job

All duties of a job should be analyzed and understood by both the counselor and client, especially with regard to possible problems. For example, hyperactive clients may want to avoid a job that requires sitting in one place all day, as this type job provides few "pressure relief valves" (Weiss & Weiss, 1976). If answering a phone is part of the job, a person may be unable to leave the work station, or if the client has auditory perceptual problems, answering the phone, taking messages, and relaying them in writing or orally may be difficult. Other job duties to consider are typing, reading, writing, and math. Is

driving a car involved? If so, how much driving is required? How important is accuracy and speed in performing job duties?

Possible hidden job requirements also should be investigated. For example, some nonsecretarial jobs demand typing, or a sales job may include considerable amounts of paperwork. If possible, a written job description should be requested in order to ascertain job duties.

2. Work Supervision

Many large employers hire their workers through personnel officers, and the newly employed workers meet their immediate supervisor only after being employed. Counselors or placement specialists should possess working knowledge of three items prior to placement: (1) functional work limitations and assets of the client; (2) the duties of the job; and (3) possible suggestions for the supervisor about how the client's assets and job duties can be made compatible, with job modification, to the company or work unit.

Job modifications should be suggested skillfully, simply, and tactfully by counselors. The supervisor may or may not be looking for help. Presentations that are complex sounding, filled with jargon, may lead the supervisor to believe that too many changes are required. Thus, clients may be perceived as too much trouble rather than potentially successful workers.

Job placement is ultimately the responsibility of VR counselors. While some clients may appear to be job-ready to the point they may be able to communicate directly and spontaneously with the supervisor, VR counselors have a direct role and responsibility in placement. In addition to performing an appraisal of clients' work experiences and special skills, counselors should facilitate the entire placement process by functioning in definite roles that benefit employers. Such roles may include the following: (1) consultant/educator on how employers can obtain qualified handicapped employees; (2) advisor on tax credits that employers may receive through the Targeted Job Tax Credit Program for employing handicapped individuals; (3) job analyst of the specific mental and physical skills needed by employees in performing specific job assignments; and (4) consultant on barrier free designs.

Additional considerations are needed to effectively place SLD clients. Will the supervisors in certain occupations listen to clients repeat directions out loud if the client has problems following directions? Will the supervisor put important directions in writing? If the client is required to do some tasks differently, how much disruption will be caused? Has the supervisor worked successfully or unsuccessfully with other disabled people? What is the company's experience in hiring disabled workers (Brown, 1980)?

Most employers will have had some experience in dealing with physically or mentally disabled people in the community, in their families, or through media exposure. These contacts may have been positive or negative experiences, resulting in accurate or inaccurate perceptions. The main task of the counselor and SLD client becomes one of marketing the handicapped client as a qualified worker possessing skills and potential to become a successful employee.

3. Work Environments and Company Values

Brown (1980) states that SLD clients with severe visual-motor problems should be cautioned against an environment that is constantly crowded and cluttered. An individual with auditory perceptual handicaps may need to avoid situations with a high level of background noise and should arrange for a quiet place to work. Vocational planning should consider environmentally related factors, including selection of jobs that will not negatively affect the client's problems or continually exacerbate those disabilities.

Determination of a company's values include consideration of several factors according to Brown (1980). What is the employee turnover rate for the company? Is the turnover rate due to intolerance for nonconformity, absenteeism, lateness, or other factors? Examination of the current job market and economic situation of the early 1980s indicates that it is an "employer's market," and depending on the level of skill, companies literally have their selection of workers. It may be an advantage for counselors and clients to investigate several types of companies where suitable jobs exist for SLD Individuals.

B. Planning in the Case Process—The IWRP

The IWRP should be the document that details all the activities the counselor and client will carry out, as well as those other goods and services that will be required for vocational rehabilitation. The development of such a plan for an SLD client is approached in the same way as with other clients.

1. Elements to be Considered in Planning

An individual's successful vocational adjustment depends upon a number of factors. Only those elements that can be specifically related to the client and dealt with directly should be considered in planning. Elements to be considered with the client in developing the IWRP include the following:

a. Disability

- Stability
- Treatment required
- Mobility
- Attitude
- Specific limitations

b. Family

- Stability
- Degree of supportiveness

c. Finances

- Financial state
- Financial support
- Available resources

d. Personal/Social

- Age
- Appearance
- Attitude
- Ability to communicate
- Personality

e. Education

- Level
- Achievement
- Interest
- Training
- Actual skills

f. Employment

- Work experiences
- Work stability
- Work skills
- Job continuation
- Job availability
- Motivation to work
- Job seeking skills
- References

g. Mobility

- Driver's license
- Able to drive
- Other transportation
- Ability to relocate

The data from these major elements must be analyzed by the counselor and client. From this analysis should come a more precise understanding of the client's strengths and weaknesses, assets or liabilities, and needs for services. Areas requiring remediation should emerge and appropriate activities then be incorporated into the IWRP. The ultimate goal toward which all remediation activities are directed is a suitable job for the client.

2. How Not to Plan

In planning a rehabilitation program with SLD clients, two common errors are frequently seen:

- a. Forget the limitations, full speed ahead**—It's true that a client's limitations should never dampen the enthusiasm of rehabilitation workers. On the other hand, limitations must not be ignored.

Unfortunately, it appears that during planning, the client and the counselor often do not use the diagnostic information they have assembled during the eligibility determination phase. Occupational plans are then developed without regard to the client's functional limitations and current levels of performance. Assisting a client to move toward an occupational goal where his or her limitations will make success impossible or extremely difficult is not good rehabilitation practice.

- b. **Rehabilitation is a cure-all**—Most SLD applicants are referred to vocational rehabilitation toward the end of their school careers. At that point, most of them have been psychologically evaluated and have received years of special and remedial instruction from professionals in the school system. After these remedial efforts by educational experts, the student may still read at a low elementary grade level. Logically, rehabilitation workers should accept that level, rather than assume that somehow, in a few brief months, VR's effort will magically transform a virtual nonreader into a capable reader when experts in reading and learning disabilities have failed to do so over a period of years. Unless there is clear and compelling evidence otherwise, the VR effort should proceed on the assumption that the schools have provided remediation that has brought each learning disabled client to his or her highest functioning level possible at this point.

C. VR Service Delivery

The majority of clients participating in the vocational rehabilitation system realize their vocational goals via one or more of the following services (1) prevocational/adjustment training, (2) vocational/college training, (3) on-the-job training, & (4) guidance/counseling and direct placement. During vocational planning and development of the IWRP, these four service areas should be examined closely in terms of the unique needs of the SLD client.

1. Prevocational/Adjustment Training

Prevocational adjustment covers a wide range of services. Several types of adjustment services typically available in vocational rehabilitation programs are described by Baker and Sawyer (1971) and are very applicable to SLD clients. These prevocational adjustment areas cover a broad spectrum of services including physical, psychological, social, educational, and vocational.

a. Physical/Medical Adjustment Programs

Counselors need to be aware of recent developments and research that address the problems, issues, and concerns related to SLD as well as recent medical advances in this area.

Neuropsychological techniques have been applied in the areas of SLD identification and remediation. Investigative studies are being conducted to determine the influence of nutrition on behavior, especially sugars and food additives. The role of stimulant drug therapy in the treatment of SLD continues to undergo study, as well as other medical factors such as how an abnormal nervous system or biochemical individuality relates to Specific Learning Disabilities (ACLD, 1982).

Some SLD clients may be prescribed medication for their hyperactivity. If they omit their medication, resulting behaviors may impede their adjustment training. Others may be on a high protein, low sugar diet.

Cylert and Ritalin are two drugs frequently prescribed for SLD individuals. Some individuals are subsequently removed from drugs during adolescence as neurological symptoms become "soft." SLD clients who take medication to control their hyperactivity may display behaviors during counseling, training, and on-the-job that may be misinterpreted, especially if medication is omitted, even temporarily. Teachers, family members, employers, fellow employees, and counselors are probably in a more advantageous position than physicians to

observe the daily effects of medication on client behavior. It is very important for counselors to ascertain if SLD clients are medicated and to have some knowledge of how such therapy affects or can affect rehabilitation performance. Counselors are also in a position to suggest the possibility of a need for clients to return to the physician if they experience severe interference with functioning.

b. Psychological/Social/Educational Adjustment Programs

SLD clients may need help in changing inappropriate, ineffective behavior into acceptable and balanced modes of responding to specific situations. Psychological adjustment programs can be designed to improve SLD clients' behavior to the point where it becomes acceptable and meaningful, both to themselves and to society.

Social adjustment training is concerned with helping SLD clients and their families adapt to a changing social environment. Many SLD adolescents have been observed to be subject to mood swings, outbursts of temper, volatile behavior, as well as requiring considerable help from parents (Weiss, 1976). There may be a tendency towards over-dependency; many SLD adults remain at home beyond their teenage years and experience considerable difficulties in building independent lives, such as getting along with others, managing money, shopping, and finding a place to live. Many SLD young adults have left home, attempted to set up independent lives, tried to manage employment and, finding themselves unable to continue, returned home.

Educational adjustment programs are concerned not only with upgrading the SLD students' academic skills but in improving the person's ability to make effective use of their economic resources.

c. Vocational/Work Adjustment Programs

Work adjustment programs are designed to improve the client's conception of actual work demands and employer expectations. Adjustment programs can be arranged to focus on many unique problems experienced by SLD clients. According to Brown (1980), typical work adjustment problems encountered with this population that need attention in an adjustment program may include the following:

Inefficiency—It can take an SLD worker longer than others to do the same task.

Errors—SLD individuals frequently make mistakes and may need to work on slowing their pace, developing accuracy, then increasing at an accurate pace.

Accident Proneness—Difficulties with gross and/or fine motor skills, a tendency to be easily startled, or visual perceptual problems can contribute to accident proneness.

Difficulty with Academic Skills—This may include problems such as making change, filling out order forms, selecting items from inventory, reading instructions, labels, etc.

Problems in Learning a Sequence of Tasks—Supervisors often report that it takes longer to train learning disabled adults.

Problems Related to Time—Many SLD individuals have trouble being on time, meeting deadlines, etc.

2. Vocational/College Training

Many state vocational rehabilitation agencies have entered into cooperative agreements with special education and vocational education agencies. These

agreements exist to provide a continuum of educational-vocational services to disabled students. The greatest impact of this agreement probably occurs at the post secondary level of education when handicapped individuals are faced with the decision of what career offers the most promise. The majority of post secondary programs recognize their responsibilities and have made modifications and other changes to better accommodate handicapped students. Modifications in these programs are usually initiated by administrators; however, their success in meeting the needs of handicapped students depends ultimately on the direct service providers, such as special education teachers, vocational education teachers, and vocational rehabilitation counselors.

VR counselors may be called upon to explain the clients' most effective channels for learning, especially to non-public school personnel such as vocational instructors or VR vendors. The counselors should also be familiar with some of the following problems that may be observed in vocational classrooms:

Decreased ability to sustain attention and resist distractions

Impulsiveness

Difficulty in verbal expression

Deficits in short and/or long term memory

Decreased ability to organize tasks

Difficulty with gross and/or fine motor skills

Hyperactivity

Difficulty in one or more of the basic academic skills

Language processing deficits (receptive and expressive)

Lack of resourcefulness in alternate methods of problem solving

Inconsistent emotional responses

SLD clients may have one or a combination of several of the above listed difficulties or deficits. VR counselors need to be knowledgeable of some of the techniques used to compensate for these problems in order to act as consultants to VR vendors and vocational instructors and to help in devising and modifying training programs. Some of these deficits and suggested compensating techniques are listed below:

Listening—Instruction in listening techniques help clients to benefit from lectures and demonstrations. Clients may need to be taught the meaning of gestures, facial expressions, raised or lowered voices. The need to be taught how to separate details from major points, ask questions and ask the instructor to repeat misunderstood statements.

Reading—Reading aids include note taking formats, audio tapes, verbal explanations, identifying key vocational vocabulary words. Metronomes have also been used to help SLD clients pace their reading (Barsh, 1980).

Thinking—Thinking techniques involve having the client do such things as describe a task they have learned and explain the operation, watch another student complete a task then tell what happened. Other techniques involve having clients reassemble disassembled machines, tools, and tasks.

Speaking—Speaking aids encourage clients to think before speaking. Hyperactive talkers have been provided with audio tapes of themselves to help them control their speaking behaviors.

Math—Math aids include measuring instruments for hands-on information. Equipment like calculators can help to solve vocational math problems.

Writing—Writing out ideas in a sequenced outline form, drawing simple pictures or diagrams, oral expressions, and oral exams can be utilized.

Vocational instructors should be willing to take advantage of the suggestions made by VR counselors because the instructors' job will be made easier. Suggestions need to be made tactfully and cooperatively and modifications implemented with minimum disruption.

The compensating aids and techniques previously listed have received attention as effective instructional strategies. Black (1976) suggested that VR lacked a service delivery system tailored especially to meet the needs of the SLD client. Recent research, however, has focused on learning problems in educational settings and employment. Interventions have been developed to impact school and job performance and, subsequently, SLD individuals' general adjustment to life and ultimate independence.

Substantial work in this area has been done by Alley and Deshler (1979) and Warner, Alley, Deshler, and Schumaker (1980). These researchers have constructed a "Learning Strategies Approach" that teaches young adults how to learn so they can better cope with the demands of the world of work. The Learning Strategies Approach, as well as others, may be applicable, practical, and useful in rehabilitation. The most desirable feature of this approach is that its methods of learning generalize to acquiring other skills over periods of time. This will be important to SLD clients' adjustment to new information and changes on the job.

Many colleges and universities have taken steps to make their campuses accessible for physically handicapped students; however, only a very few have made steps to accommodate SLD students. Prior to the client's application for admission, the availability of services for SLD students should be ascertained. These services may include use of tape recorders, carrying fewer course hours, taking untimed or oral tests, or doing special projects in lieu of examinations. The VR counselor needs to be aware of these possible modifications and take an active role in suggesting them, where applicable.

SLD students enrolling in college courses without checking the availability of accommodations may be setting themselves up for frustration, possible failure, and negative experiences that can damage their self-esteem and confidence. Those SLD clients who attempt to conceal their learning difficulties from college instructors should be made aware of the possible consequences of concealment, as well as the benefits of working cooperatively with available campus services.

Although policy decisions will vary among state agencies, SLD clients should not necessarily be encouraged nor discouraged to undertake a college education. Instead, SLD clients, like other clients, need counseling in relation to their abilities, their interests, the length of time and intensity of training, as well as availability of college curricula suitable to their needs.

3. On-the-Job Training (OJT)

OJT frequently presents an excellent opportunity for SLD clients to see practical applications of theoretical training. OJT experiences can help develop appropriate work behaviors and attitudes, the beginning of a successful work personality, etc. In arranging an OJT program, an SLD client's strengths, such as intelligence, need to be emphasized to employers. Too often an SLD individual's inability to read is interpreted by an employer as mental retardation; thus, it is important to emphasize the individual's compensating skills.

It is just as important for counselors to act as consultants for employers as it is for counselors to consult with nonpublic school vocational instructors. VR counselors should assist employers in devising alternate ways for SLD clients to learn the job (physical cues,

color codes, etc.). If the client's disability must be discussed with employers, counselors must stress that SLD is similar to any other disability in that it does not necessarily affect the functioning of the total individual. OJT is an excellent method of **combining theoretical classroom training with practical learning and skill development**. It also serves the SLD client well in helping to correctly interpret capabilities and make realistic self-assessment (Billings, 1981).

4. Counseling and Guidance

The SLD individual who applies for rehabilitation services and requires or requests counseling/guidance and direct employment placement services only, will likely present a special challenge to the VR counselor. On the surface, some SLD clients requiring or requesting only these two services may give a false picture of a "quick and easy" rehabilitation or "26 closure." Despite external appearances, counselors need to be aware of their substantial responsibility as the sole provider of services prior to placement in employment.

Counseling and guidance is a mandated service for all clients accepted for VR services. The Rehabilitation Act of 1973 (P.L. 93-112) requires that counseling and guidance be provided as an essential service and documented in clients' case records before an individual can be determined rehabilitated. Since most adults are receptive to counseling, it follows that SLD adults will, in general, enter counseling motivated to make changes in their lives in order to reach personal and vocational goals.

The cumulative life experiences of SLD adults can provide a breadth of potential abilities and strengths, as well as debilitating beliefs and attitudes. Subsequently, it is important for VR counselors to enter into counseling relationships with SLD clients directed toward improved self-image and personal development.

Counselors have personal preferences in counseling techniques based on their theoretical orientations, experiences, and the applicability of selected techniques to various client problems. The development of counseling techniques with SLD adults have not received much attention until recently. At this point VR counselors will have to rely upon those techniques generally found applicable to counseling adults, keeping in mind the special problems of the SLD adult population.

The life experiences of SLD individuals have often been described as "compliments being rare, put downs being more frequent" (Brown, 1980). Counselors may need to help a client develop a self-improvement plan and then help the client operationalize the plan. Overcoming self-doubt and building self-esteem are critical counseling areas for SLD clients who may bring to rehabilitation a history of failure and ridicule.

There are numerous counseling approaches available to counselors: rational-emotive, supportive, client-centered, behavioristic, cognitive, gestalt, existentialistic, and many others. Some counselors may also choose to be eclectic in their approaches. There are other counseling approaches that are pantheoretical in that they claim no relationship to the traditional schools nor do these schools claim relationships to them. Such nontraditional techniques may include yoga, transcendental meditation, relaxation therapy, and others. It is not the intent of this document to advocate for or against any counseling approaches.

Generally, in providing counseling to SLD clients, there may be a need to explore a deeper level of self-understanding and vocational expectations. Counselors may need to help SLD clients reorder fundamental beliefs about themselves and their world in order to attain vocational success.

Since traditional counseling is an intellectual and emotional activity that utilizes primarily oral communication, SLD clients may frequently present unique counseling related problems. Language processing problems may mean that clients are slow in

processing spoken language. Other clients may have auditory discrimination problems that mean they hear inaccurately or may experience possible misperceptions due to sequencing or discrimination errors, which can change the meaning of the entire message. Other auditory discrimination problems that may surface during counseling are scrambled messages, trouble hearing voice sounds over background noises, and other related problems.

During the session, counselors need to pay particular attention to client responses to determine if SLD clients are receiving communication accurately. Facial expressions, gestures, and other body language may provide additional cues for determining if effective communication is taking place. Attention to language processing and auditory discrimination problems may entail a little more than establishment and maintenance of rapport as a routine part of counseling. Prior to counseling, the clients' specific learning problems should have been diagnosed; counselors should be attuned to the possibilities of miscommunication.

Some counselors may overcome communication problems by simply asking clients to repeat or explain what was said. Some counselors may need to moderate their rate of speaking or ask counselees to do the same. Counselors should also practice meticulous pronunciation or even supplement their oral communication with "explanatory gestures," that is, if gestures are not distracting to clients. Conversely, clients with visual and/or auditory perceptual problems may become even more confused in attempting to deal simultaneously with both visual and auditory stimuli or with counselors that over use gestures. Generally, counseling processes vary among all individuals and must be modified for each SLD client in order to be effective.

Interviewing "pure" dyslexic individuals or others with language processing difficulties is a clinical art as is the psychological assessment of such individuals. The techniques of the art should, therefore, be practiced by interviewers and diagnosticians alike. The processing of spoken language by such clients tends to be slow and is characterized by other differences as well. The counselor and the diagnostician in giving instructions or information must remember to:

- 1) Reduce the rate at which words are spoken.
- 2) Articulate with more precision.
- 3) Use clear and simple language.
- 4) Reinforce spoken communication with alternative words or phrases of similar meaning.
- 5) Divide a long series of directions into short sequences.
- 6) Restate the information or instruction as often as necessary. (The facial expression of the client will often reflect that the message has not been processed).
- 7) Do not show impatience with delayed response time or with slow rate of verbal expression (speech) of the client.
- 8) Do not attempt to hurry or speed up the client's rate of verbal expression. This results in disorganization of the thinking process and word retrieval ability of the client, who may then simply withdraw from that particular communication interchange.
- 9) Assist the client in self-expression when difficulties in word retrieval (dysnomia) occur.
- 10) Double check that the client has understood completely an important piece of information or direction by asking that it be repeated by the client. When in doubt, write it down.

Such simple techniques will greatly increase the comfort and productivity levels of the client with language processing difficulties.

Implications

1. Vocational rehabilitation counselors should develop and maintain current knowledge of appropriate planning strategies to enable specifically learning disabled clients to develop and attain employment goals.
2. Although state agency staff may have limited planning experience with the SLD population, available techniques and aids for learning can be utilized and incorporated into planning efforts.
3. A rehabilitation program of services for SLD clients must be realistic, well defined, and individually tailored to accommodate the various and unique needs of this population.
4. Guidance and counseling services are critical to appropriate selection of employment goals that fall within SLD clients' capabilities.
5. Consideration should be given to the job market and SLD clients encouraged to work towards reasonable employment goals.

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Unit 5

Job Placement and Follow-Up

Objectives

1. To emphasize the essential and unique elements to be accommodated in job placement services to the SLD client.
2. To discuss special considerations regarding follow-up and case closure relative to established vocational goal(s).

Summary

Placement of the SLD client into suitable employment is the ultimate objective of the vocational rehabilitation process. Job placement services should begin at the point when the person seeks rehabilitation assistance. Evaluating the client's employment potential and determining rehabilitation needs are the initial phases of the placement process. Planning for placement forms the basis for providing rehabilitation services, including counseling, restorative and preparatory services, job seeking and job finding skills, and follow-up assistance. Placement of SLD clients also depends on the development and utilization of occupational information, job analysis and matching with client skills, and continuous development of job opportunities for employment of the SLD client.

From the inception of the VR movement the counselor has had the responsibility for placement services. With the reduction in program funds, increased responsibility is being placed on the counselor as a direct service provider. The counselor's attitude and willingness is the key to success in placement.

The counselor's responsibility to the client does not stop when the client has been placed in employment. Before the case can be considered ready for closure, the counselor must follow-up to determine that the employment is suitable, i.e., the client must be employed according to his capabilities and potentials, and the employer must be satisfied. The nature and degree of follow-up required should be determined individually. It is important that the counselor stay close to the situation, know how the client is adjusting, how the employer is reacting, what problems are developing, and other details essential to providing the necessary service to the client and to the employer. If the client has made a satisfactory adjustment to the job, case closure can be considered after a minimum 60-day follow-up period. The timing for closure is a judgment issue involving a mutual decision by the client and counselor.

Discussion

A. SLD Client Traits and Employment Needs

Vocational rehabilitation counselors must be particularly cognizant of factors that relate to job placement and maintenance of employment. Anderson (1976) makes reference to employment obstacles for persons with Minimal Brain Dysfunction (MBD).

1. **Rigid Academic Requirements:** An MBD individual with learning disabilities and no diploma could pass the GED if it were adapted so that a reader could ask him questions that he could answer in writing if his disability was not writing or that he could read but answer orally if his writing were impaired. A reader is as basic to a dyslexic person as to a blind person.
2. **Inflexible Apprenticeship Tests:** Often the requirements for getting into an apprenticeship program exceed the requirements for the job. Why require a high proficiency in English for a plumber? What does square root have to do with auto mechanics? Why is skill in writing a requirement for carpenters? Let us adapt the tests to the job.
3. **Inappropriate Application Procedures** lost many good workers. Let an employee take the application form home or take it orally. And why throw up barriers such as "What magazines do you read?," which throws panic into the non-reader.

4. **Restrictive Union Requirements**, which seem to be getting tighter, exclude MBD applicants for similarly inappropriate reasons. Entrance into a skilled vocation is often almost impossible.
5. **Inflexible Working Conditions** often prove a barrier to employment. Where an MBD employee could work a partial day, he or she cannot always be productive eight consecutive hours. The pressures for on-the-job completion may be too great.

Hullinger (1981) states that learning disabilities come in many shapes and sizes. Essentially, persons with SLD are not getting complete information through their senses. It has been said that most SLD persons fail not at their jobs but "at the water fountain." They may have trouble fitting in and getting along with others. This may be because their perceptual problems give them incomplete information about others. They often have a lowered self-image but have no idea why others dislike them. As they begin to meet with success, some of these problems fade into the background.

SLD clients should be considered good prospects to benefit from placement services. Pearson (1981) reported that in California the cost of rehabilitating the SLD population averaged only \$1,032 for each client versus \$1,464 for all departmental clients during the fiscal year 1979-80. This impressive cost/benefit figure helps to establish the feasibility of VR services for SLD clients.

At the Montreal Children's Hospital, Rie (1981) related that they carried out retrospective 10 to 15-year follow-up studies on 75 hyperactive adults aged 18-24 years and 45 matched normal controls. The results indicate there is indeed great variability in outcome, which is best explained on the bio-psychosocial model of etiology. An interesting finding was that their work records (measured by employer ratings and the Hollingshead Job Status) were as good as those of normal subjects; whereas, their school records (as measured during their last year at school by teachers' behavioral ratings and school achievement) were significantly worse than those of control subjects.

According to Hullinger (1981), people need to do, to achieve, to be someone. There is a need to know that the world might be better because of something one did. This is the human need to work.

The basic skills required to succeed on a job as reported by Hullinger include:

1. Basic academic skills in reading, writing, and arithmetic.
2. Skills in productive work habits such as finishing a job task, doing one's best, cooperating, and being on time.
3. Having a personally meaningful desire to work. (There are a lot more people looking for jobs than there are people looking for work!)
4. Skills in understanding occupational opportunities.
5. Decision making skills.
6. Job holding skills.
7. Skill in making use of unpaid time (if fulfills the human need to work).
8. Skills in overcoming bias and stereotyping.
9. Skills in humanizing the work place for one's self.

If the placement is to be successful, the counselor must take into account the needs of both the employee and the employer. The counselor must understand the SLD client's strengths and limitations as they relate to work and seek a balance that provides both a challenge and a realistic opportunity for success. The degree to which placement goals are attained is a

measure of the value of the services provided. From the standpoint of the SLD client, an acceptable job is the measure of VR success.

B. Types of Placement Services Needed

Good placement techniques evaluate a person on the basis of his total capacities, which include experience, training, aptitudes, skills, and physical as well as mental qualifications. The client's capacities are carefully analyzed so that a job can be found that makes the best use of his or her work potential. According to Brown (1980), "to succeed in the world of work, it is necessary to choose a job that is a good one for you." Specific Learning Disabled adults should know how their handicaps affect them occupationally. More importantly, they should know what they are capable of doing and not doing.

Preparation of the client for employment begins with the initial counseling interview. This can be a frustrating period of time when the client is in need of direction and support. Frank (1967) stated that many clients have their greatest need for the counseling relationship at that time when they attempt to enter the competitive employment market after a period of dependency.

Preparation opportunities concurrent with the ongoing counseling relationships include rehabilitation facilities, on-the-job training, and job try-out situations in the community. In addition to job skills training, preparatory activities include opportunities for the client to develop appropriate insight into attitudes toward the world of work, skills in job seeking, and adjustment to entry into employment.

The Ninth Institute on Rehabilitation Services (IRS, 1971) recommended that adequate preparation of the client for employment include some combination of the following:

1. Evaluation of the client's job readiness.
2. Guidance of the client in development and execution of a plan for job-seeking activities.
3. Instruction of the client in proper methods of making job applications; proper conduct and appearance during job interviews.
4. Contacting employers.
5. Registration of the client with the State Employment Service and/or other employment resources.
6. Analysis and modification of jobs.
7. Consultation with employers or supervisors who are advised and trained as required.
8. Provision for post-placement follow-ups involving others, where appropriate, such as vocational education, state employment service, or other public or private community agencies or organizations.

The success of any placement program is affected by the job readiness level of the client. Secondary SLD students who have participated in a school work/study program are generally better prepared for employment than those students who have not had this experience. Vocational rehabilitation should encourage schools to develop work/study programs.

Work experience has several advantages, in addition to school credit toward graduation. The experience can help develop appropriate work behaviors and attitudes, which form the beginning of a successful work personality. If work experiences are rotated periodically, the individual can identify skills, interests, and become acquainted with the work world in a realistic manner. A successful work/study experience will enhance the SLD client's potential to obtain and maintain employment after graduating from high school.

The job application is frequently the individual's introduction to the employer. SLD clients who are able to read and write must be careful, neat, and provide accurate and complete information. If the client has adequate writing skills, but has problems with dates and addresses, the counselor should assist the client in developing a "fact sheet" that has information pertinent to most applications. The client can also ask to take the application home, obtain help in filling it out, and then return it to the employer. Whatever the method, emphasis must be placed on the job application as a critical step in the placement process.

Silberberg (1978) related that personnel managers perceive reading skills as a reflection of a person's intelligence and see the employee who does not read well as incompetent. The Silberbergs surveyed 30 application forms, looking at one question which asked the applicant about his or her educational background. Ignoring the format of the question, whether it required checking an appropriate box or filling in a blank, he looked at the vocabulary. Over 80 words were required to read this question with facility.

Hamilton and Roessner (1972) surveyed the hiring qualifications and disqualifications used in a national sample of 280 employers. The qualifications identified in this study are listed in Table 1, while the disqualifications are in Table 2.

Table 1
Percentage of Employers Requiring a Given Qualification
(N=280)

Qualification	Required	Not Required	It Depends
Ability to read	85	14	1
Ability to write	85	14	1
Good personal appearance	75	25	--
Job references	50	48	2
Pass a test	35	64	1
Job training, specific	28	69	3
High school diploma	28	70	2
Work experience, general	26	71	3
Experience, specific	23	73	4

Table 2
Percentage of Employers Rejecting Applicants
with a Given Disqualification (N=280)

Qualification	Would Disqualify	Would Not Disqualify	It Depends
Health problems	59	34	6
Record of drug use	56	27	17
Language problem	39	54	7
Record of alcoholism	35	44	21
Prison record	30	47	23
Arrest record	25	48	27
Overweight	20	69	11
Gamishment	18	68	14

Whether or not disabled applicants get jobs depends on the extent they are able to meet multiple selection criteria, only a few of which are directly related to their ability to do the job.

Both Table 1 and Table 2 indicate the importance employers place on language skills. It is, therefore, important for the placement specialist to do a thorough analysis of both the actual job requirements and the applicant's skill level. Remediation in the required skill areas and/or job modification could help the SLD client to qualify for the job. Selective job placement could help to remove some of the barriers that disqualify handicapped persons for employment.

The job interview is also an important component of the job-seeking process. Frank (1967) recommended role playing and group counseling to increase the client's confidence and ability in an interview situation. Role playing gives job seeking persons excellent opportunities to see themselves in a different and more favorable light, which will improve their skills during the actual interview with a prospective employer. Group counseling provides an ideal atmosphere to equip the job seeker with the tools needed to acquire employment, e.g., practice in writing job applications, test taking, interviewing, and other job related skills.

Anderson (1968) outlines five critical components of a job:

1. Ability to describe skills.
2. Ability to answer problem questions.
3. Appropriate appearance and mannerisms.
4. Enthusiasm for work.
5. Opening and closing.

The client should have in writing the time and place of the interview and know how much travel time is involved. SLD clients who lack social awareness should ask someone to check their dress and appearance before going to the interview. The counselor and client should role play an interview to help the client handle questions about the handicap. The amount of preparation required will depend primarily on the ability of the SLD client to express him or herself in an interview.

C. Follow-up and Case Closure

The counselor's responsibility to the client does not stop when the client has been placed in employment. Before the case can be closed it must be determined that the employment is suitable, i.e., that the client is happily and optimally employed according to capabilities and potentials and that the employer, too, is satisfied.

According to the In-service Counselor Training Project for Vocational Rehabilitation Counselors (1968), the period of follow-up varies with the individual client and not the nature of the disability. Some severely disabled clients may require very little follow-up activities, while others may require extensive follow-up. The follow-up may indicate that further counseling, treatment, and training are needed. The nature of the follow-up will be determined by the individual client's initial adjustment to the job. Follow-up may be accomplished through personal or telephone interviews with the client and the employer and questionnaires mailed to the employer.

The state plan requires a minimum follow-up of 60 days after the client has been placed on the job. Follow-up beyond the 60 day period is a matter of counselor judgment and should be determined by the client, employer's satisfaction with the placement outcome. The client's work should be suitable and in line with the objectives of the IWRP. If it appears that the client has made an optimal adjustment to an entry level position after the follow-up period, then the case can be closed. This is a decision that is mutually agreed to by the client, employer, and counselor. The counselor serves as the coordinator throughout the placement and follow-up process.

If an SLD client is in need of additional services after the case has been closed, **post-employment services** can be provided. The client should be advised to contact the counselor before leaving a job if problems arise.

According to Hudson (1972), the philosophy of rehabilitation has perhaps endured as many changes through its relatively short history as has the actual practice of rehabilitation. Each step has added concepts, which have been incorporated into a philosophy that is generally accepted today. Underlying this development has been the belief in the dignity and worth of every human being. This has resulted in vocational rehabilitation remaining person-oriented as well as goal-oriented. All of these factors have been combined to produce our present philosophy, which can roughly be described as follows: Handicapped individuals can be restored to economic productivity, independence, and stability and by so doing their self-concept will be enhanced and an atmosphere of opportunity will be established so that these individuals will be motivated toward further self-fulfillment.

Implications

1. The counselor has the primary responsibility for assisting the SLD client in finding employment. Knowledge of effective placement techniques and the uniqueness of the SLD client are important if placement is to be successful.
2. Job placement planning should take into account the needs of the SLD client and the employer. The counselor must understand how the client's strengths and weaknesses will impact on placement outcomes.
3. Future research studies should emphasize the SLD client's employment needs and effective placement techniques.
4. Follow-up services are essential to insure that the SLD client has made a satisfactory adjustment. The nature of the follow-up is highly individualized in accordance with the needs of each SLD client.
5. Rehabilitation administrators and counselor educators should focus on the importance of job placement with the counselor in the role of the direct service provider.

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Section V

Utilization of the Document by Rehabilitation Trainers

Utilization of the Document by Rehabilitation Trainers

Objectives

To present tentative guidelines for rehabilitation trainers to use in planning, designing, and conducting training programs on rehabilitation of clients with Specific Learning Disabilities.

Summary

Organizations must be prepared to define their goals and procedures for serving the SLD population and then provide the necessary training and resource development to accomplish those goals. This section of the study is designed for the trainers and is intended to help the organization put together programming that will enable its personnel to better identify, assess, plan with, and serve persons with Severe Learning Disabilities. Planning considerations and sample training outlines are included.

Discussion

The primary purpose of training rehabilitation personnel in the area of Specific Learning Disabilities is to increase the quality of services provided to these clients and/or to increase the numbers served. Staff development personnel and other trainers/educators will be charged with development of training programs for other professional staff that will ultimately determine the effectiveness of the services provided to SLD individuals. Dissemination of relevant information in the area of learning disabilities and presentation of good techniques/methods to serve this clientele will have a definite impact on the nature and effectiveness of the services provided. Not only does training provide information on methods for serving SLD clients, but it enables participants to share ideas through formal and informal interactions. Training should not be viewed as the answer to all issues, but well planned training sessions can do much to resolve many of the issues and concerns in developing and implementing services to specific learning disabled individuals.

Planning for Training

Any plan for training on SLD in agencies should recognize that to attain maximum impact, all levels of agency personnel must receive training. The success of any training program will depend upon the agency's commitment to change service delivery patterns, the content of the training, and the presentation of the material.

In planning training to increase services to SLD persons, the trainer should consider three phases or levels of programming.

Level 1—Training for Administrators

Before expectation of increased service delivery to SLD persons can be realized, the agency policies and mechanisms must be in place to facilitate service delivery. Training for this group should focus on the following outcomes:

- (1) A basic understanding of the nature of Specific Learning Disabilities, including functional limitations, identification, and service implications.
- (2) Administrative decisions on the following:
 - a. State agency definition of Specific Learning Disability
 - b. Revisions in agency policy and/or manual material
 - c. Allocation of personnel and other resources.

Level 2—Training for Resource Persons

According to agency policy decisions on serving SLD persons, it will probably be necessary to provide training for resource personnel (e.g., evaluators and psychologists). This training should focus on the skills necessary to serve this specific clientele. Suggested areas for training include the following:

- (1) Introduction to Specific Learning Disabilities (overview of brain function, effects of SLD, etc.).

- (2) Assessment techniques to accomplish the following:
 - a. Identify the disability and resulting functional limitations
 - b. Provide information to assist counselors in making eligibility decisions
 - c. Recommend appropriate services.

Level 3—Training for Service Providers

Training for persons responsible for coordinating/delivering services to SLD persons (e.g., counselors) should focus on the information and skills necessary to plan and deliver appropriate services. The following areas will need to be included:

- (1) Introduction to and Overview of Specific Learning Disabilities
- (2) Orientation to new policy/manual materials
- (3) Resources for serving persons with SLD
- (4) Training, adjustment, and job placement considerations.

While the following considerations for planning training are somewhat generic, they are worth noting in planning training for agency personnel in the area of Specific Learning Disabilities:

- (1) Involve clients, advocates and/or advocacy organizations, and service providers in planning and developing training. These individuals and groups are able to provide practical information and make recommendations in terms of successful methods and techniques for developing and implementing services to persons with SLD.
- (2) Administrative staff from various agencies and organizations should provide input regarding present and future plans for serving SLD persons. This process will assist with identifying training needs and may provide valuable resources for helping present the training.
- (3) Carefully identify learning and performance objectives for the training, and design activities to insure that these objectives are met.

Below is a sample agenda for a 1½ day training program for service providers such as counselors. This agenda is intended as a reference point—any agenda should be set to accomplish the objectives established by the trainer.

Sample Agenda

Prospective Program on Specific Learning Disabilities:

30 minutes	Introduction and Program Orientation
1 hour	Purpose, Objectives, and Pre-evaluation
1½ hours	Overview of Specific Learning Disabilities in Rehabilitation
1½ hours	The Specific Learning Disabled Population
1½ hours	Administrative Issues and Concerns Regarding Services to SLD Clients
3½ hours	Case Processing Referral and Screening Diagnosis and Evaluation Eligibility and Severity
1½ hours	Planning Services Job Placement and Follow-up Closure
½ hour	Wrap-up and Evaluation

Training Module for Specific Learning Disabilities

Content	Outcome	Methods and Materials	Trainers
Introduction/ Welcome	Participants will be made aware of workshop goals. Why they were selected to attend. What the training is about. What will be learned.	Registration forms Lecture IRI Manual	Staff Development Supervisor Training Coordinator
Overview of Specific Learning Disabilities	Participants will have a historical overview of SLD. Will be able to define SLD. Will be introduced to relevant issues in SLD.	Slide/tapes Handouts IRI Manual Selected literature	Staff Development Supervisor Psychologist Training Coordinator Agency Administrative Staff
The Specific Learning Disabled Population	Participants will gain understanding of SLD and who and how the agency will serve this clientele.	Lectures IRI Manual Handouts, Films Small Groups	Agency Administrator Psychologist Agency Administrator Program Managers Supervisors
Administrative Issues and Concerns	Participants will become aware of critical issues and concerns of agencies in implementing services to SLD.	Lecture, Overhead Tape/slides	Agency Administrator Program Managers Supervisors
Case Processing	Participants will become informed of agency policies regarding referral, screening, diagnosis, eligibility, severity of disability, needed services, and placement.	Lectures Large and Small Group Discussions IRI Manual, Agency Manual Regulations & Guidelines	Staff Development Supervisor Training Coordinator
Wrap-up and Evaluation			

Appendices

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Appendix A
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Appendix B

Guidelines for Serving the Learning Disabled

(Commonwealth of Pennsylvania Bureau of Vocational Rehabilitation)

I. Definition

Specific learning disabilities are defined as those disorders of one or more of the cognitive processes involved in understanding, perceiving, and/or using language or concepts (spoken or written). The disorder may manifest itself in problems related to listening, thinking, speaking, reading, writing, spelling, or doing mathematical calculations.

Specific learning disabilities do not include individuals who have learning programs that are primarily a result of visual, hearing, or motor handicaps; or mental retardation; or of environmental, cultural, or economic disadvantage.

II. Diagnosis and Eligibility Determination

A. Existing Information

A thorough investigation and evaluation should be made of all existing diagnostic data available from the individual, the referral source, and other facilities, to determine the need for an authorization for additional testing for eligibility determination.

B. Diagnosis of a Specific Learning Disability

The diagnosis of a specific learning disability must be based upon an examination by a licensed physician or a licensed psychologist who is skilled in the diagnosis and treatment of specific learning disabilities.

C. Eligibility Determination

Although diagnostic instruments and examinations provide considerable information concerning a specific learning disability, it is only one aspect in determining a client's eligibility for Bureau services. Demonstrated, too, must be the manner in which the limitations of the specific learning disability constitute a substantial vocational handicap for the individual client. It is from these factors that a determination is made for "reasonable expectation" (or eligibility for Extended Evaluation).

When determining overall eligibility for Bureau services, it will be helpful to consider such factors as the presenting symptomatology; relevant dynamics (gross mental disturbances, emotional reactions, psychosomatic features, prominent adaptive strengths, defense mechanisms, etc.); and, the client's milieu (appearance, mannerisms, behavioral patterns, developmental history, social relationships, etc.).

By the same token, these factors will assist in evaluating the severity of the specific learning disability so that a determination can be made. Because it is not a condition categorically included as severely disabled, the functional aspects must be addressed and demonstrated.

Addressing these dynamics in terms of vocational rehabilitation expectations will lend itself more appropriately to the development of the client's IWRP.

D. Neuropsychological Test Batteries

The FIELD research project identified information regarding the utility of neuropsychological test batteries in assisting with the diagnostic as well as case planning activities for individuals with specific learning disabilities.

This evaluation consist of a battery of tests in the following areas: motor; rhythm; tactile, visual, and auditory perception; speech (receptive and expressive); academic achievement including writing, reading (including reading comprehension), and mathematics; memory; intellectual processing; ability to learn; and reasoning. (The two most common batteries are the Halstead-Reitan and the Lauria-Nebraska.)

If neuropsychological test batteries are utilized to assist in either the diagnostic or case planning process, the report from the administration of a neuropsychological test battery should contain the following:

1. The limitations of the specific learning disability and their effects upon the client's functioning. These limitations should be described in functional terms relating to the areas of sensory-perceptual, motor, psychomotor, linguistic, and cognitive skills.
2. Prognosis for overcoming these limitations.
3. Recommendations and/or treatment plan for dealing with these limitations, particularly in relation to vocational planning and placement.

Appendix C
Learning Disabilities Checklist (LDC)

Instructions: Check the following items which pertain to the case being reviewed.

- I. Test Performance (psychological)
 1. Poor geometric figure drawing
 2. Varied WAIS or WISC R subtest scatter
 3. Poor achievement test performance
 4. Poor performance on Neuropsychological Batteries

- II. Impairment of Perception
 5. Impaired judgment of distances
 6. Impaired judgment of shapes
 7. Impaired judgment of time

- III. Disorders of Speech and Hearing
 8. Impaired auditory discrimination
 9. Late language development
 10. Mild hearing loss
 11. Difficulties sounding out words
 12. Auditory input confusion

- IV. Disorders of Motor Function
 13. Clumsiness
 14. Poor coordination
 15. Tics
 16. Poor handwriting

- V. Academic
 17. Reading disability
 18. Visual discrimination problems
 19. Visual analysis-synthesis problems
 20. Visual memory disorders
 21. Reversals of letters or words
 22. Math disability

- VI. Disorders of Thinking
 23. Poor abstract reasoning ability
 24. Reduced ability to generalize from social experience
 25. Reduced ability to relate cause and effect
 26. Difficulty making choices

- VII. Emotional Characteristics
 27. Low frustration tolerance level
 28. Need for immediate gratification
 29. Poor impulse control

- VIII. Social Behavior
 30. Poor group relationships
 31. Socially bold and aggressive
 32. Poor social judgment

IX Disorders of Attention

- 33. _____ Short attention span
- 34. _____ Easily distracted
- 35. _____ Restlessness
- 36. _____ Perseveration
- 37. _____ Daydreaming

Total checks: _____

Score

- I. Test Performance:** If any items are checked under this section refer the client to the VR/LD Specialist.
 - II. Perception:** When two items are checked refer the client to the VR/LD Specialist.
 - III. Speech & Hearing:** When three items are checked refer the client to the VR/LD Specialist.
 - IV. Motor Function:** When two items are checked under this section refer the client to the VR/LD Specialist.
 - V. Academic:** When either reading disability or math disability is checked or when any two items under this section are checked refer to VR/LD Specialist.
 - VI. Thinking:** When three items are checked under this section refer the client to the VR/LD Specialist.
 - VII. Emotional:** A client cannot be referred by their score on this section.
 - VIII. Social Behavior:** All items must be checked before referring the client.
 - IX. Attention:** Four items must be checked before the client is referred.
- Note:** When there are more than 15 total checks, refer the client to the VR/LD Specialist.

Author: A.J. Scott,
**Field Investigation and Evaluation
of Learning Disabilities.** Scranton:
University of Scranton, 1980.

Appendix D
Learning Disabilities History Form (LDHF)

Section I: Screening

1. Client's Name: _____

2. Sex: M F

3. Client's Age: _____

4. Marital Status: _____

5. Highest Grade Completed: _____

*6. Does the client perceive himself as having a learning problem?
Yes No

*7. List medical problems other than the potential learning disability.

8. Does the client have problems with the following? (Please check if there is a problem.)

- | | | |
|-------------------|-------|----------------|
| Sitting | | *Allergies |
| Walking | | *Asthma |
| Talking | | *High Fevers |
| Eating | | *Hyperactivity |
| Sleeping | | *Clumsy |
| Bed wetting | | *Remembering |
| *Seizures | | Playing sports |
| *Riding a bicycle | | *Ears |
| *Coordination | | *Eyes |

9. Does the client have problems with the following? Record the nature of the problem.

*Reading: _____

*Writing: _____

*Spelling: _____

*Math: _____

*Listening: _____

*Taking tests: _____

10. Does the client have problems with the following? (Please check if there is a problem.)

- | | |
|--|---|
| <input type="checkbox"/> Organizing tasks | <input type="checkbox"/> Responds without thinking |
| <input type="checkbox"/> Daydreaming | <input type="checkbox"/> Needs constant supervision |
| <input type="checkbox"/> Being tired | <input type="checkbox"/> Talking to others |
| <input type="checkbox"/> Behavior at home | <input type="checkbox"/> Being rejected by others |
| <input type="checkbox"/> Behavior at school | <input type="checkbox"/> Attention getting behavior |
| <input type="checkbox"/> Finishing work on time | <input type="checkbox"/> Upsetting others |
| <input type="checkbox"/> Making friends | <input type="checkbox"/> Needs constant encouragement |
| <input type="checkbox"/> Getting along with adults | <input type="checkbox"/> Low frustration tolerance |
| <input type="checkbox"/> Being distracted | <input type="checkbox"/> Talking to new people |
| <input type="checkbox"/> Restlessness | <input type="checkbox"/> Making decisions |
| <input type="checkbox"/> Easily upset | |

*11. Did the client receive any special help while in school (tutor, etc.)? (please check)

- Yes
 No

*12. Can the client sound out words? (please check)

- Yes
 No

*13. Has the client ever been told by a physician that he/she has a problem with his/her eyes? (please check)

- Yes
 No

*14. Has the client ever been told by a physician that he/she has a problem with his/her ears? (please check)

- Yes
 No

15. Does the client have problems with the following? (Please check if there is a problem.)

- | | |
|--|--|
| <input type="checkbox"/> Keeping his/her balance | <input type="checkbox"/> Getting work done |
| <input type="checkbox"/> Using hand tools | <input type="checkbox"/> Making money |
| <input type="checkbox"/> Writing so people can read it | <input type="checkbox"/> Reading a map |
| <input type="checkbox"/> Seeing clearly | <input type="checkbox"/> Remembering what was seen |
| <input type="checkbox"/> Drawing pictures | <input type="checkbox"/> Reading a newspaper |
| <input type="checkbox"/> Going out with friends | <input type="checkbox"/> Doing math |
| <input type="checkbox"/> Understanding others | |

16. Based upon your observation of the client, does he/she have problems with the following? (Please check if there is a problem.)

- Disorientation
 Understanding
 Coordination
 Organization
 Attention
 Social Behavior
 Concentration

17. Does the client have problems with the following? (Please check if there is a problem.)

- *Varied WAIS subtest scatter
- *Impaired judgment of time
- *Late language development
- *Auditory dyslexia
- *Impaired Auditory Discrimination
- *Tics
- *Visual dyslexia
- *Reversals of letters or words
- *Poor abstract reasoning ability
- *Poor impulse control
- *Socially bold and aggressive behavior
- *Perseveration

Section 2: Case Management

1. List the client's special skills:

- A. _____

- B. _____

- C. _____

*2. Can the client judge distances? (please check)

- Yes
- No

*3. Can the client judge weight? (please check)

- Yes
- No

*4. Can the client concentrate on a task?

- Yes
- No

*5. What is the client's WAIS or WISC-R Verbal I.Q. score?

*6. What is the client's WAIS or WISC-R Performance score?

*7. What is the client's Full Scale I.Q. WAIS or WISC-R score?

*8. Does the client have a diagnosed neurological problem? If Yes, describe below.

Notes:

- A. Those items marked with an (*) are the most important in determining if the client's primary disability is a learning disability.
- B. This history form is used by the VR/LD Specialist to determine the primary disability. Section 1 & 2 should also be employed to summarize the case after the involvement of the neuropsychologist.
- C. Sections 1 & 2 should be utilized in combination with additional agency client data.

Author: Dr. A.J. Scott,
8-1-80,
**Field Investigation and
Evaluation of Learning
Disabilities.** Scranton:
University of Scranton, 1980.

Appendix E Information Sources

Information on the Learning Strategies Approach can be obtained from:

Coordinator of Research Dissemination
Institute for Research in Learning Disabilities
University of Kansas
313 Carruth - O'Leary Hall
Lawrence, Kansas 66045

A list of colleges, universities and technical schools with programs for SLD students is available for a small charge from:

ACLD
Youth and Adult Section
4156 Library Road
Pittsburgh, Pennsylvania 15234

Time Out to Enjoy, Inc.
113 Garfield Street
Oak Park, Illinois 60304

Appendix F
Use of Neuropsychological Information
(Example)

As an illustration of how neuropsychological testing can define strengths necessary for vocational placement, one counselor in consultation with a neuropsychologist was able to determine the skills of a client (as measured by the Luria-Nebraska test) necessary for success in placement as a General Clerk (clerical) or as a Cook Helper, Pastry. The counselor reviewed the Dictionary of Occupational Titles requirements for each of the two occupations. Then by using the various skill factors as measured by the Luria-Nebraska Neuropsychological Test Battery, he was able to define the requirements for each of the two occupations.

Clerk, General (clerical)	Cook Helper, Pastry
209 562-010	313.687-010
Kinesthesia-based movement	Kinesthesia-based movement
Drawing speed	
Fine motor speed	
Visual based movement	Visual based movement
Oral motor skills	
Rhythm and pitch reception	
Simple tactile sensation	Simple tactile sensation
Stereognosis (the ability to recognize objects by touch)	Stereognosis
Visual acuity and naming	Visual acuity and naming
Phonemic discrimination	
Relational concepts	Relational concepts
Concept recognition	Concept recognition
Verbal spatial relationships	
Word comprehension	Word comprehension
Logical grammatical relationships	
Simple phonetic reading	
Word repetition	
Reading poly-syllabic words	
Reading complex material	
Reading simple material	
Spelling	
Motor writing skill	

Other occupations could be analyzed similarly. The data could then be integrated with the standard vocational assessment for a total picture.

This same approach could be used by referencing appropriate data from tests such as the Halstead-Reitan Battery. Effective utilization of this model depends on proper training of counselors and appropriate research and demonstration of the validity of various cognitive

skills to specific occupations. Once these are defined, a potential client with a learning disability can be properly evaluated and trained in state and private vocational evaluation and training facilities.

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