A Comparative Study of the Identification of Learning Disabilities in a Multi-District Special Education Unit

Jacqualene Trefz

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A COMPARATIVE STUDY OF THE IDENTIFICATION OF LEARNING DISABILITIES
IN A
MULTI-DISTRICT SPECIAL EDUCATION UNIT

by

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A Dissertation
Submitted to the Graduate Faculty
of the
University of North Dakota
in partial fulfillment of the requirements
for the degree of
Doctor of Education

Grand Forks, North Dakota
August
1990
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Jacqualene Trefz

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This Dissertation submitted by Jacqualene Trefz in partial fulfillment of the requirements for the Degree of Doctor of Education from the University of North Dakota has been read by the Faculty Advisory Committee under whom the work has been done, and is hereby approved.

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This Dissertation meets the standards for appearance and conforms to the style and format requirements of the Graduate School of the University of North Dakota, and is hereby approved.

Harry Knell
Dean of the Graduate School
Permission

A Comparative Study of the Identification of Learning Disabilities in a Multi-District Special Education Unit

Department Center for Teaching and Learning

Degree Doctor of Education

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Date July 15, 1996
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ACKNOWLEDGEMENTS

The completion of the doctoral program represented by this dissertation has not been a solitary undertaking. Many others have provided the support and assistance necessary to the fulfillment of this dream.

Primary credit must be given to my husband, Harley Trefz. The initial commitment to a doctoral program could never have been made without his belief in the possibilities of the future. He has provided unwavering belief in my ability to accomplish this task even when the dream appeared unimportant in relation to the obstacle that had appeared. Early in our relationship, he said "whatever you do, never stop growing". His commitment to the concept expressed through these words has been unwavering. His unfailing love and support have made continued growth (and the attainment of this dream) a reality.

Recognition must also be made of the support of the Superintendents of the schools served by Buffalo Valley Special Education Unit, the Jamestown Public School Board, and, in particular, Superintendent Frank Fischer. Without their belief in the ultimate benefit to their schools and their willingness to provide the flexibility this effort has required, completion of this degree and this study would not have been possible.

Gratitude must also be expressed to my doctoral committee, Dr. Myrna Olson, Dr. Steve Harlow, Dr. Robert King, Dr. Richard Hill, and Dr. Eldon Gade. Their comments and suggestions have been valuable to my continued professional growth and have been greatly appreciated.
Special mention must be made of Dr. Myrna Olson, the Chairperson of my committee. She has been readily accessible (at sometimes unreasonable hours) for consultation, initial proofing of this document, and general moral support.

Dr. Richard Landry must also be thanked publicly for his willingness to provide independent study in research methodology and his accessibility for consultation throughout this research project. His way of asking pointed questions results in careful consideration of the primary issues at hand. In addition, his suggestions regarding the structure of this research project and the resulting document have been invaluable.

Finally, recognition must be paid to the graduate faculty of the Center for Teaching and Learning for their knowledge, skills, and dedication to the teaching profession. Through contact with these people, I have gained new insights and specific skills that will allow continued professional growth and development. For this, I am grateful.
Cross case variability in diagnostic evaluation and placement procedures was found to correspond to four theoretical models of assessment: (a) behavioral, (b) educational, (c) psychoeducational, and (d) heuristic. Inter-case consistency was found between individual definitions of learning disabilities and choice of evaluation procedures, utilization of additional resource personnel, and criteria for eligibility.

Implications of the findings for service delivery are discussed. Recommendations are provided for the development of consistent identification procedures within Buffalo Valley Special Education Unit and across the state of North Dakota.
ABSTRACT

Statement of the Problem
Variability within learning disability programs is a common problem with implications for all aspects of service delivery. This study was designed to analyze and describe inconsistencies in procedures for the identification of learning disabled students within Buffalo Valley Special Education Unit in central North Dakota.

Methods and Procedures
A multiple case study approach was used within the framework of the naturalistic paradigm. A single case was defined as the identification and placement of students within the schools served by one learning disability teacher during the 1988-89 and 1989-90 academic years. Data collection was specific to the three stages of the identification process: pre-referral, diagnostic evaluation, and placement. Information was also gathered regarding student characteristics and caseload comparisons.

Data were presented in ten case studies. Beyond the descriptions of the individual cases, a cross case analysis was used to identify specific points of variance within the learning disability program.

Results
Variability in general philosophy and practice was identified across the ten case studies. Differences in the pre-referral systems were found to vary with the building rather than with the learning disability teacher. This was hypothesized to be related to the administrative style of the building administrator.
CHAPTER I. INTRODUCTION

Background Information

"The overall field of learning disabilities is riddled with issues. These permeate such basic concepts as definition, characteristics of the population, prevalence, diagnostic instruments and prognosis. From these emanate a host of questions regarding appropriate intervention—particularly instructional methods." (Siegel & Gold, 1982, p. 321).

Variance in the field of learning disabilities is the single characteristic most often extrapolated from the literature as descriptive of the current state of the art. Variance occurs at international, national, area, and local levels and in all stages of service delivery, from assessment and identification processes, through service delivery issues, to exit criteria (Adelman & Taylor, 1985; Kavale, 1988; Keogh, 1986; Siegel, 1988; Smith, 1986; Swanson, 1988; Ysseldyke, et al., 1983).

For the past several years, administrators of Buffalo Valley Special Education Unit have expressed concern regarding apparent differences in the implementation of local policies governing assessment and delivery of services to learning disabled students within the Unit. Credibility was added to this informal assessment as a result of
a general program improvement study completed during the 1987-88 academic year. When the Learning Disability (LD) department was examined in isolation, it was discovered that various teachers within the department were expressing concerns regarding inconsistencies in the same areas informally targeted by administration. Areas of concern ranged across all service areas from pre-referral and identification to program exit.

Problems

Various problems have been identified by department staff as corollaries of these inconsistencies. These problems exist in seven areas and are discussed in subsequent sections.

Implementation of Pre-referral (Step I) Procedures

Step I procedures were designed by the North Dakota Department of Public Instruction, Office of Special Education as a process for ensuring compliance with the portion of the federal regulation which reads: "The student does not achieve commensurate with his or her age and ability level in one or more of the areas listed...when provided with learning experiences appropriate to the student's age and ability level" (34 CFR 300.541(1)). These procedures are considered a prerequisite to referral for assessment in North Dakota (Department of Public Instruction, 1984).

Staff reported that some buildings had implemented the Building Assistance Team concept (Chalfant, Pysh, & Moultrie, 1979; Miller & Bonsness, 1987). Other buildings operated with the older, special education driven, child study team model. In some buildings, learning disability (LD) teachers continued to report direct requests for special
education assessment from regular classroom teachers. The major problem in this area related to the difficulties in establishing compliance with State policy. However, corollary problems existed in the provision of unnecessary evaluation with the accompanying cost in staff time and student stress and with the unnecessary confusion for parents and teachers who move between buildings or districts.

**Appropriate Identification and Placement of Students**

Concerns in this area encompassed such issues as definition of learning disabilities, assessment process, test validity and reliability, team composition and decision making processes, and placement criteria. Problems reported to result from inconsistencies were: (a) inappropriate labelling, (b) substantial increases in caseload size, (c) unnecessary confusion and negative responses from parents as students received services in one building or district but not in another, (d) provision of state and federal assurances regarding appropriateness of Child Count figures, (e) establishment of state and federal compliance, and (f) difficulty in justifying increases in budgetary items.

**Establishment and Maintenance of Appropriate Levels of Service**

This issue related closely to the concerns expressed above. With increased caseloads came shortened time allocations for instructional contact, assessment, consultation time with other teachers, and consultation time with families. The press for time resulted in inappropriate decision making regarding instructional program issues.

**Program Development**

Program development must be thought of as a continuum encompassing three levels of increasing complexity. The lowest level in terms of
complexity is the individual student program. The second level is parallel to the building environment in which several individual programs must be woven into a logical, consistent whole. The highest level of complexity is the overall LD program, a system with the ability to meet the needs of all students requiring its services. Problems in the area of program development appeared on all levels as follows: (a) measurement of student progress and compliance monitoring, (b) inequities in student opportunities for specialist intervention created by overloads in some buildings, (c) difficulties in program justification and expansion requests in the face of budget cuts in other areas, and (d) estimation of program effectiveness.

One of the correlate concerns of the staff related to the diluting effects of increased caseloads on specialist time and the fear that the more seriously handicapped students may not have been receiving the level of support necessary.

Development and Monitoring of Appropriate Goals and Objectives

This concern was related to other issues discussed previously. Individual philosophies regarding definition, assessment procedures, and the appropriateness of program variables impact heavily on the individual educational planning (IEP) process. Inconsistencies invariably lead to unreliable program planning, even at the level of choices of goals and objectives.

Transfer/Transition of Students

Many of the concerns expressed by teachers in the program improvement study related to students who transferred or transitioned from one building to another. In a typical situation, the transfer resulted in
major changes to the student's program. The student's previous teacher was angry because s/he felt the areas in question were critical to the student's success. The student's new teacher, on the other hand, felt the student had been inappropriately identified and placed in the learning disability program by the previous teachers. Many parents reacted with understandable confusion and anger.

Exit from Program Services

It is to be expected that with inconsistency in the entrance criteria for the learning disability program, there would be inconsistency in the exit criteria. Students transferred from one building to another building in the Unit only to be dismissed from the program as not qualified for service.

The Role of Definition

Most of the problems identified through the program improvement plan appeared to stem from lack of a consistent definition of learning disabilities. This created inconsistent assessment procedures, criteria for placement and programmatic decision making. The problem was compounded by the fact that the degree of inconsistency was not completely understood within the Unit. This problem is not unique to Buffalo Valley Special Education Unit.

At a Kephart Symposium in Aspen Colorado in the summer of 1978, Hjelmer Mykelbust told this writer and other participants the story of how the term "learning disabilities" was born in 1963 out of an attempt to find a single term, descriptive of the children, that would be acceptable to all concerned. The term was suggested by Samuel S. Kirk during a late night discussion with Mykelbust and several other early
leaders in the field. The term was accepted the following day as a part of the name of a fledgling organization of parents and professionals. This organization is now known as the Association for Children and Adults with Learning Disabilities. Later, during the Symposium, Kirk verified the story.

It appears that, while the term may have been accepted, disagreement regarding class members remains. Inconsistencies observed in definitional issues translate into inconsistencies in all areas of programming. If this is true, the key to development of consistent practices across the service delivery continuum is consistency in identification procedures and eligibility criterion. This research study was designed as a first step toward reaching consensus within Buffalo Valley Special Education Unit and operationalization of that consensus into consistent and systematic procedures for identification and placement.

Statement of Purpose

The purpose of this study was to identify the inconsistencies within the identification process as it exists between and within the districts served by the Buffalo Valley Special Education Unit Learning Disability Program. It is hoped that the methodology proposed within this study may also be useful to other education agencies who wish to begin an intensive program improvement project by identifying inconsistent practices.

Research Questions

Seven areas of concern were identified and discussed in previous sections of this chapter in terms of the problems created by inconsis-
tencies in existing practice within the Learning Disability Program of Buffalo Valley Special Education Unit. The areas relating to the implementation of Step I (pre-referral) procedures and appropriate identification and placement of students were identified as the key components in development of consistent practices. Four research questions were developed as providing the structure for gathering the data necessary to the initiation of procedures for change in these areas. These four research questions were:

1. What are the differences between and within cases in the implementation of the Step I (pre-referral) process?

2. What are the differences between and within cases in the identification process?

3. What are the differences between and within cases in eligibility criteria?

4. What are the differences between and within cases in student characteristics and caseload size?

Limitations

Two limitations were identified and taken into consideration in the design of this study. The major limiter was expected to surface in the attitudes of the learning disability staff. Contributing factors were (a) the longevity of some members of the staff and resulting issues of ownership, and (b) the position of this researcher as Director of the Unit.

This limitation is related to the concept of the desirability of producing a value-neutral study and the special characteristics of the naturalistic research paradigm. Conventional research design provides
assurance of neutrality through careful control of variables. The naturalistic investigator takes the position that it is not possible to produce a totally value-free study. The issue is to identify those points that may provide a threat to trustworthiness and to take steps to minimize those effects.

Techniques such as the Nominal Group process and the Delphi technique were deliberately chosen in order to encourage the development of staff ownership in this study. The staff was used in the data gathering process whenever appropriate (as in the Step I process). These techniques, combined with additional triangulation and member checking served to dilute the effect of both resistive staff attitudes and fear of supervisory criticism.

The second limitation was created through staff change. One staff member was new to the system and to the practice of learning disabilities during the final year of the study. It was predicted that few supporting records would be available for purposes of triangulation. This assumption was found to be false. The decision to include this case in the study was made as a result of the belief that the evaluation process is only partially a function of the guiding precepts of the LD specialist in the building. The first LD teacher had been serving these buildings for a period of four years. Major change in the basic processes were considered unlikely within a few months. Therefore, each teacher took part in those portions of the data collection where participation was possible. The data were reported as a single case with differences in the responses of the two teachers noted where they occurred.
Delimitations

The first delimitation to be considered was the scope of the study. An attempt to investigate all areas of concern identified within the program improvement process would have taken several years to complete. Therefore, the decision was made to limit the number of research questions to those relating to the identification process.

The second delimitation was the time frame within which this study was completed. Data gathering was restricted to the 1988-89 and 1989-90 academic years with each of the questions examined sequentially. Data analysis occurred concurrently.

The third delimitation related to the boundaries of the study. Geographical boundaries were the physical boundaries of the ten school districts served by Buffalo Valley Special Education Unit. In addition, the study was designed as a multiple case study with analysis at two levels. Data collection was case specific. Each case was bounded by procedures to identify and place learning disabled students within the schools served by one learning disability teacher. Initial analysis was concerned with the data gathered within each case. Discrepancies were identified within each case. A second analysis was made across cases in order to identify Unit-wide inconsistencies.

Definitions

Audit trail Records of each action taken by the researcher throughout the study. Categories of records are: (a) raw data, (b) data reduction and analysis, (c) data reconstruction and synthesis, (d) process notes relating to procedures, strategies, (e) records relating to planning and
disposition, and (f) notes relating to the development of necessary instrumentation.

Case boundaries  The stated limits of the case to be investigated. In this study, each case was bounded by procedures to identify and place learning disabled students within the schools served by one learning disability teacher.

Embedded design  Research design that investigates and reports on individual sub-components as well as for a larger unit. One problem with this design is the tendency to focus on the sub-units only and not return to the larger unit of analysis. This study is considered an embedded design because of the bi-level investigation. The first level consists of identification of the procedures used in each of the schools served by one learning disability teacher. The second level examines the differences that occur across the special education unit as a whole.

Generalizability  A term used in experimental research that refers to the concept of being able to assume the ability to transfer conclusions to the larger population from which the sample was taken. The methods by which generalizability is insured serve to establish trustworthiness in the results of the study. Generalization is not appropriate for conclusions obtained through naturalistic inquiry.

LEA  Local education agency.

LRE  Least Restrictive Environment. A special education concept referring to the idea that students have a right to education in as close to the environment for other students of that age as is possible and appropriate based on his/her individual needs.
**Member check**  Method of validating information by taking a provisional report back to the person from which it was obtained for the purpose of confirming an accurate reflection of the person's point of view.

**Metatheory**  A very broad conceptual framework. May provide thought for the development of several smaller, more substantive theories.

**Paradigm**  A systematic set of beliefs and the resulting rules governing behavior. The naturalistic inquiry paradigm is an example.

**Peer debriefing**  A method of establishing credibility. A process of conferring with a disinterested, but knowledgeable peer, for the purpose of examining the inquiry for an accurate reflection of the researcher's intent.

**Pre-referral**  Refers to activities that occur in relation to a specific child before a referral to special education for assessment purposes. In practice, use of this term indicates the expectation that special education assessment will occur. Pre-referral is viewed as a special education procedure. (Contrast with the definition of Step I)

**Purposeful sampling**  Refers to the practice of establishing a purpose and then choosing the sample to provide information relative to that purpose. In this study, purposeful sampling is used to examine the assessment practices of each of the learning disability teachers.

**Step I**  A term specific to North Dakota. Refers to activities that occur in relation to a specific child before a referral to special education for assessment purposes. Term reflects the philosophy that efforts to modify curriculum and the instructional environment should occur for any child having difficulty learning. Theoretically, there is not an a priori expectation regarding special education eligibility.
assessment. In contrast with pre-referral, Step I is intended to be a general education procedure.

**Triangulation** Method of validating information by checking at least one source or method against another. One example used in this study is the use of brief interviews, as well as existing records, to establish trustworthiness in the Step I survey results.

**Transferability** Relates to the transfer of the working hypothesis; a decision regarding the appropriateness of the transfer can only be made by the person seeking to make the application. It is, therefore, the responsibility of the investigator to provide a rich, descriptive explanation that can be used by the reader in making judgements of similarity.

**Unitize** A method of dividing large portions of relatively unorganized information (e.g. an interview protocol) into the smallest possible pieces of useable information in preparation for categorization and analysis.
CHAPTER II REVIEW OF THE LITERATURE

This study was designed to analyze and describe differences in procedures for the identification of students with learning disabilities within Buffalo Valley Special Education Unit in central North Dakota. The literature related to this study is reviewed in this chapter in five sections. The opening discussion deals with the central issue of definition. The remaining sections consider the following topics in sequence: (a) pre-referral systems, (b) assessment, (c) eligibility models, and (d) characteristics of the population.

Definition of Learning Disabilities

In the early days of the field of learning disabilities Frierson and Barbe commented, "The term 'learning disorders' has become an umbrella term under which hunch-labels and scientific hypotheses have huddled together. So diverse are the applications of the term that it has lost its initial capacity to convey a clear, concise concept" (1967, p.3). Thirteen years later, McGrady commented, "The definition of learning disabilities is like the definition of pornography: 'no one seems to be able to agree on a definition, but everyone knows it when they see it'" (McGrady, 1980, p.510).

There has been little change in the ten years since McGrady's comment. On July 27, 1989 the news was placed on SpecialNet (a national electronic bulletin board) that the Appropriations Committee for the
House of Representatives had passed an increased budget request for special education with the comment that:

Students with learning disabilities constitute 49% of the 6 through 21 year old population served under the basic State grant program. The Committee is concerned that the definition of qualifying handicaps currently being used by the department may be excessively broad or, as a minimum, may lack sufficient detail to ensure that assistance goes to the neediest students (NASDSE, 1989).

The continuing confusion is directly related to the historical development of the field and the diversity of its origins. The beginning is usually traced to the early work of neurologists and ophthalmologists (e.g., Orton, Goldstein, Strauss, Werner, and Hinshelwood) with brain injured adults. Wiederholt (1974) refers to this period as the Foundation Phase (1800 to 1930). The focus of the work was medical with the primary goal of establishing a link between neurological damage suffered by adults and the loss of specific abilities.

The period from 1930 to 1963 (the Transition Phase) was marked by attempts to translate the early work into diagnostic and remedial practice and to extend the emerging theories into the realm of child development and education. The years from 1963 to the present (the Integration Phase) have been a period of marked expansion of research, educational services, support and advocacy organizations, and legislation (Wiederholt, 1974).

The writer has not attempted a complete historical review. It was enough to establish the view that early definitions revolved around
established brain damage in adults and attempts to provide the link to children who behaved in much the same way without the history of injury. The remainder of the review will deal with efforts to codify research, practice, and belief systems into a definition that could be operationalized into a consistent service delivery system to the children affected.

The beginning of the Integration Phase has been linked to the coining of the term "learning disabilities" (Siegel & Gold, 1982, p.4) on April 6, 1963 in Chicago. As previously discussed, the term was chosen as being a) descriptive of the children's inability to learn, and b) acceptable to the disagreeing factions.

The new term did not settle the argument, however, and in 1966, the first government task force (Task Force I, 1966) was organized for the purpose of establishing a definition that would link minimal brain dysfunction and learning problems and describe the characteristics of children affected. The task was completed. However, issues related to the diagnosis of minimal brain dysfunction presented major difficulties as attempts were made to translate definition into educational practice. Therefore, instead of facilitating agreement, this definition created the opposite effect, additional conflict.

The following year, a National Advisory Committee on Handicapped Children was asked to provide information to the Office of Education that could be used for legislation concerning the funding of services for learning disabled children (Gearheart, 1973, p.8). The committee's report commented on the definitional confusion and went on to formulate a definition which was later incorporated into the Children with

The 1969 definition was later incorporated into The Education for All Handicapped Act of 1975 (P.L. 94-142). This definition remains in federal law today. It reads as follows:

The term 'children with specific learning disabilities' means those children who have a disorder in one or more of the basic psychological processes involved in understanding or in using language, spoken or written, which disorder may manifest itself in imperfect ability to listen, think, speak, read, write, spell, or do mathematical calculations. Such disorders include such conditions as perceptual handicaps, brain injury, minimal brain dysfunction, dyslexia, and developmental aphasia. Such term does not include children who have learning problems which are primarily the result of visual, hearing, or motor handicaps, of mental retardation, of emotional disturbance, or of environmental, cultural, or economic disadvantage. (Goldberg, 1982, p.121)

Professionals uncomfortable with the need to identify processing dysfunctions were satisfied by the ability to focus on academic learning. However, the wording also allowed for the use of a more neurological orientation. This definition, therefore, did not accomplish the goal of unification of the field around a single definition of learning disabilities.
In 1981, the National Joint Committee for Learning Disabilities (NJCLD) proposed a definition which was intended to unify the field. The NJCLD definition is as follows:

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 differences, insufficient/inappropriate instruction, psychogenic factors), it is not the direct result of those conditions or influences.

(Hammill, Leigh, McNutt & Larsen, 1981, p. 336)

The major differences between this definition and the federal definition lie in (a) the broadened definition (to include adolescents and adults), (b) the specific reference to the intrinsic nature of the disorder (which was expected to effectively distinguish the intended group from those experiencing educational discrepancies for some other reason, e.g., poor instruction and lack of motivation), (c) the repositioning of spelling as a sub-category under written language, (d) the omission of the list of "conditions" that could be included, e.g., "perceptual handicaps, brain damage, minimal brain dysfunction, dyslexia, and developmental aphasia" (under the rationale that the list
confused rather than clarified the issue), and (e) elimination of the exclusionary clause on the grounds that it led to the conclusion that learning disabilities could not occur in conjunction with other handicapping conditions (Hammill, Leigh, McNutt & Larsen, 1981). All member organizations of the National Joint Commission ratified the new definition except the Association for Children and Adults with Learning Disabilities.

Further evidence of the continued debate was found in the Spring, 1983 issue of the Exceptional Education Quarterly. This publication contained summaries of the five national research institutes that were established in 1977 for the explicit purpose of supporting extended research in issues critical to learning disabilities. In a closing commentary on the series, Barbara Keogh pointed to difficulties in generalizing results from these studies because of the differences in population samples and demographics. She commented:

It is disappointing that we are no nearer to settling the LD definitional issue now than we were five years ago. The problem of definition was not the mission of the Institutes. Yet, one hoped that the opportunity for systematic study of LD over time would lead to consensus about critical definitional criteria. Certainly the Institutes have provided us with a great deal of information about LD pupils and the programs that serve them. Unfortunately, we are left with continuing uncertainties and controversies about who is learning disabled." (Keogh, 1983, p. 122)
The seriousness of the confused definitional state is emphasized by the number of scholarly journals actively participating in the debate—not only around specific definitional components, but even around appropriate theoretical constructs and methodology that must be used to approach definitional consensus (See the April and May, 1988 issues of the *Journal of Learning Disabilities*).

The Spring, 1988 issue of *Learning Disabilities Focus* contained a review of the report made by an Interagency Committee on Learning Disabilities (ICLD) to the U.S. Congress (Silver, 1988). The report stated that the primary need is to establish a "uniform definition and set of diagnostic criteria" (p.80). The ICLD recommended federal adoption of the NJCLD (1981) definition with modifications based on current literature. The modified definition reads:

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, or of social skills. 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), with socio-environmental influences (e.g., cultural differences, insufficient or inappropriate instruction, psychogenic factors), and especially with attention deficit disorder, all of which may cause learning problems,
a learning disability is not the direct result of those conditions or influences. (Silver, 1988, p.78)

This definition was reviewed by each of the NJCLD organizations. Once again, agreement could not be reached. The point of contention revolves around the addition of "social skills" as a major manifestation of the learning disorder. While none of the dissenting groups dispute the fact of frequent concomitant problems in this area, the fear is that this definition would allow for identification of learning disabilities based solely on the manifestation of significant difficulties in social skills. The position of the Department of Education was that acceptance of this definition would require a change in the wording of EHA, which would result in increased confusion rather than having the desired effect of unifying the field.

In the neighboring state of Minnesota a recent study was reported comparing state and local eligibility criteria for learning disabled and other mildly handicapped students (Lombard, 1989). This study found that variances in standards and in operationalization of those standards have resulted in "the common finding that a student could be "handicapped" in one district but not in another, or might be placed in a completely different program upon transfer to a new district" (Lombard, 1989, p.11).

Pre-Referral Systems

In examining the historical development of special education services, it becomes apparent that several factors combined to foster the development of a broad range of services for handicapped children. These factors include (a) a shift in public attitudes from the idea that
education was only for the privileged few to the idea that public education is the right of all children; (b) litigation that resulted in a change in the level of federal involvement with education; (c) efforts toward equalizing opportunity for poor, disadvantaged, or racially segregated children; and (c) an increased dissemination of research regarding the education of children with particular types of problems.

As special education services developed, serious questions also began to be raised. The numbers of students placed in special education programs increased dramatically (Algozzine, Ysseldyke, & Christenson, 1983). Learning disabled students, for instance, increased in number from 1.80% of the total student enrollment in 1977 to 4.82% in 1988 (Baker, 1989). In addition, several studies began to question the appropriateness of identification procedures (Ysseldyke et al., 1983). Other researchers found referrals being made for reasons other than classroom functioning (Algozzine, Christenson, & Ysseldyke, 1982; Christenson, Ysseldyke, Wang, & Algozzine, 1983; Foster, Ysseldyke, Casey, & Thurlow, 1984; Shinn, Tindal, & Spira, 1987). An extremely high correlation has also been found between referral and placement (Algozzine, Christenson, & Ysseldyke, 1982; Sevick & Ysseldyke, 1986).

Researchers hypothesize that biases in placement and classification decisions may be related to teacher expectations regarding the stereotypic behaviors and the specific number of students with particular handicapping conditions (Ysseldyke, Algozzine, & Richey, 1982; Thurlow, Ysseldyke, & Casey, 1984). If that is true, then it would be reasonable to expect that the converse is also true; certain student
behaviors produce lowered expectations and preconceived notions relating to the presence of a handicap in that student.

Researchers have also found that teachers often believe difficulties in learning are related only to causes intrinsic to the student—not extrinsic as in the classroom environment (Adelman & Taylor, 1983; Christenson, Ysseldyke, Algozzine, 1982). The implication is that children experiencing difficulty in the general classroom environment must be handicapped. Therefore, they should be referred for special education evaluation and placement as soon as possible. These teachers believe this will insure provision of appropriate services. In actuality, many problems can be solved at the classroom level prior to formal assessment procedures. The concept of least restrictive environment (LRE) is relatively well established at the placement level. It should be extended to assessment and identification procedures as well (Graden, Casey, & Christenson, 1985).

The authors of P.L. 94-142 addressed this issue in the portion of the regulations relative to placement criteria for learning disabled students. The first criterion listed states that "the student does not achieve commensurate with his or her age and ability level in one or more of the areas listed below, when provided with learning experiences appropriate to the student's age and ability levels" (34 CFR 300.541(a)-(1)). In other words, when a referral is made to special education services for assessment, the classroom teacher is attesting to the failure of all attempts to personalize the curriculum for the student being referred. This is a critical concept—central to the discussion of pre-referral systems.
In a survey of the states designed to determine the level of compliance with this portion of the federal regulations, Carter & Sugai (1989) found that 23 of the 49 responding states require some planned intervention within the regular classroom environment prior to referral for special education assessment. An additional eleven states indicated that prereferral systems are recommended. Only ten states do not address the issue.

In North Dakota, this process is called Step I. It is not, however, a step limited to students suspected of having a handicapping condition. Step I is intended to "assist classroom teachers in responding to the most obvious needs of all students whose apparent school difficulties require additional planning and/or interventions to personalize the environment and individualize instruction" (Department of Public Instruction, 1984, p. 18). Step I is a process that focuses on educational factors external to the child. It can be appropriately implemented in many ways.

There are several advantages to this type of process, including: (a) maintaining low-functioning, non-handicapped students at a successful level in regular classrooms; (b) avoiding inappropriate placement by ensuring appropriateness of identification and placement procedures (Graden, Casey, & Christenson, 1985); (c) decreasing the cost of current services by moving toward a consultative model and away from a direct service model; (d) redirecting educational resources from assessment to providing assistance in the regular classroom where learning problems are first noticed (Graden, Casey, & Christenson, 1985), and (e) exercis-
ing greater variability in decision-making as it relates to individual program planning options (Pfeiffer, 1982).

Historically, referral systems were unitary in nature. A single teacher, parent, or other professional made a direct request to a single special educator for evaluation of a student. This system evolved into the Child Study Team (CST) concept with implementation of P.L. 94-142 and its requirement for a multidisciplinary assessment team. The child study team is clearly a special education team in nature. It is special education mandated, organized, and driven. The role assigned to a child study team varies among states and even between local education agencies (LEAs). Frequently their activities relate to referral gatekeeping, assessment, and placement activities (Moore, et al, 1989). Classroom teachers typically attend this type of meeting but rarely participate (Moore, et al, 1989; Ysseldyke, Algozzine, & Allen, 1982). The Child Study Team has been gradually replaced in many areas by a teacher assistance team (building support team).

Teacher Assistance Teams (TAT) are designed to provide daily support to teachers in solving learning and behavior problems. Teams are school based and generally consist of two or three teachers elected for a period of time. The building principal may or may not be included as a regular member of the team. The team generally meets on a regular schedule to discuss the needs of students with various problems. Data were gathered relative to the success of this model in Arizona, Nebraska, and Illinois as part of a two year national demonstration project. Two hundred students were involved who would otherwise have been referred directly for special education evaluation. The problems of
66.5% of the students were solved without formal evaluation. Only 54 students were referred to special education for testing. All 54 were found eligible for special education services (Kirk & Chalfant, 1984).

A team approach has been found to have mixed success in a variety of studies. Success seems to be dependent upon (a) administrative support (Graden, Casey, & Bonstrom, 1985; Harrington & Gibson, 1986; Walsh, 1989), (b) general willingness to explore alternatives and change processes (Graden, Casey, & Bonstrom, 1985; Walsh, 1989), (c) general skills training received by consultants (Graden, Casey, & Bonstrom, 1985, Walsh, 1989), (d) ownership based in belief in the possibilities of the new system (Graden, Casey, & Bonstrom, 1985), (e) consistent parental support and effective home-school communication (Harrington & Gibson, 1986), (f) broad viewpoints on the team; e.g., school psychologist, social worker, former teachers of the child, parents and other special education personnel as needed (Harrington & Gibson, 1986).

Pugach and Johnson (1989) have categorized current prereferral interventions into two categories: informal, school-based, problem-solving teams (e.g., TAT model) and consultation models using special education teachers as consulting specialists. Problems are identified with each model. Prereferral systems remain cognitively tied to special education processes. Therefore, the full potential of the system is not usually reached. It frequently remains simply another hurdle to testing. Consultation models are unidirectional by nature. That is, information flows from the specialist to the generalist--from the special educator to the general classroom teacher. Pugach and Johnson felt this tended to maintain the separateness of the special education/
general education systems as well as to encourage continued dependence of the classroom teacher upon the specialists.

At the time of this writing, the North Dakota Department of Public Instruction is fostering the development of building level support teams within the various districts under its jurisdiction (Department of Public Instruction, 1982, 1984). The process is well established in some districts, less well established in others.

It is important to realize that the development of pre-referral (Step I) interventions has not occurred in discrete stages. Rather, development has progressed along a temporal continuum as local education agencies have attempted to mediate the demands of federal and state regulatory systems with the realities within local districts and the needs of individual students. It is likely, therefore, that a survey of Step I interventions may provide evidence of any one or all of these approaches within a multi-building or multi-district special education unit. Knowledge of the local realities of this step within the identification process of learning disabled students is critical to any effort toward system change.

Assessment

Basic Concepts

A review of the literature relating to the assessment of school-aged children identifies an abundance of issues. These issues can be categorized into three general areas; (a) the problem of terminology and definition, (b) procedural questions, and (c) reliability and validity considerations. Many of the specific questions subordinate to these issues relate to efforts to establish the relative worth of the evalua-
tion procedures and test instruments used with children. While these questions are of critical importance in establishing defensible procedures for individual assessment, this study is concerned only with identifying the differences between cases as the identification process currently exists within Buffalo Valley Special Education Unit. Thus, the review of the literature will be limited to issues that will assist in the identification of differences in current practice. A brief description of basic concepts of general assessment is appropriate as background information to later discussions.

Assessment is usually thought of in terms of three distinct tasks: screening, diagnostic evaluation, and progress monitoring (Siegel & Gold, 1982; Faas, 1980). The purpose for screening is to establish a valid educational reason for undertaking a complete evaluation. In the broadest sense, the Step I process previously described may be considered screening. Screening may be active (in contact with children) or passive (through record review). Screening may also be accomplished with groups of students or on an individual basis. The amount of time expended by students and staff is usually minimal. This level of assessment generally requires at least brief training in assessment procedures.

The second task is diagnostic evaluation. This is always individual assessment. There are two purposes for diagnostic evaluation—eligibility decision-making and program development. This task requires a substantial amount of time and effort from both student and evaluators. Evaluation procedures and evaluator qualifications are heavily regulated at both federal and state levels. There must be more than one
Evaluator involved with the child. Each evaluator must have specific training in individual assessment. Assessment procedures must be culturally unbiased and administered in the child's primary language. Standardized test instruments must have acceptable levels of reliability and validity.

The third task is assessment for purposes of evaluating the efficacy of the student's program. This task may be accomplished through specific evaluation of the student's progress towards individual goals and objectives. It may also include normative evaluation in order to assess the student's general academic progress in relation to his or her age mates. Thus, information is gathered that is useful in assessing the student's progress toward return to the general education classroom—the least restrictive environment (LRE). This type of assessment is completed by the student's casemanager and other teachers involved with his or her instruction.

This study focuses on diagnostic assessment for the specific purpose of establishing eligibility for special education services as a learning disabled student. The remainder of this chapter will provide a brief review of the literature relating to that purpose.

Diagnostic Assessment Models

A variety of assessment models are discussed in the literature—each based on a theoretical construct of the concept of learning disability. Each model, therefore, assumes a slightly different definition of the term learning disabilities. The models that will be discussed here are (a) the behavioral model, (b) the "educationally oriented" (Myers & Hammill, 1982, p.43) model, (c) the neuropsychologi-
The Behavioral Model

The behaviorist operates from the belief that learning is accomplished through the presentation of highly structured, hierarchically sequenced, instructional stimuli and properly administered reinforcement and correction procedures. From this theoretical paradigm, it is not important to consider a child's underlying abilities (Torgesen, 1986). Mercer (1979) describes the basic principles of the behavioral model in the following manner:

1. The locus of the handicap is primarily outside the child.
2. Behavior assessed is directly observable.
3. Test items should be similar to tasks demanded of the child in the classroom.
4. There is a hierarchy of skills and learners must sequentially pass through the steps.
5. There is a criterion of acceptable performance.
6. Direct skills instruction corrects inadequate responses.
7. Students can learn to generalize specific responses across conditions. (Mercer, 1979, p.67)

Schlieper (1982) defines behavioral assessment as "the description of an event in its context" (p.84). Assessment under this model focuses on academic skills—examining specific skill acquisitions as well as the antecedents and consequences (contextual events) which maintain it. While standardized instruments are used, nonstandardized procedures are
the primary tool of assessment. Assessment procedures include teacher-made, curriculum-based informal measures, criterion referenced instruments, and direct observation.

The Educationally Oriented Model

The educationally oriented model is related to the behavioral model in that assessment of a child's underlying abilities is not considered important. Two major purposes of evaluation are recognized: (a) "to screen the students to find those who are experiencing more than expected difficulty..." and (b) "to obtain information that can be used to plan individual programs for those children who are identified as handicapped" (Myers & Hammill, 1982, p.44).

Diagnostic evaluation consists of procedures designed to measure skills in the academic areas of reading, arithmetic, and language—oral and written. Correlative learning disabilities in the areas of perception, motor function, and behavior are recognized but not considered relevant to the teaching process (Hammill & Bartel, 1982; Myers & Hammill, 1982). Myers and Hammill (1982) state:

From the viewpoint of the present authors it is highly questionable whether these rather exotic, and certainly esoteric, disorders have any direct relationship to the identification and remediation of learning disabilities. Such problems routinely occur in individuals with mental retardation, in those with cerebral palsy, and in normal children with no other difficulties. From the standpoint of definition and from the theoretical and experiential bases we have adopted, there is little need to proceed beyond the
assessment of spoken language, written language, and arithmetic." (p. 66)

Assessment is focused almost exclusively on academic skills. Formal assessment instruments are considered to be permissible but of limited utility. Informal checklists, curriculum-based assessment, and criterion referenced assessments are considered of primary importance.

The Neuropsychological Model

Various forms of this model appear under the terms neurodevelopmental model, the neuroeducational model, and the psychoeducational (information processing) model. The key concept is emphasis on the individual. Variations seem to be related to distance from the medical community. Mercer lists the basic principles of this model as

1. The basis of the learning problem is within the child (e.g., in information processing).
2. These processes underlie academic functioning.
3. These processes can be identified and strengths and weaknesses can be assessed.
4. Valid and reliable instruments exist that assess the specified processes.
5. These processes can be remediated.
6. The student can benefit from teaching methods that are based on strengths and weaknesses identified in the process areas. (Mercer, 1979, p. 66)

Assessment procedures under this model may include (a) neurological examinations (Bryan & Bryan, 1982; Hynd & Semrud-Clikeman, 1989; Obrzut, 1989), (b) neuropsychological evaluations (Arffa, Fitzhugh-Bell,
Black, 1989, Hartlage, Hornsby, & Asken, 1987), and (c) psychoeducational evaluations (Faas, 1980; Myklebust, Bannochie, & Killen, 1971; Ysseldyke, 1983). While neurological and neuropsychological evaluations provide valuable information for appropriate educational programming, they are not often obtained during the process of assessing a student for eligibility in a learning disability program. Psychoeducational assessment is the variation under this model that is most frequently used in public school practice.

In a study reviewing the records of learning disability students identified under the psychoeducational model, Ysseldyke and his associates (1983) found a wide variety of standardized tests in use. However, five tests were consistently found in the identification of more than half of the students. These tests were the KeyMath Diagnostic Arithmetic Test, Peabody Individual Achievement Test, Wechsler Intelligence Scale for Children-Revised, and the Wide Range Achievement Test.

The Developmental Model

The developmental model is evolving from recent research on the critical characteristics of learning disabilities. The model "assumes that learning disabled children have common age-related deficits" (Kass, et. al. 1982, p. 173). Each of five age ranges (from birth to age 14) has one primary learning strategy. From birth to 18 months the emphasis is on sensory orientation as the physiological system begins to interact with its environment. From 18 months to 7 years, memory is the critical function--the ability to retain an accurate perception of stimuli when it is no longer present. From 7 to 11 years, the emphasis is on recognition--the internalization and the development of flexibility in
semantic and structural meanings. From 11 to 14 years of age, the child is synthesizing previously learned behaviors into automatic responses. Beyond 14 years, the critical characteristic is communication—the ability to receive and transmit meaning.

Kass, et al. (1982) have attempted to translate this theory into a formal procedure for identification of learning disabilities through the use of selected tests at each age level. A 1982 study investigated the discrimination properties for specific assessment procedures for each of the four age and function groupings appropriate to school age children. At each level except the 18 month to seven year range, a limited number of tests (or subtests from larger batteries) were found to discriminate the age related deficit areas in question.

While not advocating this system as a total screening for learning disabilities, Kass et al. (1982) recommended administration of the tests appropriate for each student according to the age-related function. Eligibility for learning disability services would then be calculated based on a specific formula. Kass and her associates are recommending further investigation and replication studies before using this system as a primary tool for identification purposes.

The Ecological Model

Ecological assessment "refers to the analysis of an individual's learning environment and his/her interactions within and across these settings" (Heron & Heward, 1982, p. 117). The term 'heuristic' is preferred by this writer because of the implicit inclusion of the child's basic psychological processes within the variables under investigation. These are closely related and are used under their
respective definitions throughout this document. The importance given
to this model can be seen in the newly enacted P.L. 99-457, the Educa-
tion of the Handicapped Amendments of 1986, which emphasize the exten-
sion of traditional assessment of young children (birth to age three) to
the family (Katz, 1989). The basic principles underlying this model are

1. A portion of the learning problem may lie within the
information processes of the child.

2. These processes underlie academic functioning.

3. Valid and reliable instruments exist for evaluating academic
functioning and information processes.

4. Learning does not occur in isolation from the environment.
Therefore, the environment must also be considered in the assessment
process.

5. Few formal instruments exist for evaluating environmental
influences.

6. The student can benefit from teaching methods that are based
on knowledge of the effect of environmental variables on the child's
learning.

A complete ecological assessment includes investigation into each
of the following areas: (a) physiological disabilities or medical
deficiencies within the student, (b) physical aspects of the classroom
environment, (c) interpersonal aspects within the classroom, school,
home, and neighborhood, (d) physical aspects of the home and neighbor-
hood, and (e) past history. Sources of information are student records,
interviews, formal and informal assessment, observation in a variety of
environments, informal checklists, and permanent products. (Hardin, 1978; Heron & Heward, 1982).

Assessment for eligibility using the heuristic model is time consuming. It may not be appropriate for all assessments for eligibility. It has been found particularly useful in cases with a behavioral component.

**General Assessment Procedures**

It is logical to expect that assessment procedures follow assessment models. While this can be assumed to be true in relation to the practice of individual diagnosticians, literature reviews indicate that general practice across districts does not follow this logic. Berler and Romanczyk (1980) examined research studies reported between 1972 and 1978 for the purpose of identifying the methods used to identify the sample populations. They found a lack of specificity and consistency. Out of 153 studies surveyed, sixty-one percent of the studies reported using a specific intelligence test or designating a minimum intelligence criterion level without identifying the test that was used. Thirty percent of the studies used a single standardized achievement test (only eight percent used multiple measures). Twenty percent used psychometric tests including general screening, language, and/or perceptual-motor instruments (Berler & Romanczyk, 1980).

Perlmutter & Parus (1983) surveyed assessment personnel in fourteen Michigan school districts for the purpose of determining the amount of agreement/disagreement regarding procedures and instruments for determining student eligibility for learning disability services. All fourteen districts reported (a) involving parents prior to the
beginning of formal assessment, (b) involving at least one psychologist and the regular classroom teacher in the assessment process, and (c) administering routine assessments in standardized achievement tests and perceptual acuity (visual and audiometric screening). Eleven of the districts routinely collected developmental histories. Seven districts reported using preliminary neurological assessments. Standardized testing fell into the general categories of (a) intelligence, (b) auditory perception, (c) visual-spatial organization, (d) mathematical abilities, (d) spelling, (e) sensory integration, and (f) fine/gross motor skills.

A National Task Force was established in 1984 for the purpose of identifying practices and procedures used to identify learning disabled students (Chalfant, 1985). Information was used from a national survey to identify the following factors in eligibility decisions: (a) behavioral characteristics of students, (b) use of test scores, (c) evidence of a possible dysfunction in one of the psychological processes, (d) inability to identify other reasons for academic failure, (e) an identified discrepancy between academic failure and estimated ability level, and/or (f) an identified etiological factor.

The Task Force discussed three general approaches for identifying eligibility indicators:

1. Observing and recording behavioral symptoms
   (a) Descriptive lists of behavioral characteristics
   (b) Categorical guidelines for process disorders
   (c) Task-process observation checklists

2. Informal task-process assessment
3. Standardized tests
   (a) Subtest analysis of intelligence test performance
   (b) Specialized ability tests. (Chalfant, 1985, p. 12)

Other recommendations made by the Task Force included (a) careful
description of classroom observations, (b) task analyzing the lesson in
terms of pre-requisite skills, sequential steps, and stimulus - response
components, (c) assessment of all possible environmental factors
contributing to the failure, (d) informal, diagnostic teaching to assess
the accuracy of the developing hypothesis regarding the dysfunctional
psychological processes, and (e) development of a pattern of individual
strengths and weaknesses incorporating data from all assessment domains.

North Dakota's Guide XI - Identification and Assessment of
Students with Specific Learning Disabilities (Department of Public
Instruction, 1984) recommended a broad scope of assessment that includes
(a) basic psychological components, (b) specific academic achievement
proficiency in "listening comprehension, oral expression, reading skill,
reading comprehension, written expression, mathematics calculation and
mathematics reasoning....[and (c)] social skills, independence or self-
help skills, and psychomotor functioning" (p.69). Five specific steps
are required for assessment.

1. Determining achievement level.
2. Determining ability level.
3. Obtaining observational data.
4. Determining the discrepancy between ability and achievement.
5. Determining the primary handicap (Department of Public
   Instruction, 1984, p. 71).
Eligibility Models

One of the few issues relating to the identification of a learning disabled child that enjoys a general consensus of opinion is the federal regulatory requirement of a discrepancy between the child's expected and actual achievement levels. The regulations for Public Law 94-142 states that "[t]he student has a severe discrepancy between achievement and intellectual ability...." (P.L. 94-142 Regulations, 34 C.F.R. Part 300.541(a)(2)).

The report of the National Task Force on Specific Learning Disabilities referenced earlier (Chalfant, 1984) identified five general approaches for establishing the existence of a discrepancy between achievement and potential: (a) informal estimates based on professional judgment, b) grade level expectancies, (c) achievement level expectancies, (d) standard score discrepancy formulas, and (e) regression models. The findings of the Task Force in each of these areas are summarized briefly in the following sections.

Informal Estimates

At the time the report was written, informal estimates were being used in sixteen states to establish discrepancy levels. In this approach a classroom teacher or specialist estimates the level of discrepancy by estimating potential and subtracting an approximate achievement level. Methods identified for estimating potential included (a) subtracting 5.5 from the student's chronological age, (b) establishing an approximate listening comprehension level by reading a selection and asking comprehension questions, and (c) asking general information questions at a level known by most children of that chronological age.
Advantages cited were ease of use, flexibility in establishing eligibility for services, and effectiveness in overriding questionable formula driven decisions. Major disadvantages were related to the possibility of arbitrary decision-making and the question of defensibility in a court of law (Chalfant, 1984).

Grade Level Expectancy

The grade level expectancy approach was used in sixteen states. Two variations of this approach were identified—constant deviation and graduated deviation. The constant deviation model uses a constant level of achievement such as one or two years below grade level. This approach is easy to use, but the discrepancy is non-proportional; a one year lag at the eighth grade level is within the range of average achievement. A one year lag at the first or second grade level is a serious problem. The Task Force reported a Cone and Wilson (1981) analysis demonstrating the graduated deviation model as the more defensible approach. An example of the graduated deviation would establish criterion at .5 years below grade level in the primary grades, 1 year in the intermediate grades, 1.5 years at the junior high level, and 2 years or more at the high school level. The graduated deviation model is often used with a requirement for at least average ability. This general approach tends to over-identify students at the lower end of the ability ranges.

Achievement Level Expectancy

An achievement level expectancy formula was used in eleven states. The Task Force identified five formulas: (a) Johnson and Myklebust (1967), (b) Kaluger and Kolson (1969), (c) Bond and Tinker (1973), (d)
Harris (1970), and the (e) Algozzine, Forgnone, Mercer, and Trifiletti (1979) formula. Several concerns have been raised in the literature relative to these discrepancy formulas in particular and to other discrepancy formulas in general.

1. There is no comparability across formulas. A student may be learning disabled according to the Bond and Tinker formula but not learning disabled according to the Myklebust formula (O'Donnell, 1980). In a study comparing numbers of students identified by different operational criteria, Ysseldyke, Algozzine & Epps (1983) found that up to 65% of 248 regular classroom students would have been identified as having a severe achievement discrepancy by one or more of a set of seven aptitude-discrepancy formulas. A related study using the same aptitude-discrepancy formulas identified between 3 and 78% of a sample of 50 previously identified LD students (Ysseldyke, Algozzine, & Epps, 1983).

2. None of these formulas address the issues of measurement error, regression toward the mean, or norm group comparability (McLeod, 1979 as reported in Sinclair & Axelson, 1986). This results in a tendency to over-identify students in the low-average range of intelligence (Danielson & Bauer, 1978; Dangel & Ensminger, 1988).

3. Expectancy formulas typically fail to account for the amount of time the student has been in school. Severity levels are typically selected arbitrarily and may be a reflection of the desired incidence level rather than the incidence level reflecting the severity level. These formulas are automatically biased against children with higher IQ scores (Chalfant, 1984; Cone & Wilson, 1981).
4. Most discrepancy models are not able to account for multiple comparisons. This creates a situation where the use of multiple comparisons increases the likelihood of identifying a severe discrepancy (Willson, 1987).

**Standard Score Discrepancy**

The standard score discrepancy model was identified in twenty-three states surveyed by the National Task Force on Specific Learning Disabilities as a more acceptable method for quantifying a severe discrepancy between aptitude and achievement. In this model, all scores are statistically converted into standard scores with the same mean and standard deviation. This construction allows for direct comparison of scores across tests. Chalfant (1984) identifies Erickson's z-score model as the most frequently used formula. This method solves many of the statistical criticisms associated with statistical formulas but does not take into account the effects of regression of IQ on achievement.

**Regression Model**

The regression model is the most widely accepted and statistically sound method for determining a severe discrepancy. It takes into account the occurrence of regression toward the mean. By using standard score procedures, it seems more statistically appropriate. However, there are also major concerns with this model. Chalfant (1984) lists the following concerns:

(a) The regression model is "a precise sophisticated technique being used on tests that are gross measures of behavior" (p.71).
(b) The weakness in the model is directly related to the low reliability of intelligence tests and other failures in meeting acceptable psychometric standards.

(c) The complexity and sophistication of the model is a barrier to understanding by administrators, special education personnel, and parents.

(d) No adjustment is made for the number of years a student has been in school.

(e) Selection of the required severity level is an arbitrary decision.

In summary, several methods for quantifying the concept of severe discrepancy exist in the literature. However, the consensus is that the discrepancy statistic is only one piece of information for consideration of the assessment team.

"Eligibility for special education services is and should be a value judgment and should not be made solely by measurement experts. There are many considerations that cannot be placed in a formula which should be considered by administrators, psychologists, special educators, teachers, parents, etc. The decision to determine eligibility should be made by a multidisciplinary team and be based on observation of school performance and behavior, informal assessment, responsiveness to instruction, and standardized test scores" (Chalfant, 1984, p. 73).
Characteristics - Subtypes

The wide variability of characteristics found within the population considered learning disabled has given rise to a substantial body of literature related to the identification of subtypes that can be consistently identified through a specific pattern of abilities and disabilities. A review of this literature suggests the development of theories along a somewhat parallel organizational structure to the assessment models previously discussed: (a) neuropsychological, (b) developmental, and (c) behavioral.

The Neuropsychological Model

Coplin & Morgan (1988) defined the central assumption of this model with the following statement: "The neuropsychological perspective assumes that learning disabilities reflect central processing problems affecting the organization, integration, and/or synthesis of information. Learning disabilities are highly specific in nature and result from underlying neuropsychological deficits or dysfunctions. These difficulties in learning persist with age, fail to respond to normal classroom instruction, and occur cross-culturally in similar patterns" (p.616).

Several studies investigating patterns (subtypes) of learning disabilities have used statistical analysis of neuropsychological test batteries. In a series of studies, Rourke (1978, 1981) identified three primary subgroups using multivariate statistical analysis. The subtypes identified through these studies fell into three major groupings.

Group I: Students in this group displayed significantly higher Performance than Verbal IQ scores. Relative strengths were found in the
areas of visual-spatial skills, psycho-motor skills, tactile functioning, and nonverbal concept formation. Deficit areas were identified in the language domain. Examination of developmental history frequently revealed delayed onset of language. The students exhibited serious deficits in expressive language. This pattern was primarily reflected in low scores in reading and spelling. Reading skills were characterized by phonological errors. Typically, this group will have good math skills at the automatic level but will have difficulty with conceptual understanding—particularly with verbal problems. This group is often labeled as auditory-linguistic dyslexics. This pattern of scores was found to be similar to the dysphonetic subtype described in earlier work by Boder (1971a; 1971b; 1973).

Group II: Students in this group presented the opposite profile. They demonstrated significantly higher verbal than performance skills. Their auditory perception skills were well-developed and they had acquired good oral language skills. Deficit areas were found in the psycho-perceptual-motor domain, visual-spatial skills, tactile perception and nonverbal concept formation. The psychological processing deficits of this subgroup were reflected academically in their inability to perceive letters and words as visual patterns. These children possessed good phonetic analysis and synthesis skills, but used the wrong letters and omitted silent letters in spelling tasks. Written math problems frequently included wrong number configurations and reflected inaccurate conceptual understanding. The characteristics of this group were similar to the dyseidetic dyslexic identified by Boder (1971a; 1973).
Group III: This group displayed relatively equal performance in the areas measured by verbal and performance IQ scores. Primary deficits lay in the areas of sequential processing and memory—processes requiring both visual-spatial and auditory modalities. The reading & spelling skills of these students revealed the impact of sequencing and memory skills on the acquisition of the visual and auditory representations for sounds. The characteristics of these students were similar to the group Boder (1973) labelled dysphonetic-dyseidetic. This group is usually the most severely handicapped educationally.

Other characterizations of subtypes within the neuropsychological model follow this general pattern—deviating primarily in the fineness of the discrimination between groupings. Satz & Morris (1981) used cluster analysis techniques to identify 5 subtypes:

1. Group I exhibited global language impairment with normal perceptual results in nonlanguage areas.
2. Group II demonstrated specific language deficits, particularly as related to verbal fluency.
3. Group III was found to be a mixed subtype with impairment on all neuropsychological tests.
4. Group IV displayed deficits that were primarily visual-perceptual-motor in nature.
5. Group V students exhibited normal neuropsychological profiles.

Lyon & Watson (1981) used multivariate analysis to extend earlier work based on students referred to neurology clinics to the public school population. Their work resulted in similar findings. Six subgroups were identified with cluster deficits in (a) language compre-
hension, auditory memory, sound blending, visual-motor integration, visual-spatial and visual-memory skills, (b) mixed deficits in language comprehension, auditory memory, and visual motor integration skills, (c) language disorder with both receptive and expressive components, (d) visual perceptual deficits, (e) aphasic-like deficits in memory, synthesis, and expression of sound and word sequences, and (f) a "normal diagnostic profile" (p. 260).

The Developmental Model

"Subtypes of learning disabilities within a developmental approach are based on the interaction between learning tasks and the maturation level of the child. Learning is not a unitary process, and increasingly complex skills are required at each successive stage of acquisition. Likewise, cognitive development follows a pattern of fairly distinct stages with increasingly complex levels of thought processes" (Coplin & Morgan, 1988, p. 617).

Several studies have been based in Piagetian theory (Hresko & Reid, 1981; Klees & Lebrun, 1972; Saxe & Shaheen, 1981). Evidence supports the hypothesis that learning disabled children advance through developmental stages in the same order as non-learning disabled children, but at a slower rate. The literature also suggests that many learning disabled children continue using perceptual strategies for problem solving long after the higher conceptual stage of concrete operations should have been reached (Hresko & Reid, 1981; Saxe & Shaheen, 1981). Coplin and Morgan (1988) suggest that the same types of exceptions made for autism and psychosis account for apparent exceptions to the "similar sequence hypothesis" (p. 617).
Attempts have been made to tie other developmental theories to the learning processes found in learning disabled children. An example can be found in Coplin and Morgan's (1988) description of Golden's work in applying a developmental perspective to Luria's neuropsychological theory. This theory proposed five major stages of neurological development. Learning in the first three stages occurs primarily within single modalities. Tasks requiring cross-modal transfers can be learned and accomplished only as automatic level performances. Integration between two or more modalities does not occur (according to this theory) until between the ages of five and eight. Developmental lags in this area are reflected in academic skills that are dependent on cross-modal transfers. Reading is such a task.

The Behavioral Model

The behaviorist views learning disabilities as a simple discrepancy between a child's estimated ability level and academic achievement. "The disability is an inability to make use of the unspecialized instruction usually found in the typical classroom. Given proper and specialized instruction, the disability disappears" (Ross, 1977). General subgroups under this model are described in terms of academic functioning. Subgroups may be loosely defined in terms of "(a) those children who have failed to acquire initial educational skills and (b) those who have failed to make scholastic progress following mastery of basic subjects" (Coplin & Morgan, 1988, p. 618). Characteristics were described in terms of collections of academic skills related to curriculum areas, behavioral patterns, or cognitive styles Hammill & Bartel, 1982).
In summary, the review of the literature relating to subtypes of learning disabilities parallels the theoretical structure of the assessment models previously discussed. Under the neuropsychological model, subgroups are identified primarily along patterns revealed through statistical analysis of test batteries. Patterns are relatively stable across broad categories, varying in (a) criterion with which the population sample was chosen, (b) method of analysis, and (c) interpretation of the data. Each scheme presents significant discrepancies between visual-spatial and auditory processing modalities or it may present a mixed pattern of strengths and weaknesses. All studies using a nonexclusionary definition of learning disabilities resulted in one subgroup with normal neuropsychological profiles.

The developmental model links the functioning of learning disability subgroups to schemata for learning functions related to developmental stages based in specific theory (e.g., Piagetian and Luria). The extreme difficulty in determining stage-appropriate development is difficult for learning disabled children because of their extreme variability. This model does, however, show promise in providing information about a child's functioning that can easily be translated into educational practice (Coplin & Morgan, 1988).

The behavioral model discusses subgroups of students in terms of academic skills or behavioral characteristics. A 1966 survey by Clements resulted in the identification of the ten most frequently cited characteristics of learning disabled children. These characteristics are frequently cited in introductory discussions of learning disabilities. They are (in order of frequency cited):
1. Hyperactivity.
2. Perceptual motor impairments.
3. Emotional lability.
4. General orientation defects.
5. Disorders of attention (e.g., short attention span, distractibility).
6. Impulsivity.
7. Disorders of memory and thinking.
8. Specific learning disabilities in reading, arithmetic, writing, and spelling.
9. Disorders of speech and hearing.

Summary

The review of the literature clearly reveals continuing disagreement among professionals regarding the nature of learning disabilities. Controversy exists in the definition of the term and in ways of operationalizing that definition into practice through implementation of pre-referral (Step I) systems, assessment practices, eligibility standards, and the characteristics of students receiving services through existing programs.

Early in the development of the field of learning disabilities, McCarthy & McCarthy (1969) stated that it is important to ask the following questions about LD children:

What is a learning disability?
What causes a learning disability?

What are the distinguishing characteristics of children with learning disabilities?

What can be done to nullify the effects of learning disabilities? (McCarthy & McCarthy, 1969, p. xiii)

These questions remain to be answered.
CHAPTER III ORGANIZATION AND METHODOLOGY

The field of learning disabilities is characterized by variability rooted in basic philosophical differences, resulting in variations in practice within the public school sector. Inconsistent and inequitable service delivery is the frequent consequence to children. This study was designed as a first step toward resolution of inconsistencies in the initial identification process within Buffalo Valley Special Education Unit. The purpose of the study was to identify, analyze, and describe differences in the procedures and criteria used for the identification of learning disabled students within Buffalo Valley Special Education Unit.

Demographic Description of the Unit

Buffalo Valley Special Education Unit serves fourteen elementary and eight secondary public school programs and three parochial elementary programs within ten member districts. These districts are primarily centered in small rural communities located within a range of eighteen to forty-five miles from the larger Jamestown district in central North Dakota. All districts, with one exception, are located within the boundaries of Stutsman County. The combined student population of the member districts ranges from approximately 4,400 to 4,600 annually. Of this number, approximately 3,400 students are within the
Table 1. Student Population of Member Districts

<table>
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<th>82-3</th>
<th>83-4</th>
<th>84-5</th>
<th>85-6</th>
<th>86-7</th>
<th>87-8</th>
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<td>66</td>
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</table>

**TOTALS** | 4439 | 4527 | 4460 | 4140 | 4454 | 4407 | 4298

* Taken from North Dakota Education Directory for the years 1982-1989.
Jamestown schools (See Table 1 for population data as published by the North Dakota Department of Public Instruction).

Development of cooperative services for special education began in North Dakota in 1975 in response to a state mandate (NDCC 15-59.1-01) for the formulation of county boards of special education with the power to contract for special education services with any school district. The Stutsman County Board of Special Education subsequently contracted with the Jamestown Public School Board for the services of a director of special education. A cooperative plan and budget was submitted to the Department of Public Education, approved and implemented during the 1975-76 academic year (School Board Minutes, 1973). In 1980, again in response to the state legislature (NDCC 15-59.2), the cooperative plan was reorganized into a multi-district unit for special education service delivery (School Board Minutes, 1979). This is the organizational structure which exists today.

The first learning disability teachers in this area were hired for the Jamestown Public School District for the 1972-73 academic year. During the next four year period of reorganization, the learning disability staff doubled and then expanded again. By 1988-89, the learning disability program had grown to ten (9.5 FTE) credentialed learning disability staff providing direct service to 241 students. Of this staff complement, six teachers served the Jamestown Public School District. The remainder served nine county schools.

The staff represents both undergraduate and graduate level pre-service training programs. All staff hold teaching certificates at either elementary or secondary levels. All but one of the teachers had
teaching experience in elementary, secondary, and/or special education of the mentally retarded or learning disabled prior to accepting a position in Buffalo Valley. One member of the staff also has training in severely multiply handicapped and two staff members have nearly completed another credential in education of the emotionally disturbed. The range of experience in education of the learning disabled ranges from seven to seventeen years.

Selection of Research Paradigm

The naturalistic inquiry paradigm was chosen over the positivistic paradigm because of its "fit" to the purpose of the proposed research study. The primary difference between the two approaches is cited as a function of the amount of control exercised over the definition and restriction of variables (Guba, 1978; Lynch, 1983; Willems, 1969).

Research methodology based in positivism requires entry into the study with a preconceived hypothesis and a detailed plan for testing that hypothesis. Trustworthiness in the data and the conclusions drawn are established through careful control and manipulation of variables. Trustworthiness is defined in terms of validity, reliability, and generalizability issues. Trustworthiness is a prerequisite to generalizability (the ability to generalize conclusions to other populations). Random sampling is one of the techniques often used to assist in establishment of trustworthiness and generalizability.

The opposite is true in the purist's interpretation of naturalism. The naturalistic researcher enters the field without an hypothesis or specific plan and attempts to investigate the issues without influencing the outcome (Lincoln & Guba, 1985; Lynch, 1983). The plan for investi-
gation develops as the analysis of the data proceeds. Trustworthiness is established through attention to issues of credibility, transferability, dependability, and confirmability (Lincoln & Cuba, 1985). Sampling procedures are purposeful—chosen for the ability to add information or confirm the emerging theory.

Basic research begins with a theory or hypothesis related to a theory and attempts to prove, disprove, or modify that theory. The naturalistic paradigm begins with practice and grounds the emergent theory in that practice.

The purpose of this study was to identify the inconsistencies within the identification process as it existed at the time of data collection. This purpose could only be accomplished in the natural setting through the investigation of actual practice and the artifacts relating to that practice. Any attempt to control, manipulate, or influence the identification process would have resulted in contaminated data and compromised results. Therefore, the naturalistic inquiry paradigm was chosen as the appropriate structure upon which to build and care was taken to avoid influencing the data. A multi-site case study approach was chosen as the appropriate design strategy.

Research Design

The study was completed through the use of a multiple case study approach. Each case was bounded by procedures used to identify and place learning disabled students within the schools served by one learning disability teacher under the supervision of Buffalo Valley Special Education Unit. A description of important geographical, historical, and other demographic data were also gathered in order to
assist readers in making judgments regarding the transference of procedures used in this investigation and/or conclusions drawn by this study to learning disability programs in other areas. Sampling procedures were purposeful. Data collection methods varied with the research question and the availability of data.

The four research questions were reorganized into three general areas of investigation for clarity of purpose and ease of data collection. Question one (relating to the implementation of the Step I process) was unchanged. Questions two and three were combined so that entrance criteria was subsumed as part of the assessment process. Question four (relating to student and caseload characteristics) was unchanged. The result was a system for data collection that parallels the sequential order of the evaluation process. The three general areas of investigation, therefore, were (a) the pre-referral (Step I) process, (b) the evaluation process (which was subdivided into three components; definition, instruments/procedures, and eligibility criteria), and (c) the characteristics of LD students identified within the time frame of this study. Each of these was treated as a separate inquiry for purposes of design and analysis. A brief description of each of these inquiries is included.

Step I

A survey instrument was designed to gather the perceptions of all participants in the Step I process (administrators, regular classroom teachers, social workers, counselors, learning disability teachers and other special education personnel) regarding elements of the process as it exists in their buildings. This survey was administered to district
principals and superintendents during administrative meetings and to the learning disability staff at a regular department meeting. The learning disability staff then assisted the building administrators in gathering the information from the general teaching staff. In most cases, this was accomplished during building staff meetings. This method of gathering data resulted in a very high rate of return for most buildings.

Each protocol was coded by building and chronological order of examination—resulting in a system that could be traced to building but not to respondent. A form was then designed to assist with data analysis. Tentative results were provided to each learning disability teacher during a staff meeting in order to provide time for that teacher to examine the data pertinent to his or her schools. Brief individual interviews were held regarding each LD teacher's perception of the accuracy of the preliminary results. Further triangulation and member checking was accomplished through brief conversations with the appropriate building administrator. Where available, documentation of Step I meetings was also gathered.

**Evaluation**

**Definition.**

Implementation of this research study began with the consideration of the definition of learning disabilities used by professional staff within Buffalo Valley Special Education Unit. This information was gathered over a period of several weeks. The process began with the use of the Nominal Group Technique (NGT)(Delbecq, Van de Ven, & Gustafson,
1975; Lapine, 1987). There were several purposes for beginning in this manner:

1. The process of NGT establishes an emphasis on the importance of the opinions of each member of the group. This technique encourages equal participation from all group members.

2. Fear of personal evaluation is diminished as the focus is directed to a common task and away from individuals.

3. Since the ideas generated belong to the group, the likelihood of ownership in the product is strengthened.

4. Beginning the study with a discussion of the definition of learning disabilities also served to focus attention on the central theme of the program—the student population that is served.

The individual satisfaction of each teacher with the resulting definition was later obtained through a brief interview. These interviews were tape recorded with the full knowledge and agreement of each teacher in order to obtain maximum accuracy in representing the views of each teacher.

Procedures and Instruments

Suggestions originating during level one of the original NGT procedure were later developed through a procedure more closely related to the Delphi technique (Cunningham, 1982; Delbecq, Van De Ven, & Gustafson, 1975). The original suggestions regarding appropriate procedures and instruments were placed in a brief questionnaire form and circulated to learning disability staff members. Responses were compiled into a more complete listing and circulated again. In the interest of time constraints, the third draft was discussed during a
regular staff meeting. The final checklist was prepared by a staff member who organized the procedures into specific domains. The checklist was used to identify the preferred assessment methodology for each teacher. The results of this procedure were used to develop a coding system for documenting findings from the records of students evaluated and placed in learning disability services during the course of this study.

**Eligibility Criteria**

The NGT process also led to the development of (a) a listing of possible criteria and discrepancy cut-off points and (b) a weighting system for determining the relative weight each teacher gives to a particular element. The information gathered during this step was included in the coding system used for triangulation of results through file checking.

**Student Characteristics**

Information regarding student characteristics was extracted from the records of students entering the learning disability program during the period of this study. The information was found in individual evaluation reports, assessment summary forms, or written in the current level of functioning of the initial individual education plan (IEP).

**Summary**

The purpose of the study was to identify, analyze, and describe differences in the procedures and criteria used for the identification of learning disabled students within Buffalo Valley Special Education Unit. The naturalistic inquiry paradigm was chosen as the appropriate structure because of the need to investigate current practice in the
field with as little disruption and contaminating influence from the study itself as possible. A multiple case study approach was chosen as the appropriate design strategy.

The data is primarily qualitative with some quantitative data gathered for purposes of clarification, extension, and triangulation. Other techniques used to assist in maintaining objectivity were member-checking, discussions with peers, and periodic reviewal of the original research plan (Lincoln & Guba, 1985; Guba & Lincoln, 1981). Evidence was drawn from five sources: documents, archival records, interviews, surveys, and participant observation (Yin, 1989).

The Borich and Nance Model was used as a method for organizing and maintaining the focus for the study (Borich & Nance, 1987). Use of this model as a research plan and a methodological log assisted in the establishment of trustworthiness. Examination of the plan (found in the Appendix) will reveal four separate designs—one for each of the research questions under consideration. Each design was organized by first considering the purpose of each major component, identifying a strategy or strategies by which to meet that purpose, developing a set of procedures, considering the instrument that was required, the investigator involved, and the source of the information. This plan was an important tool for organizing and documenting methodology. It was modified many times throughout the course of the study.

Analysis and comparison of data was accomplished at two levels. The first level of analysis considered data relative to the practice of each learning disability teacher (a single case). At this level, each of the research questions was answered in the chronological order of the
natural occurrence of the sequence in the schools—Step I, evaluation, eligibility, and student characteristics. At the second level, a cross-case analysis was used to compare and contrast data across case studies for the purpose of identification of the points of variance within the learning disability program of Buffalo Valley Special Education Unit.

Level one analysis takes the form of ten descriptive case studies. Level two analysis follows a cross-case pattern (Yin, 1989). The recommended format for studies of this nature is presentation of the analysis in separate chapters or sections for purposes of clarity (Yin, 1989). The individual case studies are presented in Chapter IV. Chapter V contains the cross-case analysis. Conclusions and recommendations will be found in Chapter VI.
CHAPTER IV DATA AND ANALYSIS

The purpose of this study was to identify inconsistencies in the process of determining eligibility for learning disability services within Buffalo Valley Special Education Unit. This was accomplished through the use of the naturalistic inquiry method in a field based setting. Four plans were developed to assist in organizing the data gathering process. Each plan was designed to gather the data required to answer one of the four research questions. Data analysis was aided through the reorganization of the four original questions into three components of the general assessment process: (a) Step I (pre-referral procedures), (b) identification, and (c) characteristics of students and caseloads. Two levels of analysis were required in order to answer the original questions. The first level of analysis considered only data specific to the practice of one learning disability teacher—a single case study. There are ten case studies at this level. The second level analyzed the data across the ten cases in order to provide answers to the research questions posed.

Level one analysis is presented in this chapter in a parallel structure to that imposed on the analysis of the data. Each of the research questions are answered in the chronological order of the natural occurrence of the sequence in the schools—Step I, evaluation, eligibility, and the characteristics of students and caseloads.
Case One

The teacher (LD One) provides service to one elementary public school in a relatively large district. The student population of this building was 417 for the 1989-90 academic year. LD One was hired by this district in 1974 and has provided service to learning disabled students in the same building for most of this period of time. The program was originally structured to provide half day self-contained services to the district's most severely learning disabled students. It remains one of two options in the Unit for severely learning disabled elementary students. This teacher holds a Master of Science degree in mental retardation and severe multi-handicapping conditions in addition to the credential in learning disabilities.

Step I

The data relating to the Step I process was obtained through (a) a survey of all professional stakeholders in the building (parent sampling was not included), (b) brief interviews with the LD teacher and the building Principal, and (c) a review of the records of students evaluated for the first time during the period of this study.

The first question of the survey was open ended. The respondents were asked to describe the steps to be taken when a student is having difficulty learning (see Appendix A for a copy of the survey). Responses from general education personnel were unitized and grouped categorically in order to provide usable information. The responses of the LD teachers to this question were treated separately due to their knowledge of the Step I process as presented in state guidelines. Care has been taken to reproduce the response of each LD teacher as exactly as
possible in order to eliminate the possibility of inaccurate interpretation.

**LD One Survey and Brief Interview**

LD One described the pre-referral process in this building in the following manner:

Contact Sp Ed and/or Principal to form a TAT meeting. If team decides call parents in - fill out referral forms for Sp. Services. Contact Sp Ed person Get Permission to eval if necessary/ or to revaluate the Alternate Learning strategies that have worked or that have not. If they have not been effective Sp Ed Personnel may need to get involved actively and get Background History - Schedule someone to observe get all relevant med & academic testing completed previous Eval - to answer the Questions for Sp assessment. (Step I, LD One survey, Item 1)

Written descriptions of the problem and modifications made by the classroom teacher are to be submitted prior to the TAT (Teacher Assistance Team) meeting. According to LD One, the child's parents are contacted by the classroom teacher. This will happen either at the TAT meeting or during a parent-teacher conference. The TAT meets only when there is a specific request by the teacher. No records are kept regarding these meetings.

**Step I Building Surveys**

Fourteen of fourteen surveys were returned from this building. Of the fourteen responses to question one, only three (21%) mentioned the need to use alternate strategies for teaching (personalize the learning
environment) prior to consideration of referral for special education evaluation. Only one of the fourteen (7%) listed it as the first thing to be done. Nine of the fourteen (64%) suggested that parents should be contacted as one of the first steps in dealing with a student's learning difficulties. Half of the teachers said the first step in getting assistance is to consult the learning disability teacher. Twelve (86%) of the fourteen listed consultation with the LD teacher as one of the first three things to be done. Eight teachers (57%) listed testing as one of the steps to getting help for a failing student. Two of the eight also referred to the need for an IEP (Individualized Education plan). Five respondents (36%) specified the need for a TAT meeting.

In responding to the other questions on the survey, a majority of the teachers (64%) agreed that the process for getting assistance is formal and requires written descriptions of the student's problem (78%) as well as the modifications that have been tried (78%). Ten (71%) of the teachers felt that parents should be involved in the problem after a decision is made to do so during a TAT meeting. Nine (64%) of the teachers felt that the responsibility to discuss the problem with parents was theirs. Four (29%) of the teachers felt it was the LD teacher's responsibility. Twelve (86%) responses stated that there is a TAT (also called Building Assistance Team) in existence but said it does not meet regularly. Eight (57%) provided names or positions of regular members of the team.

Five suggestions were made for improvement of the process. Four of these involved increasing the speed with which children are evaluated and placed into special education services.
Student Records

Five records of students evaluated in this building during the period of this study were examined for evidence of the Step I process. Four of the five contained evidence of one meeting prior to the referral meeting. The fifth indicated that two Step I meetings had been held. The team generally consisted of the LD teacher, the child's classroom teacher, and the building principal. In two instances the building speech pathologist attended and in one instance the parent also attended.

Other Records

A formal TAT (Teacher Assistance Team) plan is in place within this district. A copy was returned with one of the survey forms. Forms were included within the plan for (a) a referral to the TAT team by the classroom teacher and (b) documentation of the "Plan of Action" developed during the TAT meeting. One of the goals listed for the TAT program is "To provide an efficient pre-referral screening for special education services" (Jamestown Elementary Teacher Assistance Team Program, dated 4/90, p. 1). According to this plan, the building principal is to call the meeting, appoint the chairperson and the recorder, and invite appropriate support personnel. The plan states "no formal referral for special education services shall be made until at least 2 modifications suggested in the child's TAT have been tried and 2 formal TAT meetings have been held" (Jamestown Elementary Teacher Assistance Team Program, Revised 4/90, p. 1). Records are to be kept in the Principal's guidance file. If a referral is made to special education, the TAT report is to be placed in the cumulative folder.
Summary

In this building, the Step I process is seen as a special education function. The request for assistance generally is made directly to the LD instructor. The focus for over half of the teachers in the building is on special education testing and placement. Parents are contacted by the classroom teacher during one of the first steps. Classroom observations are included in the process and may be accomplished by the building principal or LD One. The process is in the form of a written procedure to be followed. However, practice does not yet match the written procedure. Meetings are scheduled infrequently as individual teachers feel a need for assistance. There is an established core committee with other members included on the basis of the contribution that can be made to resolution of the student's individual problems.

The Step I process in this building seems to fall within the Child Study Team model. In this model the classroom teacher makes an informal referral directly to the special education teacher. The special education teacher organizes a discussion meeting with members of an assessment team. The second meeting of this team is generally held with the parents of the child. The function of the second meeting is to complete the formal referral process to special education assessment services. This concept of the process as it functions within this building was corroborated by LD One and the building principal during brief interviews.
Evaluation

The data relating to the evaluation process were obtained through the use of (a) a consensual definition developed by the LD department through the use of a Nominal Group Technique (NGT), (b) a brief interview with LD Teacher One, (c) a checklist of testing procedures and instruments, (c) results of an NGT procedure identifying criteria and discrepancy cut-off points, and (d) a review of the records of students evaluated for the first time during the period of this study.

Consensual Definition

The operational definition of learning disabilities established by the LD department is as follows:

A learning disability student generally has low average to above average aptitude and processing deficits that result in severe discrepancies between the student's estimated ability level and his/her academic performance in one or more areas specified under the law. The level of this discrepancy differs somewhat from grade to grade but is generally considered to be a 2 grade level difference or to fall within a range of at least 1 to 2 Standard Deviations below the mean for other children of that ability level.

(Minutes of LD Department meeting, 3-9-89)

Brief Interview Regarding Department Definition

LD One expressed general satisfaction with the operational definition developed during departmental staff meetings, referring specifically to the elimination of the requirement for an estimated ability level that is at least average and the concomitant specifica-
tion of an identified processing deficit. LD One also stated agreement with the use of a differentiated scale (based on the age or grade placement of the student for determining the level of discrepancy between the child's ability and achievement levels. LD One also stated that the student's background and experiential history should be taken into consideration. The ability of the teacher to "modify and personalize the curriculum and do a good job of it", the student population in the general classroom, and the LD caseload size are other factors that LD One felt should be considered (Interview #3, March 1990, paragraphs 4, 6, 8, and 14).

Checklist of Procedures and Instruments

For an initial evaluation, LD One typically uses a combination of procedures and instruments. The self reported checklist indicates preferences for the (a) Detroit Test of Learning Aptitude - 2nd edition (DTLA-2) and the Detroit Test of Learning Aptitude - Primary (DTLA-P) in the cognitive area, (b) the Kaufman Test of Educational Achievement - Comprehensive (K-TEA), the Key Math, and the Woodcock Reading Mastery - Revised in the achievement area, (c) the Beery Developmental Test of Visual-Motor Integration (DTVMI) in the sensory perceptual areas, and (d) the Peabody Picture Vocabulary Test - Revised (PPVT-R) in the language area.

Record Review

The review of the records shows consistent use of informal tests, classroom observations, the DTLA-2, Woodcock Reading Mastery - Revised, and the KeyMath - Revised. The DTVMI is used frequently. Occasionally a psychological evaluation is requested and/or reviewed.
Achievement/Aptitude Discrepancy Questionnaire

In determining eligibility for services, LD One prefers to use standard scores in obtaining an estimate of the student's ability level. The choice of type of score chosen to describe a student's academic level depends upon the purpose. LD One prefers to use standard scores in calculating eligibility and age or grade level scores in talking with parents. In the area of processing abilities, LD One prefers to use standard scores or percentile ranks "depending on the test" (Achievement/Aptitude Discrepancy questionnaire, LD One:5B). LD One believes that the minimal discrepancy between the student's estimated ability level and academic skills should vary with grade level, e.g., 1 standard deviation or 6 to 12 months at the Kindergarten level, 1.5 standard deviations or 2 to 3 years at the elementary level, and 2 standard deviations or 3 to 4 years at the high school level. LD One reports using the Harris formula for determining the severity of discrepancy between the student's estimated ability level and academic skills. This formula is represented as $\frac{2MA + CA - 5.2}{3}$ (where MA = Mental Age and CA = Chronological Age).

Student Records

The review of the records provides only speculative data relative to actual practice related to criterion. Three records were reviewed. Record LD One:1 provides documentation of entrance into the learning disability program based on "spatial concerns" (from individual evaluation report dated February 1990). Other information from this report reveals grade level placement of 4.5 with academic skills ranging from 3.5 to 4.0. Other statements describe LD One:1 as having "low average
ability with no significant difficulties". Record LD One:3 specifies a learning disability based on .5 to 1 year academic discrepancy between grade placement and achievement. The student's estimated potential is unknown. Placement is tentative with a psychological evaluation planned for September of 1990. Record LD One:4 is identified as learning disabled with "visual motor-auditory visual concerns" (Composite Assessment Summary, February 1990). The student is a mid-year first grader who is described as having slower than average ability and academic skills approximately 1 year below grade placement. Problems are described in "concept development, visual motor memory, verbal expression (individual assessment report, February 1990).

Summary

LD One appears to function under the heuristic model. Evidence exists in the records regarding consideration of data from a wide range of sources: (a) physiological disabilities or medical deficiencies, (b) physical aspects of the classroom environment, (c) interpersonal relationships in all environments, (d) characteristics of the home and neighborhood, and (e) past history (Hardin, 1978; Heron & Heward, 1982). However, this hypothesis must be viewed with caution because of the limited nature of the data available in record form.

Characteristics of Students and Caseload

The data relating to characteristics of students were obtained through review of individual assessment reports, the composite summary written by the placement team, and the current level of functioning section of the IEP. The data relating to characteristics of the caseload in terms of size and the percentage of students placed were
obtained through year end reports submitted by each learning disability teacher at the end of each academic year.

**Student Records**

Limited records were available for examination during this period. Of the five records of students placed, one was placed on the basis of records from the student's previous school and one student was evaluated but not placed. The three remaining students were estimated to have "slower than average ability" (Identification and Dismissal Record, LD One 1,3,4). One of these students has been referred for a psychological evaluation in September of 1990 to rule out retardation. Academic skills appear to have been measured against grade placement for the purpose of identifying an academic discrepancy. Two of the three have identified problems in information processing (Identification and Dismissal Record, LD One 1 and 4).

**Other Records**

Data were available regarding the size of the caseload for this building and this teacher for a ten year period. During that time the caseload size has ranged from a low of 20 to a high of 37. The average caseload size is 25. During that same period of time, the percentage of students placed into learning disability services has ranged from 11% (1985-86 academic year) to 93% (1988-89). During the 1989-90 academic year, 5.9% of the population of this building was served within the learning disability program. This figure is somewhat misleading, however, because of the number of students moved to this building for the more intensive services that can be provided in this program. Approximately five percent of the students from this attendance area are
being served as learning disabled students. This is slightly higher than the most recent report of the national incidence level of 4.82% as reported by the U. S. Department of Education (Baker, 1989).

Case Two

The teacher holds a baccalaureate degree in elementary education and had three and a half years of experience in elementary teaching prior to obtaining a master's degree in learning disabilities. This teacher serves one public elementary school and two parochial schools. One of the parochial schools has a Kindergarten to Grade 6 (K-6) organizational plan while the other is K-8. The combined population of the three schools is approximately 576, however the K-8 school is considerably smaller (N = 26) than the other two (N = 388 and 162). There have been no identified learning disabled students in the smaller K-8 school for several years. That school is not included in this study.

Step I

LD Two Survey and Brief Interview

LD Two described the pre-referral process in the larger building in the following manner:

1. Teacher contacts administrator or Designee
2. Informal conference held (Teacher -- administrator and personnel who could potentially help)
3. Decision made (Is TAT meeting necessary)
4. Building administrator contacts participants
5. TAT meeting Step Process
6. Followup
7. Decision (Special Education Referral or continue current plan of action) (LD Two, Step I survey, Item 1)

LD Two reported that the process is in formal written form. (A copy of Jamestown Elementary Teacher Assistance Team Program, 9/86 was attached to the survey.) Written descriptions of the problem, modifications made by the classroom teacher, and documentation of a specific number of interventions that have been tried must be submitted prior to the TAT meeting. In this building, the teacher is also expected to submit written information regarding the student's strengths, weaknesses, and any background information that may be pertinent. According to LD Two, the building administrator or classroom teacher contacts the parents regarding the problems in the classroom. Time is set aside on a weekly basis for TAT meetings. The agenda for each meeting is set by the Principal. The Principal also invites other members of the team based on the apparent needs of each student. "...some instances we do have parents, and some instances we don't have time. We are very flexible. Some meetings I am involved and some I am not involved in." (Interview #4, paragraph 14) Records are kept, but not placed in the child's cumulative records unless there is a referral for special education.

LD Two reports that the process at the larger parochial school is very different. The system there is primarily a direct consultation model. LD Two stated that the TAT system is a public school process; the consultation model is more suited to private schools (Interview #4, paragraphs 24, 29).
Step I Building Surveys

Fourteen of fourteen surveys were returned from this building. The first item asks the respondent to describe the steps to be taken when a student is having difficulty. Of the fourteen surveys returned, one respondent chose not to respond to this question. Four (28.5%) mentioned the need to use alternate strategies for teaching (personalize the environment) prior to consideration of referral for special education evaluation. Three of the fourteen respondents (21%) listed contact with parents as the initial step. Six (43%) felt that consultation with the building administrator should be the first step. None of the fourteen respondents mentioned consultation with the LD teacher as a first step. Nine (64%) did not mention consultation with LD Two at all. Two (14%) teachers mentioned a referral to special education services. Only one (7%) mentioned testing (step 6 on this respondent's list). Five (36%) listed a TAT meeting as step 2 or 3 on their list.

In responding to the other questions on the survey, eleven of the teachers (78.5%) agreed that the process for getting assistance is formal and requires written description of the problem (100%), a description of previous modifications (100%), and documentation of the number of interventions attempted (93%). Nine of the teachers (64%) felt that parents should be contacted about the problem before anything else is attempted. Four others (28.5%) expressed the belief that a decision needs to be made relative to the problem before calling parents. Twelve (86%) of the teachers felt that the responsibility to discuss the problem with parents was theirs. Seven (50%) teachers acknowledged the existence of a TAT. Five (36%) reported that it met
regularly and twelve (86%) listed the names or positions of the regular members of the team.

One recommendation was made for improvement of the process—to establish a maximum time period that could elapse from referral through the evaluation process to establishment of a behavioral program in the classroom. Eight positive comments were made (Step I, Building Two survey, Item 8).

Student Records

Four records of students evaluated in this building during the period of this study were examined for evidence of the Step I process. All four contained evidence of at least one meeting prior to the referral meeting. The referral team generally consisted of at least one parent, LD Two, and the classroom teacher. The building principal attended three of the four referral meetings. Other team members listed as participating in at least one of the referrals were the elementary social worker and the basic skills teacher.

Other Records

Case Two is located in an elementary school within the same district as Case One. The written TAT (Teacher Assistance Team) plan described in Case One is a formal procedure for this building as well.

Summary

The Step I process in this building appears to follow the Chalfant, Pysh and Moultrie (1979) model. The team is functionally a building level, general education process. LD Two is an invited member, not a permanent member. The very high level of agreement regarding the related issues discussed in the survey suggests that this process is
very well entrenched within the daily functioning of this building. The building principal's high level of support and control of the process is evident. Teacher comments indicate a high level of acceptance of the process as beneficial to their teaching success. Records are kept and a formal system has been established for their disposition.

Evaluation

Brief Interview

LD Two stated, "This [the definition] looks pretty good, I think...if we could adopt this we could probably clarify it a little more, but generally this would include the areas that I specifically look at when evaluating students, or potential students" (Interview #4, paragraph 2). LD Two considers the ability versus achievement discrepancy as the major issue in a decision of eligibility. LD Two indicated that he may place a student who has a "need for specially designed instruction" (Interview #4, paragraph 8) if not satisfied that other services (e.g., basic skills) are available and able to help close the discrepancy.

Checklist of Procedures and Instruments

For an initial evaluation, LD Two typically uses a combination of procedures and instruments. The self reported checklist indicates preferences for the (a) DTLA-2, the Woodcock-Johnson Psychoeducational Battery, Part I (WJPEB I) and observation in the cognitive areas; (b) K-TEA comprehensive form, KeyMath, Woodcock Reading Mastery Test, Form A (WRMT), criterion referenced measurement, and informal assessment in the academic achievement areas, (c) an informal checklist in the problem areas, (d) the DTVMI and informal assessment in the sensory perception
areas, and (e) the Peabody Picture Vocabulary Test (PPVT) forms L and M, and informal assessment in the language area.

**Record Review**

The review of the records documents a consistent pattern of assessment. The basic battery of procedures used by LD Two for initial evaluations for eligibility consists of (a) informal screenings, (b) observations, (c) criterion referenced measures, (d) DTLA-2, (e) KeyMath-R, (f) Woodcock Reading Mastery R, and (g) the DTVMI. The four records reviewed also indicated that a hearing acuity screening was performed for one student, and background information was gathered for two students.

**Achievement/Aptitude Discrepancy Questionnaire**

In determining eligibility for services LD Two expressed a preference for the use of standard scores in estimating a student's ability level--stating that they are more reliable (Achievement/Aptitude Discrepancy survey, LD Two, item 1). In the area of academic skills LD Two indicated use of all possibilities (standard scores, percentile ranks, grade, local curriculum based norms, and age), indicating that "grade equivalencies and percentile ranks usually don't give detailed information necessary for programming" (Achievement/Aptitude Discrepancy survey, LD Two, item 3). In the processing areas, LD Two indicated preference for standard scores, criterion referenced information, and other (unspecified). LD Two believes there should be no minimal IQ score criterion for eligibility for learning disability services. LD Two also states the belief that learning disabilities in the borderline IQ range are "unlikely but possible" (Achievement/Aptitude Discrepancy
survey, LD Two, item 2). LD Two declared use of a formula comparing standard scores to determine the severity of the discrepancy. A specific formula was not indicated.

Student Records

Four records were available for review from students evaluated by LD Two. Record LD Two:1 provides documentation of entrance into the learning disability program based on "discrepancy appears not correctable without special education" (from Composite Assessment Summary form dated March 1990). Other statements describe LD Two:1 as having word identification skills at grade level (mid-first grade), comprehension skills lagging one half year, no significant weaknesses in math, problems with attention and distractibility, and poor social skills. Record LD Two:2 was found to have an educational discrepancy but was not placed in services. The reasons are unclear from the documentation. Record LD Two:3 was placed in learning disability services as a result of "listening discrepancies [that] appear not correctable without special education. Record LD Two:4 was placed. This child's functioning is described as "slower than average ability - reading at mid first grade - no significant math weakness. No serious concerns in spatial perceptual organization or verbal conceptualization. Possible auditory sequential and fine motor difficulties" (Individual evaluation report, dated February 19, 1990).

Summary

LD Two appears to function under the educational orientation. Evidence exists regarding the emphasis on evaluation procedures designed to measure skills in the academic areas. The major focus is on obtain-
ing information that is readily usable in program planning. Formal assessment instruments are used but appear to be of secondary importance to informal checklists, curriculum-based assessment, and criterion referenced assessment procedures.

Characteristics of Students and Caseload

Student Records

The data relating to characteristics of students were obtained from three records. Due to the nature of the documentation and the extremely small sampling available, little can be said about the characteristics of these students beyond the statement that their "discrepancies appear not correctable without special education" (Record LD Two:1,3,4).

Other Records

Data were available regarding the size of the caseload for these buildings and this teacher for a ten year period. During that time the caseload size has ranged from a low of 20 to a high of 32. The average caseload size has been 28.5. During that same period of time, the percentage of students placed into learning disability services has ranged from 46% (1984-85) to 78% (1987-88). During the 1989-90 academic year, 4.6% of the larger public school population was served within the learning disability program. This is slightly below the recent report of the national incidence level of 4.82% (Baker, 1989).

Case Three

The teacher has fourteen years of experience, thirteen in this district. The teacher's undergraduate degree is in secondary education with a graduate level credential in learning disabilities. This teacher
serves two elementary buildings within a single district. These schools have a combined population of 657 students.

Step One

LD Three Survey and Brief Interview

LD Three described the pre-referral process in these buildings in the following manner:

- discuss with administrator
- put problem in writing according to guidelines
- meet with team
- follow recommendations
- progress report
- usually testing or problem solved at this time (Step I, LD Survey, Item 1)

Written descriptions of the problem, modifications made by the classroom teacher, and "summarization of discussions in writing" (Step I, LD Three Survey, Item 3e) are to be submitted prior to the team meeting. According to LD Three, the child's parents are involved in discussions during the period interventions are being attempted and in a formal meeting when permission to evaluate is obtained. A formal TAT process is in place in both of these buildings, but neither TAT meets on a regularly scheduled basis. Each TAT meets only when a teacher makes a specific request. Regular members of the team are the building administrator, classroom teacher, and LD Three. Other persons are invited as appropriate to the needs of the student.

Step I Building Surveys
In the smaller of the two buildings, nineteen surveys were returned of nineteen. In response to the first question asking for a description of the steps to be taken when a student is having difficulty, nine respondents (47%) reported that they would contact the building administrator first. Twelve of the teachers (63%) reported discussing the problem with parents. Ten of the teachers (53%) listed consultation with the LD teacher as one of the first five steps to be taken. Seven respondents (37%) said they would try alternate strategies in the classroom in order to attempt to solve the student's problems. Two of the teachers (10.5%) mentioned a need for referral to special education services and five (26%) specifically mentioned testing. Fourteen teachers (84%) mentioned the need to schedule a TAT meeting.

In responding to the other questions on the survey, a majority of the teachers agreed that the process for getting assistance is formal (53%) and requires written descriptions of the student's problem (89%) and descriptions of previous attempts to personalize the curriculum. Eight suggestions were made for improvement of the process. Four suggestions relate to a need to shorten the amount of time occurring between referral and evaluation. One suggests that classroom observation should be done by an additional person. Another suggestion relates to the practice of having a second teacher participate in TAT meetings. This respondent reports feeling that the second teacher's time is being wasted and that the teacher's presence is intimidating to parents. The same respondent concluded with the following statement, "Also we do not always have the TAT team present when we fill out the form because it's a hassle to get them all together with all the other committee meetings,
staff meetings and class preparation" (Step I, LD Three, Respondent 9, Item 8).

In the larger building, sixteen of twenty two surveys (73%) were returned. Of the sixteen responses, only one (6%) mentioned the need to use alternate strategies for teaching (personalize the learning environment) prior to consideration of referral for special education evaluation. Nine of the sixteen (56%) suggested that parents should be contacted as one of the first steps in dealing with a student's learning difficulties. Another 56% said they would contact the learning disability teacher in one of the first four steps. Twelve respondents (75%) listed the building administrator as one of the first two steps. Two (12%) mentioned the need for a formal referral to special education and seven (44%) suggested testing as an option. One teacher stated the need for "SpEd Team and Teacher [to be] carrying out IEP" (Step I, LD Three, Respondent R:14, Item 1). Eleven (69%) of the teachers referred to a TAT meeting as part of the process to be followed.

Eight (50%) of the respondents agreed that the process they had described is a formal, written procedure. Fifteen (94%) reported that the process requires written descriptions of the child's problems and modifications that have been tried. Three respondents (19%) would involve the parents before anything else is done while thirteen (81%) would wait until a decision is made at the TAT meeting or would inform them of the situation during a formal meeting. Seven teachers (44%) felt the responsibility to contact the child's parents was theirs; eight (50%) felt LD Three should make the contact. There were no answers to the question "Does your building have a Building Assistance Team
(Teacher Assistance Team)?" (Step I, LD Three Survey, Item 6). Twelve of the respondents (75%), however, listed specific positions or persons as regular members of the TAT team.

Twelve comments were made regarding the effectiveness of the referral process in this school. Two comments were positive. Five comments stated a desire to "speed it up" (Step I, LD Three Survey, Respondent R:1, Item 8). Two comments reflected a perceived need to establish a classroom for the emotionally disturbed. Three teachers stated a need for additional inservice that would provide skills needed to improve the process.

Student Records

Three records of students evaluated in these buildings during the period of this study were examined for evidence of the Step I process. One of these records indicate a referral date early in September. This record has no documented evidence of the Step I process. Each of the other two records document three pre-referral meetings for each student prior to the date of formal referral. The referral team generally consisted of the building principal, the parent, the child's classroom teacher, and LD Three. The building speech pathologist and the school psychologist were each recorded as attending two of the three meetings. The elementary social worker and the special education programs coordinator are also recorded as participants in one of the three meetings.

Other Records

These buildings are located in the district that has a formal TAT plan in place within the elementary schools. Additional corroborating evidence was found in the form of minutes of TAT meetings. These
minutes were found in the Principal's office in the larger building. These records clearly support the existence of a functional Step I process in the form of the TAT model. A brief interview with the Principal provided the additional information that these records are kept in a separate TAT file unless the child is referred for special education services. At that point, TAT records are transferred into the child's cumulative folder. It should be noted that one of the later records examined in the Buffalo Valley central office files contained xerox copies of the TAT minutes for the student.

**Summary**

The process has evolved somewhat since the time the survey was taken. At this time, the Step I process appears more established in the larger of these two buildings than in the smaller. Documentation supports the hypothesis that the process is used and record keeping is done with the intent of providing future assistance to the child rather than simply filling out a form because it is required. The brief interview with LD Three and the building Principal indicate that the LD teacher is very involved in the process in this building. LD Three perceives the involvement as having both positive and negative components. The involvement provides knowledge of the child and the situation that would be difficult to match in any other way. On the other hand, "I think it is still thought of as special education function as opposed to the way they function." (Interview #5, March 30, 1990, Paragraph 46). This building appears to have developed a classic TAT model that is showing the initial signs of developing into a broader building level problem-solving team.
In the smaller building, the process appears to have undergone change during this past academic year (1989-90). The survey indicates a strong teacher awareness of the need to attempt alternate strategies in the classroom prior to a referral to special education. In most instances where contact with the LD teacher was listed as a step to obtaining assistance for a student, it was listed as a second, third, fourth, or even fifth step. As a result of perceived difficulties within the process, a staff meeting was held in late January, 1990 with the Buffalo Valley School Psychologist acting as facilitator. During this meeting (a) strengths and weaknesses of the program were identified, (b) clarifications were made of the misunderstandings of some teachers, and (c) some modifications were made in the process.

In describing the differences that have occurred in the process over the period of this study, LD Three reported, "This is the first year I have been involved at TAT at ____. I was never invited to a TAT meeting last year....[This year] we are very heavy on documentation and forms and are really playing it by the book" (Interview #5, March 30, 1990, Paragraph 64). In describing the perceived relationship of TAT in this building to special education, LD Three stated, "I will say that there are some real attempts to try things....Although, some teachers still say, 'You mean I have to go through all that to get this kid tested?' and you never hear from them again" (Interview #5, March 30, 1990, Paragraph 70). This building appears to be moving from the older Child Study Team model toward a functional TAT model.
Evaluation

**Brief Interview Regarding Department Definition**

LD Three expressed some concern with the consensual definition developed by the LD Department saying, "I think this is fairly accurate for the majority of our students, but we have some of those gray area students." (Interview #5, March 30, 1990, paragraph 2). LD Three went on to describe two types of children: (a) those who have severe processing deficits and measured intelligence quotients of about 70 and (b) those who have processing deficits but whose measured discrepancies between ability and achievement is less than two grade levels. LD Three reported belief that criteria for entrance should be somewhat flexible in order to allow for appropriate identification at kindergarten and first grade levels as well as the upper levels. LD Three bases the first eligibility decision on evidence of a processing deficit. The ability versus achievement issue is secondary to the processing question.

**Checklist of Procedures and Instruments**

For an initial evaluation, LD Three reported use of a wide variety of evaluation procedures and instruments. The self-reported checklist indicates preferences for the (a) DTLA-2, DTLA-P, and the Slosson Intelligence Test (SIT) in the cognitive areas; (b) the Basic Skills Inventory (BESI), the Brigance Test of Basic Skills, the Brigance Test of Early Development, the Diagnostic Achievement Battery (DAB), the KeyMath, the Test of Written Spelling—2nd edition (TWS-2), and the Wide Range Achievement Test (WRAT) in the academic achievement areas; (c) the DTVMI and the Illinois Test of Psycholinguistic Abilities (ITPA) in the
sensory perception areas; and (d) the Peabody Picture Vocabulary Test (PPVT) and the Test of Written Language (TOWL) in the language areas.

**Record Review**

The review of the records revealed complete documentation of the assessment for eligibility is not available in the Buffalo Valley central office files. The single record containing complete documentation of the procedures used for evaluation indicates use of classroom observations, the DAB and the DTLA-2 (Record LD Three:2). Other assessments were performed by the school psychologist and the elementary teacher for the emotionally handicapped.

**Achievement/Aptitude Discrepancy Questionnaire**

In determining eligibility for services, LD Three expressed a preference for the use of standard scores (for the ability to make comparisons) and age scores for obtaining an estimate of the student's ability level. LD Three expressed preference for standard scores, age scores, grade scores, and criterion referenced information in the academic achievement areas. In the processing areas, LD Three prefers to use standard scores for the ability to make comparisons with other scores. In establishing criteria for placement, LD Three considers 80 to be the minimal IQ score for learning disability placement. The discrepancy between the student's estimated ability and academic skills should be at least 1 to 1.5 standard deviations from the mean.
Student Records

Three records of students evaluated for eligibility during the course of this study were reviewed. These records revealed insufficient documentation regarding the specific criteria used to establish or reject eligibility for learning disability services.

Summary

The brief interview with LD Three suggests that this teacher may be operating under a basic psychoeducational model for assessment purposes. The discussion as it relates to both placement and exit issues seemed to revolve around the concept of learning disabilities as a function of psychological processing (Interview #5, March 30, 1990, paragraph 6, 28, 30, and 36). Evidence does not exist in the records to support or to refute this hypothesis. This conclusion must, therefore, be viewed with caution.

Characteristics of Students and Caseload

Student Records

Of the three records of students evaluated for eligibility during the period of this case study, only one provides clear documentation of the findings relative to student characteristics. This student was identified as having a severe disability in expressive language related to weaknesses in auditory sequential processing and difficulty with word retrieval. This student was also identified as having visual motor strengths. The student was enrolled in speech and language services. The student was not enrolled in learning disability services.

A statement cannot be made about characteristics of the students on this caseload from the data available.
Other Records

Data were available regarding the size of the caseload for these buildings and this teacher for a ten year period. During that time the caseload size has ranged from a low of 20 to a high of 35. The average caseload size has been 26. In that same period of time the percentage of students placed into learning disability services has ranged from 0% (1988-89) to 38% (1985-86). During the 1989-90 academic year, 3% of the population of the two buildings was being served within the learning disability program. This is below the national incidence level of 4.82% (Baker, 1989).

Case Four

The teacher's baccalaureate degree is in elementary education and special education (mental retardation). This teacher had three and one half years of teaching experience before returning to school for a master's degree in learning disabilities. The teacher was hired into Stutsman County Special Education Unit in 1976 (the precursor to Buffalo Valley Special Education Unit). This teacher currently provides service to three separate districts consisting of two K-12 and one K-8 organizational plans. The total student population of these three districts during the 1989-90 academic year was approximately 325 students.

Step I

LD One Survey and Brief Interview

LD Four described the pre-referral process in these buildings in the following manner:

(1) Go to LD & Speech and talk about the student prob
(2) Get ideas on what do /what has been done & try them
(3) Have the LD/Speech person observe student.
(4) Meet w/ principle & teachers concerned to discuss problem
(5) Talk to parent about the problem
(6) meet w/ principle/SpEd tchrs to decide what to do next.
(7) Call mtg w/ parent to have testing done (Step I, LD Survey, Item 1)

LD Four reported that this process is in writing in the special education classroom. A description of the problem, the ways the usual teaching methods/strategies have been modified for the student, and the number of interventions that have been tried are to be presented to LD Four on a form designed for this purpose. The initial contact to the student's parents is made by the classroom teacher with a later contact from the LD teacher.

Step I Building Surveys

Three of three surveys were returned from the smallest of the buildings. In describing the steps to be taken when a student is having difficulty, the teachers agreed that they would discuss the problem with each other (one of the teachers acts as a lead teacher), contact the parents of the child, and consult with LD Four. One of the three mentioned attempting alternate learning strategies. All identified formal referral and testing as steps in the process. Two of the three say that the process is not formalized in written form and does not require written documentation. No comments were made concerning improvement of the process.
Eight of eleven surveys were returned from the mid-sized building. Eight of eight listed consultation with LD Four as one of the steps to be taken. Five of the eight (62.5%) said they would contact parents. Two (25%) reported attempting alternate strategies in the classroom. Two (25%) respondents from this school also mentioned asking LD Four to do a classroom observation. Only one of the eight (12.5%) mentioned special education evaluation or an IEP. These teachers are divided on the question of the existence of a formal process. Three teachers (37.5%) say the process is written in a formal manner; four (50%) say the process is not formally written. Teachers report involving parents primarily during a formal meeting or after a tentative decision is made about the problem. Five teachers (62.5%) report that contacting parents is their responsibility. Three (37.5%) believe the responsibility belongs to the building administrator. Suggestions for improvement made by respondents of this district were to formalize the process through a written document and to "cut the red tape; get student help right away instead of wasting time with meetings forms, etc." (Step I, Building Four survey, Respondent K7, Item 8).

In the larger district, fourteen of sixteen surveys were returned. Eleven of the fourteen listed contact with LD Four as one of the first three steps to be taken. Five of the fourteen (36%) listed contacting parents as the second step. Six (37.5%) reported consulting with the building administrator. One (6%) specifically mentioned accessing the TAT process. Four of the sixteen (25%) said the process is not a formal (written) process. The remainder of the sixteen either indicated they did not know or left the question blank. Seven of these respondents
reported that it was their responsibility to contact parents about the problem. Five said contacting parents is the responsibility of the LD teacher. Four of the sixteen (25%) felt parents should be contacted by the building administrator. Six (37.5%) respondents declared that the district does have a TAT. Nine (56%) stated that the TAT meets regularly. Ten (62.5%) specified the names or positions of regular team members. Suggestions for improvement made by the respondents from this district were (a) to place more staff members on the team, (b) to write a section on the process for the staff handbook, and (3) to make sure all teachers are aware of the steps.

Student Records

The records indicate that eight students were evaluated for eligibility in these schools during the period of this study. One record documents a pre-referral meeting prior to making a formal referral to special education. A second record lists a pre-referral date that is the same as the date for formal referral. Additional evidence of a Step I process does not exist in the remaining student records for these districts.

Other Records

No other records have been provided that document the existence of a Step I (pre-referral process) in these buildings.

Summary

At the time this survey was taken a formal TAT process did not exist in any of the three buildings served by this teacher. The data support the hypothesis that the pre-referral system was operating under the child study team model. The Step I requirements were being ob-
served, but it was happening under the direct guidance and supervision of LD Four. A brief interview with LD Four and with a building administrator provides information that suggests a change in focus within the larger of the three buildings. LD Four stated that a portion of each regular staff meeting has been set aside to discuss the needs of students. Subsuming the TAT structure under a general staff meeting is felt to have several benefits in this school: (a) another meeting is not added to an already busy schedule, (b) each student receives the benefit of the wide range of skills and grade level perspectives represented in the staff, and (c) the structure encourages discussion of the special needs of all students—not just those having academic or behavioral difficulties (Interview, LD Four, February 6, 1990, paragraph 36). This discussion was corroborated in a later conversation with one of the building administrators.

Evaluation

Brief Interview Regarding Department Definition

LD Four expressed general satisfaction with the definition established by the LD Department. LD Four stated primary reliance on standard scores for determination of eligibility but believes that criterion referenced assessment is more helpful for establishing instructional programs. LD Four stated a desire for additional clarification or discussion within the department regarding the discrepancy criterion as it is used at varying age levels. "Two grade levels isn't appropriate for first graders. But it says the level of the discrepancy varies from grade to grade. We need to talk about that more" (Interview, February 6, 1990, paragraph 6).
Checklist of Procedures and Instruments

For an initial evaluation, LD Four reports using (a) the DTLA-2, DTLA-P, SIT, and the WJPEB I for cognitive ability; (b) the K-TEA (Comprehensive and Brief forms), the Test of Computational Processes, WJPEB II, and WRMT--R for academic achievement; (c) pertinent medical records and observations in the problem areas; and (d) the DTVMI, the Frostig Developmental Test of Visual Perception (DTVP), and the Motor Free Visual Perception Test (MFVPT) in the sensory perception areas.

Record Review

The review of the records documents the use of a differentiated pattern of usage in choice of test instruments and procedures. LD Four appears to begin initial assessments for eligibility with classroom observations and the Woodcock-Johnson, Parts I and II (WJPEB I, II)--using the Woodcock-Johnson Battery as a basic screening tool (Record LD Four:1, 3, 4, 5). Other instruments, procedures, and evaluators appear chosen on the basis of initial findings (Records LD Four:1, 3, 4, 5, 6, 7, 8). Evaluations for eligibility appear to be multi-disciplinary team evaluations. The records document participation of the general classroom teacher through curriculum based assessment (Records LD Four:1, 3, 4, 5) and the speech clinician through assessment in the language and auditory processing areas (Records LD Four:1, 3, 4, 5).

Achievement/Aptitude Discrepancy Questionnaire

In determining eligibility for services, LD Four expressed a preference for standard scores in obtaining an estimate of the student's ability level. LD Four stated that this allows for use of a "range of scores comparing to other tests" (Achievement/Aptitude Discrepancy
Survey, LD Four:1). LD Four stated a preference for a combination of standard scores and criterion referenced measures in the areas of academic skills and processing. LD Four believes the minimal IQ score for eligibility as learning disabled should be 80 and that the minimal discrepancy between the student's estimated ability level and academic skills should be established at 1 to 2 years or 1.5 standard deviations. LD Four reports the use of a statistical formula for determining the severity of discrepancy between the student's estimated ability level and academic skills (stating the use of standard scores when available) (Achievement/Aptitude Discrepancy Questionnaire, LD Four:6).

Student Records

Of the eight records documenting the process of evaluating eligibility for learning disability services, six of the students were declared ineligible for services on the basis of academic achievement that was consistent with the student's estimated ability and grade level. One student was placed into services on the basis of a diagnostic IEP (Record LD Four:2). Record LD Four:1 indicates placement on the basis of a "severe discrepancy in auditory process that reflects in academic functioning" (Individual Assessment Report dated 10/88).

Summary

LD Four appears to be operating within the heuristic model of assessment. The records indicate that consideration is given to (a) functioning in the informational processing areas, (b) the relationship of this processing to academic functioning, and (c) assessment of the impact of the environment on the student's academic and interpersonal functioning (Hardin, 1978; Heron & Heward, 1982).
Characteristics of Students and Caseload

Student Records

Of the eight records of students evaluated for eligibility during the period of this case study, only one provides documentation of the findings relative to characteristics of students placed in learning disability services. This student was identified as having a severe disability in auditory processing related to weaknesses in memory and language (Composite Assessment Summary, Record LD Four:1).

A statement cannot be made about characteristics of the students on this caseload from the data available.

Other Records

Data are available regarding the size of the caseload for these buildings and this teacher for a five year period. During that time the caseload size has ranged from a low of 12 to a high of 23. The average caseload size has been 16. During that same period of time the percentage of students placed into learning disability services has ranged from 50% (1987-88) to 66% (1985-86). During the 1989-90 academic year, 4.92% of the population of the three buildings was being served within the learning disability program. This is slightly above the national incidence level of 4.82% (Baker, 1989).

Case Five

The teacher has a baccalaureate degree in elementary education and taught one year in an elementary position and five years in another learning disability program before joining this staff. The learning disability credential was earned through graduate level work with a Master's degree in special education completed a few years ago. This
teacher has a total of sixteen years of experience in teaching learning disabled students and provides service within a single building with a student population of 712.

Step I

Step I Survey and Brief Interview

LD Five described the pre-referral process in this building in the following manner:

1. See counselor and/or LD teacher
2. LD teacher or counselor check cum. folder, spec. ed. folder, other past & present teachers. Make suggestions to relieve problem.
3. If looks like learning problem, LD teacher pursues, with having teacher fill out formal referral and parent contact, followed up by evaluation. (Step I, LD Five Survey, Item 1)

LD Five reported not knowing whether the process described is a formal process in written form, however, a description of the problem is expected to be submitted in writing. According to LD Five, the student's parents would be called by the teacher before the teacher saw the counselor or LD person.

Step I Building Surveys

Twenty-nine of forty-two surveys were returned from this building. In describing the steps to be taken when a student is having difficulty, eighteen respondents (62%) indicated that the first step would be to contact the building counselor. Eighteen (62%) also indicated that one of the first steps would be to contact the LD
teacher. Seven of the twenty-nine (24\%) indicated that one of the first three steps would be to contact the student's parents. Three (10\%) of the teachers mentioned a need for referral to special education and seven (24\%) of the teachers suggested testing. Four teachers (14\%) mentioned the need to attempt an alternate strategy or to modify curriculum for the student. One teacher said, "Consult procedures manual and check student files" (Step I, Building Five Survey, Item 1).

In responding to the other questions on the survey, seven (24\%) reported that the procedure they had described is a formal (written) procedure. Five (17\%) declared that there is not a formal process. Thirteen (45\%) indicated they did not know. Fourteen of the respondents (48\%) stated that a written description of the problem must be submitted. Thirteen (45\%) reported that a written description of modifications attempted must also be submitted. Seven of the twenty-nine respondents felt that parents should be involved first or throughout the process. Thirteen (45\%) said parents should not be contacted until after a decision is made on how to proceed; seven of those felt the parent contact should come during a formal meeting. Twelve teachers (41\%) declared ownership of the responsibility of contacting parents. Seventeen (59\%) indicated the responsibility belonged to someone else.

Eleven suggestions were made for improvement of the process. These recommendations can be categorized as: (a) provision of inservice activities to increase staff awareness, (b) greater administrative support of the process, (c) request for classroom observations and consultation from special education personnel, (d) making evaluations
easier to get for students, and (e) development of a teacher assistance team.

**Student Records**

The records indicate that only one student in this building was evaluated for eligibility during the period of this study. The record for this student indicated that the evaluation was requested by an outside agency and that the agency requested completion of the educational portion by school personnel. The remainder of the evaluation was completed elsewhere. A report of the agency's evaluation is contained within the student's file. No other information is available. Evidence of a Step I process does not exist in the student records for this building.

**Other Records**

There is a written TAT plan in existence at the elementary level within this district. This building is not included within the plan.

**Summary**

The evidence suggests that this building is operating within the unitary system. It appears as though a request for evaluation moves from a single teacher, parent, or other professional to LD Five who investigates the request and makes the decision to test or not to test. This hypothesis must be viewed with caution, however, since records do not exist of students evaluated for eligibility purposes during the period of this study.
Brief Interview Regarding Department Definition

In relation to the consensus definition developed within the LD department, LD Five shared an original concern that the definition was becoming too broad. LD Five reported preferring that the definition had specific point score cutoff criteria beyond which a student could not be declared eligible for services. LD Five felt strongly that the criterion for educational discrepancy should be wider as IQ scores decrease. LD Five stated that by the time students have left the elementary levels, they have often "learned to their ability level...plateaued" (Interview, May 17, 1989, paragraph 5).

Checklist of Procedures and Instruments

For an initial evaluation, LD Five reported use of a standard test battery. The self-reported checklist indicates preferences for the (a) Slosson Intelligence Test (SIT) and Woodcock-Johnson, Part I in the cognitive areas and the Diagnostic Achievement Test for Adolescents, the K-TEA, and the Woodcock-Johnson, Part II in the achievement areas.

Record Review

As stated previously, the single student in this building evaluated for eligibility during the period of this study was evaluated through another agency. Records do not exist documenting the actual assessment practice of LD Five.

Achievement/Aptitude Discrepancy Questionnaire

In determining eligibility for services, LD Five expressed preference for the use of standard scores or grade scores when obtaining an estimate of the student's ability level. LD Five expressed prefer-
ence for using grade scores for evaluating academic skills. In obtaining
an estimate of the student's processing abilities, LD Five stated a
preference for standard scores or grade scores. LD Five used the
following reasoning, "Standard scores correlate w/ IQ scores and grade
scores can be compared to achievement scores" (Achievement/Aptitude
Discrepancy Questionnaire, LD Five, Items 1 and 5). LD Five considers
an IQ score of 90 as the lower limit acceptable for identification as
learning disabled. LD Five would like to see the criterion level for
discrepancies set at 11 to 15 standard score points or one to two years.
"By [this age] many other factors may have influenced their achievement,
which have nothing to do with processing deficits. A wider spread,
indicates better chance of real handicap" (Achievement/Aptitude Discrep-
ancy Questionnaire, LD Five, Item 4). LD Five does not use a formula to
determine the severity of the discrepancy between the student's estimated
ability level and academic skills.

Student Records

Evidence does not exist with which to corroborate LD Five's self
report regarding the actual practice in establishing student eligibility
for learning disability services.

Summary

There is not enough evidence in existence to attempt classification
of the diagnostic assessment model under which LD Five functions.

Characteristics of Students and Caseload

Student Records

Records were not available for students evaluated for eligibility
during the period of this case study. Since the parameters of the
sample from which data were to be obtained for this section of the study had been established as "records of students evaluated for eligibility within the boundaries of this case during the period of this case study", it was felt to be inappropriate to examine records of students evaluated at earlier stages of their education.

Other Records

Data are available regarding the size of the caseload for this building and this teacher for a ten year period. During that time the caseload size has ranged from a low of 15 to a high of 43. The average caseload size has been 28. The records indicate that there have been no new placements in this building since the 1982-83 academic year. During the 1989-90 academic year, 6% of the building population was being served within the learning disability program. This is above the national incidence level of 4.82% (Baker, 1989).

Case Six

The teacher's baccalaureate degree is in secondary education. This teacher had seven years of experience teaching secondary content area coursework before returning to school for graduate work in learning disabilities. This teacher also completed a Master's degree in special education within the last few years. The building served by this teacher has a total student population of 702.

Step One

Step I Survey and Brief Interview

LD Six described the pre-referral process in this building in the following manner:

Contact special ed people or counsellors or social worker.
or principal.

Meetings are set up with parents and all involved persons.  
(Step I, LD Six Survey, Item 1)

LD Six reported that the process is not in written form. A description of the problem is expected to be written, but that does not always occur. The student's parents would be involved through a contact by the principal, special education teacher or social worker "when any special action is taken" (Step I, LD Six Survey, Item 4).

**Step I Building Surveys**

Twenty-two of 42 surveys were returned from this building. In describing the steps to be taken when a student is having difficulty, five respondents (23%) reported that they would talk to the building administrator first. Nine (41%) reported contacting the counselor before doing anything else. Three (14%) said they would contact LD Six. Three (14%) reported contacting parents first. One respondent simply said, "No problems in music" (Step I, Building Six Survey, Item 1).

None of the respondents mentioned attempting alternate strategies or making attempts to personalize either the curriculum or the classroom environment.

In responding to the other questions on the survey, three respondents (14%) declared that there is a formal process covering situations where students need assistance. One of the three referred to policies covering course failures. Another referred to detention policies. Four of the twenty-two (18%) declared that a description of the problem needs to be submitted in writing. Eight respondents (36%) reported that parents should be involved first. One said that parents should be kept
informed throughout the process. One said that parents should be informed after a decision is made regarding the steps to be taken. Eight of the teachers felt that contacting parents should be the responsibility of someone else. Others who were mentioned as being responsible for contacting parents were LD Six (9%), the Counselor (27%), the social worker (4.5%), and the administration (4.5%).

Responses regarding the existence of a TAT (or Building Assistance Team-BAT) were inconsistent. Seven (32%) declared that there was one. Three (14%) said there had been one the previous year but that it didn't meet any more. Eight (36%) chose not to respond to the question. One person reported that the TAT meets regularly and named the day of the week and time of the meeting. Five simply reported that it does meet on a regular basis. One said, "Not this year, but we did last year" (Step I, LD Six Survey, Respondent #3, Item 6a). Six respondents listed the names or positions of regular members of the team.

Three recommendations were made for improvement of the process. These recommendations were: (a) develop a problem-solving team, (b) increase parent involvement, and (c) make more referrals for peer tutoring as this resource is not being fully utilized.

Student Records

The records indicate that only one student in this building was evaluated for eligibility during the period of this study. The record for this student indicates that a pre-referral meeting was held for this student. However, the record is suspect because of the fact that the date indicated for pre-referral is after the dates of both the formal
referral and the evaluation dates for this student. Evidence of a Step I process does not exist in the student records for this building.

Other Records

There is a written TAT (called Building Assistance Team, BAT, in this building) plan in existence at the elementary level within this district. The secondary level does not have a plan at this time.

Summary

As a result of a North Central Evaluation process completed shortly after this survey was taken, an effort was made in this building to reactivate the BAT meetings in the Fall of 1989. LD Six reports not having membership on this team. LD Six is aware that an effort is being made and the meetings are scheduled on a regular basis, however there seems to be very limited use of the team. LD Six described a report made to a May meeting of the teaching staff, stating, "They said there has been really a small amount [of meetings], I think 2 or 3 all year" (Interview #10, May 1990, Paragraph 34).

It appears that the pre-referral process in this building remains primarily a Unitary system even though there have been some efforts to establish a TAT system. The Step I survey revealed no responses indicating that teachers in this building attempt to personalize the curriculum or the instructional environment for students having difficulty. Three possible reasons could exist: (a) modifications to accommodate student need could be such an automatic response that it is not considered as a step toward getting help, (b) the open labelling of the survey as 'special education' may have created an expectation of eventual removal of the student from the class, or (c) teachers really
do not think of personalizing instruction to meet the needs of students. In reality, the truth probably lies in a combination of these reasons. In responding to a direct question, less than half of the respondents indicated that they would contact parents directly about the student's difficulties.

**Evaluation**

**Brief Interview Regarding Department Definition**

LD Six stated, "Well basically, this [the definition] is what I have been going by" (Brief Interview #10, May 1990, Paragraph 2). LD Six commented on the rare need to do an initial evaluation for eligibility purposes. LD Six primarily considers the ability versus achievement discrepancy the critical issue in establishing eligibility for learning disability services. LD Six reported, "we try to determine what area the processing deficit is in" (Interview #10, May 1990, Paragraph 2).

**Checklist of Procedures and Instruments**

For an initial evaluation, LD Six reported use of a standard test battery. The self-reported checklist indicates preferences for the (a) Slosson Intelligence Test (SIT) and WJPEB I in the cognitive areas, and (b) the K-TEA and WJPEB II in the academic achievement areas.

**Record Review**

The review of the records revealed a single evaluation for eligibility during the period of this study. Documentation indicated use of the WJPEB I and II, the K-TEA, and the SIT (Record LD Six:1). This student was declared ineligible for learning disability services. Due to the extremely small size of the sample and the fact that this student was found ineligible on the basis of screening level
instruments, the findings from this record review must be viewed with extreme caution.

**Achievement/Aptitude Discrepancy Questionnaire**

In determining eligibility for services, LD Six expressed a preference for the use of standard scores and grade level scores in obtaining an estimate of the student's ability level, academic achievement level, and processing abilities. LD Six expressed preference for using a grade level discrepancy of three to four years "or half of placement" (Item # 4) between the student's estimated ability and academic achievement level, but prefers to use a standard deviation measure when attempting to identify inter-test scatter. LD Six considers an IQ score of 80 as the lower limit acceptable for identification as learning disabled. LD Six does not use a formula to determine the severity of the discrepancy between the student's estimated ability level and academic skills.

**Student Records**

As previously stated, the review of the records revealed a single evaluation for eligibility during the period of this study (Record LD Six:1). This student was declared ineligible for learning disability services. The criterion under which ineligibility was established was not documented in the record, therefore, the self-reports of LD Six cannot be corroborated through a record review.

**Summary**

There is not enough evidence in existence to classify the diagnostic assessment model under which LD Six functions.
Characteristics of Students and Caseload

Student Records

No records were available of students evaluated for eligibility during the period of this case study. Since the parameters of the sample from which data were to be obtained for this section of the study had been established as "records of students evaluated for eligibility within the boundaries of this case during the period of this case study", it was felt to be inappropriate to examine records of students evaluated at earlier stages of their education by other LD specialists.

Other Records

Data were available regarding the size of the caseload for this building and this teacher for a ten year period. During that time the caseload size has ranged from 13 to 25. The average caseload size has been 18. During that same period of time the percentage of students placed into learning disability services has ranged from 0% (1987-88 academic year) to 100% (1982-83, 1983-84, 1988-89). During the 1989-90 academic year, 3% of the building population was being served within the learning disability program. This is below the national incidence level of 4.82% (Baker, 1989).

Case Seven

Mid-way through this study, the LD position was vacated and a replacement hired. This created a constricting influence on the data collection process. The decision to include this case in the study was made as a result of the belief that the evaluation process is only partially a function of the guiding precepts of the LD specialist in the building. The philosophies and unofficial agendas of the administration
and teaching staff of the building itself also present a shaping force. The first LD teacher had been serving these buildings for four years. Major change in the basic processes would not be likely within the span of a few months. Each teacher took part in those portions of the data collection where participation was possible. The data was reported as a single case with differences in the responses of the two teachers noted where they occur.

The first teacher (LD Seven:1) had seven years of experience in teaching mildly to moderately retarded children prior to entering a state supported tutor-in-training program designed to facilitate the entrance of experienced teachers into the learning disability field. This teacher holds a master's degree in special education with a major in learning disabilities. LD Seven:1 was hired in 1981 as an itinerant LD teacher in the rural schools within Buffalo Valley Special Education Unit and was later hired into a single district. LD Seven:1 served two buildings until the 1989-90 academic year. One of the buildings is a public elementary school with a population of 213 while the other is a parochial school with one teacher and eighteen students in grades one through eight. LD Seven:2 was subsequently hired for this position.

LD Seven:2 had three years of prior experience in a classroom of multiply handicapped youngsters. These children were physically handicapped with mental retardation or severe learning disabilities. LD Seven:2 has a master's degree in special education with a major in learning disabilities.
Step I

LD Seven Survey and Brief Interview

With only one teacher in the entire school, the smaller of the two schools does not have a Step I problem-solving team. When a student has difficulty in this building, LD Seven becomes a resource for the teacher in a consultation role. The teacher attempts to adjust instruction to the student's needs and eventually a referral is made if the problem is not resolved.

LD Seven:1 described the pre-referral process in the larger building in the following manner:

Discuss it [the student's problem] w/ parent - probably already asked previous teacher if avail.
Discuss it w/ LD & ask for an observation & suggestions.
If what I've done hasn't helped, ask for TAT
Ask for further help - testing - if no solution has been found. (Step I, LD Seven survey, Item 1)

Written descriptions of the problem, modifications made by the classroom teacher, and any other helpful information such as health factors are to be submitted prior to the TAT (Teacher Assistance Team) meeting. According to LD Seven:1, the classroom teacher typically has spoken to the child's parents several times about the problems prior to requesting a TAT. Parents are often invited to the second TAT meeting. Consistent members of the team are the building principal, LD teacher, and the child's teacher. Other TAT members vary depending upon the specifics of the student's problems. The child's previous teacher, the speech
clinician, and the elementary social worker are other frequent members (Step I, Building Seven survey, Items 2 through 6).

LD Seven:2 reported initiating some change in the process described above. A classroom teacher (usually the child's previous teacher) has been added to the core TAT team. Records are kept in LD Seven's files (Interview #6, paragraphs 42, 44). At the end of the year they are placed in the student's cumulative folder (Principal interview). TAT meetings are held on a regular weekly schedule. The classroom teacher approaches LD Seven:2 for a place on the TAT schedule. In previous years, the expectation had been that LD Seven would make all the arrangements for the meeting, but that is changing. The classroom teachers are becoming responsible for (a) clearing the scheduled time with the Principal, (b) inviting the second teacher, and (c) preparing the TAT referral forms (Interview #6, paragraph 54).

Step I Building surveys

Ten of ten surveys were returned from this building. In describing the steps to be taken when a student is having difficulty, six (60%) mentioned the need to use alternate strategies for teaching (personalize the learning environment) prior to consideration of referral for special education evaluation. Three of the ten (30%) listed contacting the parent as the first thing to be done. All ten respondents listed contacting parents as one of the steps in dealing with a student's learning difficulties. Only one of the teachers (10%) said the first step in getting assistance is to consult the learning disability teacher. Five (50%) of the ten listed consultation with the LD teacher as one of the first three things to be done. Three teachers (30%)
listed testing as one of the steps to getting help for a failing student. Two respondents also referred to the need for an IEP (Individualized Education plan). Eight respondents (80%) specified the need for a TAT meeting.

A majority of the teachers (70%) agreed that the process for getting assistance is formal and requires written descriptions of the student's problem (70%) as well as the modifications that have been tried (80%). Three of the teachers (30%) felt that parents should be contacted about the problem before anything else is attempted. Three others expressed the need to keep parents informed throughout the process. Eight of the teachers (80%) felt that the responsibility to discuss the problem with parents was theirs. One respondent indicated that contacting parents should be done by LD Seven. One respondent indicated that it should be the principal's responsibility. Half of the responses stated that there is a TAT. Eight (80%) provided names or positions of regular members of the team.

Three suggestions were made for improvement of the process. The first of these was elimination of the Step I process for referral to speech therapy. Another idea was to have a beginning of the year review of the previous year's cases. The third suggestion was to maintain the TAT review process for a student until the problem was completely resolved. Six positive comments were made (Step I, Building Seven Survey, Item 8).

Student Records

Eight records of students evaluated in this building during the period of this study were examined for evidence of the Step I process.
Two of the eight contained evidence of one meeting prior to the referral meeting. The remaining six records documented a range of two to four Step I meetings. The referral team generally consisted of the parents, LD Seven, the child's classroom teacher, the building principal, and the speech clinician. Other persons listed were the teacher of the emotionally handicapped, the school psychologist, the special education programs coordinator, the occupational therapist, and (in one instance) a student teacher.

Other Records

Case Seven is an elementary school within the same district as Case One. The written TAT (Teacher Assistance Team) plan described in Case One is formal procedure for this building as well. The description will not be repeated here.

Summary

The Step I process in this building appears to be in a period of active transition between the child study team concept and the development of a true building level problem solving team. While the request for assistance continues to go directly to the special education diagnostician (LD Seven), the movement is toward greater responsibility for the process within the general education system. TAT meetings are part of the regular school calendar. The classroom teachers are becoming responsible for scheduling a TAT, inviting other personnel that may be appropriate, and preparing a pre-referral report that helps to organize the meeting. Comments of the general education teachers indicate their acceptance of the process as a worthwhile expenditure of
time and effort. Records are kept and a formal system has been established for their disposition.

Evaluation

Brief Interview Regarding Department Definition

LD Seven:2 initially expressed concern with the differences between the federal definition and the operational definition drafted by the LD department. The concern centered on the omission of the exclusionary conditions. The primary concern seems to be the result of ambiguous feelings that (a) elimination of the exclusionary conditions may allow placement of students inappropriately, but (b) strict enforcement of the exclusionary conditions (environmental deprivation in particular) may result in the denial of services to children who need them even though they may not technically qualify as learning disabled (Interview #6, paragraphs 14 through 29). LD Seven expressed general comfort with the definition as written but would like a graduated discrepancy to allow for the dis-proportionate effects of a single criterion on various age levels of students (Interview #6, paragraph 32).

Checklist of Procedures and Instruments

For an initial evaluation, LD Seven typically uses a combination of procedures and instruments. The self reported checklist indicates preferences for the (a) Detroit Test of Learning Aptitude--2nd edition (DTLA-2), Slosson Intelligence Test (SIT), Woodcock-Johnson Psychoeducational Battery, Part I (WJPEB I), and the Test of Nonverbal Intelligence (TONI) in the cognitive areas; (b) the Gallistell-Ellis Test of Coding Skills, the Kaufman-Test of Educational Achievement (K-TEA) (both brief
and comprehensive forms), the KeyMath, the Test of Written Spelling (TWS), the WJPEB II, the Woodcock Reading Mastery Test (WRMT), and criterion referenced measurement in the academic achievement areas; (c) classroom observation and an informal checklist for other problem areas; (d) the Developmental Test of Visual-Motor Integration (DTVMI), Goldman Fristoe Woodcock Test of Auditory Discrimination (GFW Auditory Discrimination), the Illinois Test of Psycholinguistic Abilities (ITPA), the Motor Free Visual Perception Test (MFVPT), and the Wepman Auditory Discrimination Test for sensory perception; (d) the Test of Written Language (TOWL) in the language area; and (e) the Vineland Social Maturity Scale in other areas of assessment.

Record Review

The review of the records documents the use of a wide range of instruments and procedures. The basic battery of formal tests used by LD Seven:2 for initial assessments for eligibility consists of (a) WJPEB I and II, (b) the appropriate level of the DTLA, (c) the Frostig DTVP, and (d) the DTVMI. LD Seven:2 also gathers informal samples of classroom performance, observes the student in the classroom, and chooses other procedures and evaluators based on initial findings. The four records of students evaluated and placed in special education services document use of the GFW Auditory Discrimination test, language assessment by a speech clinician, gross and perceptual-fine motor assessment by the occupational therapist, psychological testing by the school psychologist, and consultation from the elementary teacher of the emotionally handicapped. As a point of interest, the records of four
students evaluated by LD Seven:1 the previous year indicate a preference for the same core battery.

Achievement/Aptitude Discrepancy Questionnaire

In determining eligibility for services, LD Seven expressed a preference for a combination of standard scores, percentile ranks, grade and age scores in obtaining an estimate of the student's ability level. LD Seven stated that these are used "to see if the scores are in the av. range, to plot the scores graphically, Use both age & SD" (Achievement/Aptitude Discrepancy survey, LD Seven:1). In the area of academic skills, LD Seven:1 prefers to use standard scores, percentile ranks, or grade scores. LD Seven:1 believes that grade scores are more meaningful for parents, standard scores allow measurement of deviation, and percentile ranks are useful for "plotting" (Achievement/Aptitude Discrepancy questionnaire, LD Seven:1, Item 5B). In the processing areas, LD Seven:1 prefers standard scores or age scores. LD Seven:1 believes the minimal IQ score for eligibility as learning disabled should be 80 and that the minimal discrepancy between the student's estimated ability level and academic skills should be established at two years or 1.5 standard deviations from the mean. LD Seven:1 does not use a statistical formula for determining the severity of discrepancy between the student's estimated ability level and academic skills.

Student Records

The review of the records provides only speculative data relevant to actual practice as it relates to the issue of criteria. Four records were available for review from students evaluated by LD Seven:1. These records provide documentation of the type of learning disability but
provide no data relative to measures of discrepancy utilized for decision making. Four records were also available for review documenting the practice of LD Seven:2. These records indicate placement on (a) a "moderate discrepancy with weaknesses in visual memory of words in isolation" (Record LD Seven:2, #5); (b) delayed perceptual motor skills, low ability, and severe social-emotional problems (Record LD Seven:2, #6); and (c) 1 to 2 year discrepancies in visual motor perception and verbal skills with a "severe discrepancy in reading" (Record LD Seven:2, #8). The fourth record indicates that the student is mildly mentally retarded and a placement was made into appropriate special education services (Record LD Seven:2, #7).

Summary

LD Seven:2 appears to function primarily under the behavioral model for assessment. However, there are indications that this teacher is still working through a series of issues relative to settling into a basic belief system. Evidence exists in the brief interview regarding collection of information that focuses on the description of the learning event in context with its environment (Interview #6, paragraphs 12, 14, 16, 20, 22, 26). This is an indicator of a behavioral focus. Evidence also exists in the records regarding the current use of formal tests for the primary purpose of establishing a processing deficit. This is a primary indicator of a psychoeducational focus.

Characteristics of Students and Caseload

Student Records

Eight records were available for examination; four were obtained from the records of each teacher. Of these eight records, four of the
students can probably be grouped within Group II as identified by Rourke (1978, 1981). These students are described as having visual-motor perceptual difficulties that are manifest in difficulties in perceiving numbers, letters, and words as visual patterns (Identification and Dismissal record, LD Seven:1,2,5,6). Three of the students appear to demonstrate profiles similar to Rourke's Group III. These students have primary deficits in the areas of sequential processing and memory—processes requiring both visual-spatial and auditory modalities (Record, LD Seven:5,8). The eighth student was identified as mentally retarded with deficits in all areas of functioning (Record, LD Seven:7). These conclusions should be considered tentative hypotheses due to the limited amount of information available in the documentation.

Other Records

Data were available regarding the size of the caseload for this building for a period of nine years, however, there have been four changes of teachers during that period of time. For the purposes of this study, data was limited to the period of time covered by the practice of LD Seven:1 and LD Seven:2 (five years). During this period of time the caseload size has ranged from 18 (1989-90 academic year) to 30 (1985-86 and 1986-87). The average caseload size during this period has been 23.8. During the 1989-90 academic year, approximately 11% of the building population was served through the learning disability program. This is considerably higher than the 4.82% reported by the U. S. Department of Education as the national incidence level for 1988 (Baker, 1989).
The teacher has a baccalaureate degree in elementary education with a minor in learning disabilities. This teacher had two years of experience in an elementary classroom before entering the learning disability field. LD Eight was hired in 1981 and is serving students from K-12 in three rural schools in this Unit. Two of the schools have recently become a reorganized district. Both towns have retained their school plant by placing the elementary program within one building and the secondary program within the other. The three schools have a combined population of 217 students. The distance between attendance centers is approximately 54 miles.

Step I

LD Eight Survey and Brief Interview

LD Eight described the pre-referral process in these buildings in the following manner:

referral comes from Chp I teachers, classroom teachers or parents for an educational evaluation. Meeting is held with Teacher - Chp I & LD to discuss problems & alternate methods & strategies to use. Other strategies are tried. If no success (usually a few weeks) is seen, then testing will begin. Parent becomes involved at this point if they are not referral source, to give permission to evaluate.

(Step I, LD Eight Survey, Item 1)

The process described is not a formal process in these buildings. LD Eight reported that documentation does not become part of the process until a formal referral is made. LD Eight described keeping informal
notes; one copy is given to the classroom teacher and one to the parent. A third copy is placed in the student's file. According to LD Eight, parents are typically not involved until permission is needed to perform an evaluation.

Step I Building Surveys

Ten of fourteen surveys were returned in the larger, consolidated district. In this district, teachers are relatively consistent in their description of the process. Six of the ten (60%) state the first step to be taken when a student is having difficulty is to consult with another teacher. For three of the six, the second step is also to consult another teacher—the basic skills teacher. Eight of the ten (80%) contact LD Eight in one of the first three steps. Six respondents (60%) report that they would contact the student's parents. Five (50%) report contact with the building administrator. Seven respondents (70%) specify the need for testing. One refers to development of an IEP. None of the teachers reported attempting an alternate strategy in the classroom as part of the process. Seven of the ten teachers (70%) agreed that the process for obtaining assistance is not formal. Written documentation is not required. Two of the teachers (20%) felt that parents should be involved before anything else is attempted. Five (50%) reported that parent contact should not be made until after an initial decision is made. Eight (80%) of the teachers felt the responsibility for contacting parents was theirs. Two (20%) reported that the LD teacher should be responsible for making the contact.

Three positive comments were made by the teachers of the larger, consolidated district. Comments for improvement related to (a) develop-
ing a formal written process and providing inservice to classroom teachers, (b) providing better information regarding the resources available to the district, and (c) the concept of making referrals at earlier ages, e.g., Kindergarten and first grade. One teacher commented, "Unfortunately, often many adjustments have to be made in the classroom when the student is enrolled in LD which may make a teacher reluctant to refer a st. Also we hear so much about the dangers of giving a child a 'label' which may deter referral" (Step I, LD Eight Survey, Respondent B6, Item 1).

Seven of eleven surveys were returned from the smaller district. Of these seven, four (57%) reported making the first contact for assistance to the building administrator. Four reported contacting the LD teacher, and three reported consulting with another teacher. Three respondents (43%) stated they would contact parents regarding the problem. One of the seven (14%) teachers mentioned attempting classroom modification as one of the steps to obtaining assistance for the student. Six of the seven respondents (86%) agreed that the process described was not a formal process. Written documentation of the problem and alternate learning strategies attempted is not required. The responses regarding contact of parents were evenly split. Three teachers (43%) felt parents should be contacted before any other steps are taken. Three thought that preliminary decisions should be made before contacting parents and suggested the contact be made during a formal meeting. No suggestions were made for improving the process in this district.
Student Records

Eight records of students evaluated in these buildings during the period of this study were examined for evidence of the Step I process. Evidence did not exist supporting the existence of a pre-referral system within these districts. The first report in each of the records was the service request documenting a formal referral for assessment to special education services.

Other Records

No records were found supporting the existence of a Step I process in either of these districts.

Summary

The Step I process in these buildings appears to remain a unitary system. The request for assistance comes from individual teachers or parents directly to LD Eight. LD Eight coordinates the necessary steps and organizes a referral meeting for the purpose of obtaining parent signature for formal testing.

Since the time of this survey, LD Eight reported that the larger of the districts has received a recommendation through the school evaluation process to develop a system similar to TAT. Personnel from this district have attended inservice provided by the North Dakota Department of Public Instruction and is in the process of developing a building level support system for teachers and students. This information has been corroborated through brief discussions with an administrator from the district.
Brief Interview Regarding Department Definition

LD Eight expressed satisfaction with the definition as developed by the learning disability department. LD Eight stated that "it provides some guidelines without being overly restrictive" (Interview, April 23, 1990, paragraph 3). LD Eight reported that the definition focuses on the differences between the student's ability and achievement. "That's the important thing, after all...but it also says we need to be looking for processing problems. I like that" (Interview, April 23, 1990, paragraph 7).

Checklist of Procedures and Instruments

For an initial evaluation, LD Eight reports using a variety of instruments. The self reported checklist indicates preferences for the (a) DTLA-2, the Slosson Intelligence Test, and the Woodcock-Johnson, Part I in the cognitive areas; (b) the K-TEA Comprehensive and Brief forms, the Test of Computational Processes, and the Woodcock-Johnson, Part II in the academic achievement areas; and (c) the DTVMI in the sensory perception areas.

Record Review

Seven records were available for review regarding students evaluated for eligibility by LD Eight. The review of the records provided evidence of consistent use of the Woodcock-Johnson, Parts I and II and the DTLA-2 (Record LD Eight:1, 2, 3, 4, 5, 6, 7). Other instruments used included the K-TEA Comprehensive (Record LD Eight:1, 7), and the DTVMI (Record LD Eight:1, 4, 7).
Achievement/Aptitude Discrepancy Questionnaire

In determining eligibility for services LD Eight expressed a preference for the use of age scores, grade scores, and "sometimes uses standard scores to compare [with] other standard scores" (Achievement/Aptitude Discrepancy Questionnaire, LD Eight, Item 1) for obtaining an estimate of the student's ability level. In the areas of academic skills, LD Eight reports preference for percentile ranks and grade scores saying, "grade to compare with grade placement, percentiles to see the range of skills - discrepancies show up here" (Achievement/Aptitude Discrepancy Questionnaire, LD Eight, Item 3). In obtaining an estimate of the student's various processing abilities, LD Eight prefers standard scores and age scores saying, "age and standard scores to compare with child's age. More than 1 SD below or 2 yrs below age indicates problems to me" (Achievement/Aptitude Discrepancy Questionnaire, LD Eight, Item 5). LD Eight believes there should be no minimal IQ score criterion for eligibility for learning disability services. In reporting the minimal discrepancy for eligibility, LD Eight checked the categories of 16-20 points, 1.5 SD, 2-3 years, and 2 SD, saying, "when deficits appear on test results usually its more than 1 SD below" (Achievement/Aptitude Discrepancy Questionnaire, LD Eight, Item 1). LD Eight reports not using a formula to determine the severity of the discrepancy between the student's estimated ability level and his/her academic skills.

Student Records

The review of the records of students assessed during the period of this study indicates that placement for two of the seven students was
made on the basis of inter-test discrepancies—a severe deficit according to results of the Woodcock-Johnson, Parts I and II and a "significant difference" on the DTLA-2 (Record LD Eight:4, 5). The remaining five records document the evaluation of students who were not determined to be eligible for learning disability services. Documentation of the basis for the decision was not available.

**Summary**

LD Eight appears to function primarily under the psychoeducational model for purposes of assessment. LD Eight reports preference for assessment instruments which can be used to provide processing information. The records corroborate LD Eight's self report regarding the use of these instruments. However, this hypothesis must be viewed with caution because of the small sample of records from which to draw supporting evidence.

**Characteristics of Students and Caseload**

**Student Records**

Seven records were available for examination. Five of the students were declared ineligible for learning disability services.

Only two of the records provide information relative to the characteristics of the students. Record LD Eight:4 was placed on the basis of a learning disability in "reading and math [as a result of deficits in] long term memory" (Composite Assessment Summary, January, 1990). Record LD Eight:5 indicates a consistent functioning between the student's estimated ability and academic achievement, however, the student was placed on the basis of "weaknesses in long term memory, oral expression,"

Other Records

Data are available regarding the size of the caseload for these buildings and this teacher for a period of nine years. During that time the caseload size of this position has ranged from low of 14 to a high of 29. The average caseload size has been approximately 21. During that period of time, the percentage of students placed into learning disability services has ranged from 0% (1987-88) to 60% (1985-86). During the 1989-90 academic year, 8.75% of the student populations of these districts were being served within the learning disability program. This is approximately twice the national incidence level of 4.82% (Baker, 1989).

Case Nine

The teacher has a baccalaureate degree in elementary education with a minor in learning disabilities. This teacher began teaching LD students in this Unit in 1981 with no prior experience. This teacher provides service to two rural schools with a combined population of 159 students. One of the schools has a K-12 organization while the other school has students in grades one through six. The smaller of the two schools does not have a superintendent, depending instead upon the County Superintendent of schools for administrative needs. The distance between attendance centers spans approximately thirty miles. This teacher works part time.
LD Nine Survey and Brief Interview

LD Nine described the pre-referral process in the two buildings in the following manner:

- Describe behav. and/or academic difficulties to LD teacher
- Discuss possible alternatives to alter behav, etc.
- Rehash progress - if any and decide if need to test (Step I, LD Nine Survey, Item 1)

The process has not been written in a formal manner in either building. According to LD Nine, "It's always suggested that parents be called - I don't think that's always happening" (Step I, LDIX survey, item 4).

When meetings are called in the larger of the two schools, participants are the superintendent, the principal, the classroom teacher, and LD Nine. LD Nine stated the belief that the teachers in this building consult among themselves before asking for assistance (Interview #1, March 1990, paragraph 2). In the smaller school, the teachers approach LD Nine directly asking for special education assessment.

Step I Building Surveys

Three of ten surveys were returned from the larger building. No surveys were returned from the smaller building. In listing the steps to obtaining assistance for a failing student, none of the respondents mentioned the need to attempt alternate strategies for teaching prior to consideration of referral for special education evaluation. One of the respondents mentioned the need to contact parents. One of the teachers listed testing as one of the steps in getting help for a student. Two of the respondents also referred to the need for an IEP.
One of the teachers stated that the pre-referral process is a formal process in the building, but no documentation is needed. The second teacher said the process is not formal. The third teacher indicated that four items have to be submitted in writing: (a) a description of the problem, (b) a description of ways the usual teaching methods estrategies have been modified, (c) documentation of the specific number of interventions that have been tried, and (d) "visual observation, diary of events" (Step I, Building Nine survey, Respondent 3, Item 3e). All respondents indicated that parents are called after a decision is made in the school.

One suggestion was made for improvement of the process. This teacher requested a formal written process to be followed and inservice provided regarding the legal components of the process.

**Student Records**

Four records of students evaluated in this building during the period of this study were examined for evidence of the Step I process. One of the four contained evidence of one meeting prior to the referral meeting. The referral team present for one student consisted of the classroom teacher, one parent, and LD Nine. A second record documented four referral team members: (a) one parent, (b) classroom teacher, (c) speech clinician, and (d) LD Nine. The other two records did not contain documentation of the referral team members.

**Other Records**

No other records exist documenting the existence of a Step I (pre-referral) process in either of these buildings.
Summary

In the two buildings served by LD Nine, the process of personalizing instruction for students remains a function of special education personnel. When classroom teachers approach LD Nine for assistance, the expectation is that LD Nine will test the student and place the student in special education services. In terms of the Step I process, these buildings appear to be functioning within the developmental level of the unitary system.

Evaluation

Brief Interview Regarding Department Definition

LD Nine expressed satisfaction with the definition established by the LD department stating, "I like it. I think it is very good...." (Interview #1, March 1990, paragraph 23). LD Nine believes the definition correlates well with the Woodcock-Johnson. LD Nine also stated that the criterion for discrepancy should vary somewhat with the grade of the student. "I like the two grade level differences, but I also think at the early grades...it should be less in the lower grade" (Interview #1, March 1990, paragraph 25).

Checklist of procedures and instruments

For an initial evaluation, LD Nine reports using (a) WJPEB I for cognitive ability, (b) the K-TEA comprehensive, WJPEB II, and the Wide Range Achievement Test (WRAT) for academic achievement, and (c) the Vineland Social Maturity Scale for other problems.

Record Review

The review of the four records of students evaluated for eligibility during the period of this study revealed consistent use of formal
tests. LD Nine used the Woodcock-Johnson, Parts I and II and the WRAT for each evaluation. In one instance, the Vineland Social Maturity Scale was also used.

**Achievement/Aptitude Discrepancy Questionnaire**

In determining eligibility for services, LD Nine prefers to use standard scores, percentile ranks, or grade scores when obtaining an estimate of ability. When evaluating a student's academic skills, LD Nine prefers grade scores or criterion referenced measures. In evaluating processing abilities, LD Nine prefers percentile ranks. LD Nine believes that the minimal IQ score with which a student should qualify for learning disability services should be 80 and considers six months to a year as being the smallest discrepancy criterion allowed between ability and academic skills. LD Nine does not use a formula to calculate the severity of the discrepancy between the student's estimated ability level and academic skills.

**Student Records**

The review of the records of students assessed during the period of this study indicates that placement for three of the four students was made on the basis of academic discrepancies between grade level and actual functioning level. Record LD Nine:1 documented academic functioning in reading and math above grade placement, while written language scores indicated functioning in that area nearly three years below grade placement. (Individual Assessment Report dated September, 1989) The Individual Assessment Report found in record LD Nine:2 identified a one year discrepancy between the student's score in reading and his grade placement. Record LD Nine:3 identifies a moderate deficit
in written language based on a written language score one year below grade level. The fourth record (LD Nine:4) indicates below average functioning in all areas. This child has been referred for a psychological evaluation in September, 1990.

Summary

LD Nine appears to function under the educational orientation. Evidence exists in the records documenting placement in learning disability services on the basis of an educational discrepancy established through use of the Woodcock-Johnson Psychoeducational Battery, Parts I and II.

Characteristics of Students and Caseload

Student Records

Statements regarding the characteristics of learning disabled students in these two schools cannot be made from the information reported in the student files beyond the curriculum area affected. On the basis of this information, two of the students would be considered learning disabled in written language. The third would be considered learning disabled in reading (Identification and Dismissal record, LD Nine:1,2,3).

Other Records

Data were available regarding the size of the caseload for these two buildings and this teacher for a seven year period. During that time the caseload size of this half-time position has ranged from a low of 7 to a high of 12. The average caseload size has been approximately 10. During that same period of time, the percentage of students placed into learning disability services has ranged from a 25% (1988-89) to
100% (1983-84, 1985-86, 1987-88). Seven and one-half percent of the students from these attendance areas are being served as learning disabled students. This is somewhat higher than the 4.82% national incidence level (Baker, 1989).

Case Ten

The teacher has a baccalaureate degree in elementary education with a minor in learning disabilities. This teacher began teaching in this Unit in the Fall of 1988 with six years of prior experience in learning disabilities. The teacher is providing service to two rural schools (K-12) with a combined population of approximately 250 students. The distance between attendance centers is approximately 18 miles.

Step I

LD Ten Survey and Brief Interview

LD Ten described the pre-referral process in these buildings in the following manner:

They would talk to the Speech or LD teacher & say "I have this student who..." & ask for suggestions. If those don't work they would ask if we could move on to the next step. Some would know it was the referral process - others wouldn't. There are no Building Assistance Teams. They would know that they then needed to fill out a referral. (Some informally discuss problems with fellow teachers before any of above). (Step I, LD Ten Survey, Item 1)

LD Ten requires the teachers to provide a description of the problem, a description of ways the usual teaching methods/strategies have been modified for the student, and observation checklists. This is not a
building level process, however, but one imposed by this teacher to provide the documentation required by North Dakota regulation. LD Ten states, "Most referrals come during conferences. Parent has been notified by classroom teacher before I'm ever aware of prob. [problem.] Then they contact me to talk to parents. (They are usually sounding out the parent as to how they'd feel about eval)" (Step I, LD Ten Survey, Item 4).

**Step I Building Surveys**

The buildings are treated separately for reporting purposes with the results consolidated within the summary of each major section.

**Larger District**

Nine of 20 surveys were returned from the larger district. In listing the steps to be taken when a student is having difficulty, seven respondents (78%) listed consultation with the LD teacher as the first step. The two remaining respondents (22%) reported contact with the building administrator in the first step. Three of the nine (33%) reported the need to provide alternative strategies in the classroom in an attempt to resolve the learning problem. Six respondents (67%) listed parent contact as one of the steps to be taken. Six of the teachers (67%) spoke of referring the student to special education. Three (33%) mentioned testing and three (33%) spoke of writing an IEP.

The majority of the teachers (78%) stated that the process for getting assistance is a formal process in written form. The teachers are agreed that descriptions of the problem and modifications that have been attempted need to be submitted to the LD teacher in writing. Four of the teachers (44%) stated that it is their responsibility to contact
parents regarding the problem. Four of the teachers stated that contacting parents is the responsibility of LD Ten.

**Smaller District**

A similar profile appears in the smaller district. Four of seven respondents (57%) report contacting LD Ten in the first or second step of the process. Six of the seven report contacting either the building administrator (57%) or another teacher (28%) in the first step. Only one of the seven (14%) reported the need for providing alternative strategies in the classroom in an attempt to resolve the learning problem. Three (43%) respondents listed parent contact as one of the steps to be taken. Four (57%) mentioned testing and one (14%) spoke of the need for writing an IEP.

Four of the teachers (57%) stated that the process for getting assistance is a formal process that is in written form. Three (89%), however, state that it is not. Four report that descriptions of the problem and modifications that have been attempted need to be submitted to the LD teacher in writing. One of the teachers (14%) stated that the responsibility of contacting parents belongs to the classroom teacher. One (14%) of the teachers stated that contacting parents is the responsibility of LD Ten and four (57%) felt it is the duty of the principal.

Two suggestions were made for improvement of the process. One of the teachers suggested inservice to help them "brush up a bit more on the steps" (Step I, Building Ten survey, Respondent ME3, Item 8). LD Ten echoed that suggestion, adding that providing access to successful Step I teams would provide good information and encouragement to
buildings that were struggling to organize this type of system (Step I, LD Ten survey, Item 8).

Student Records

Four records of students evaluated by LD Ten during the period of this study were examined for evidence of the Step I process. One of the four contained evidence of one meeting prior to the referral meeting. Two of the records provided evidence of two Step I meetings. The fourth record did not indicate that a Step I meeting had been held, however, there are two separate meetings documented as referral meetings.

Other Records

Although a formal written document does not exist in either building regarding the Step I process, the larger of the two schools does use a "Special Education Pre-referral Form". This form was included with each of the surveys returned from that building. The form provides (a) identifying information, (b) the type of referral that is being made (the service requested), (c) specific information about each attempt to resolve problems, (d) description of parent contact(s) related to the referral, and (e) any additional information that is important to understanding the student and the referral.

Summary

At the time of the survey, the Step I process in both of these buildings was a special education function. The request for assistance was made directly to the LD instructor. The LD instructor then orchestrated the appropriate steps in the process. The role of LD Ten in these buildings was clearly that of consultant-casemanager.
Throughout the 1989-90 academic year, the personnel from the larger of the two districts attended in-service meetings regarding the TAT model and began to implement the process. LD Ten reported (with corroboration from the Elementary Principal) that a referral is now made to a TAT team (called a BAT or Building Assistance Team in this building) for problem solving. The sequence of events follows: (a) a member of the team does a classroom observation, (b) the team meets and makes recommendations, (c) the classroom teacher tries various alternatives as recommended, (d) the team meets for a second time (within a two week time line), and (e) the cycle begins again. This team does not meet on a regular basis, but is scheduled whenever there is a request from a teacher.

There are actually two teams in this school. This district is a K-12 organization with all grades housed within a single plant. The BAT system has allowed for the different needs of the elementary and secondary people by establishing separate teams. The membership of each team consists of three teachers plus the principal. LD Ten is not included as a team member at either level. The BAT system in this district is organized as a separate process from special education personnel. In this building, it is now the BAT team, and not an individual teacher, which makes a referral to special education for services. LD Ten and the elementary principal both indicate satisfaction with the new system. LD Ten reported, "I think it's hitting a lot more kids, the teachers...are referring them more to this team, and they are stressing this doesn't mean just a quick step to get them through before they go on to testing from me. So there has [sic] been a
few where they haven't been referred on to me now, and it's been working" (Interview #1, February 1990, paragraph 25).

The Step I process in the smaller district seems to be generally operating within the Child Study Team model. In this model, the classroom teacher makes an informal referral directly to the special education teacher. The special education teacher organizes a discussion meeting with members of an assessment team. The second meeting of the team is generally held with the parents of the child. The focus of the meeting is to organize a formal referral for testing. This concept of the process as it functions within the smaller district was corroborated by LD Ten.

Evaluation

Brief Interview Regarding Department Definition

LD Ten expressed general satisfaction with the operational definition developed by the LD Department stating, "I was glad that they added that low average because I see some kids as having a big discrepancy and they are not quite at that average level" (Interview #1, February 1990, paragraph 2). The definition allows for the practice of emphasizing the identification of processing deficits in the younger children while allowing for academic emphasis for the older students.

Checklist of Procedures and Instruments

For an initial evaluation, LD Ten typically uses a variety of assessment procedures. The self reported checklist indicates preferences for: (a) the DTLA-2 and the WJPEB I in the cognitive areas; (b) the K-TEA, the Silvaroli Reading Inventory, and the WJPEB II in the achievement areas; (c) the DTVMI, the ITPA, and the Test of Auditory Perception
(TAP) in the sensory perception areas; (d) the Boehm Test of Basic Concepts, the PPVT, and the Test of Language Development (TOLD) in the language areas, and (e) a back ground information questionnaire, and appropriate acuity screenings (pure tone audiometric and the Keystone Telebinocular Screening Test for Visual Acuity).

Record Review

The review of the records shows consistent use of parts I and II of the Woodcock-Johnson (WJPEB I and II), the DTLA-2, classroom observation, and other informal observations. Other procedures are included by other team members when appropriate (e.g., speech and language, psychological, occupational therapy).

Achievement/Aptitude Discrepancy Questionnaire

In determining eligibility for services, LD Ten prefers to use standard scores and age scores in obtaining an estimate of the student's ability level. The age scores are used primarily for young children as a measure against developmental levels. Standard scores are used for the standardization and ease of comparison. In obtaining academic achievement levels, LD Ten chooses to use standard scores for the ease of direct comparison across skills but uses grade level scores to explain the results of assessment to parents. In obtaining estimates of processing abilities, LD Ten uses percentile ranks to "give me an idea of where he's at in a more graphic form" (Achievement/Aptitude Discrepancy Questionnaire, LD Ten, Item 5b).

LD Ten believes that the minimal IQ score for inclusion within a learning disability program should be 70. The minimal discrepancy between the student's estimated ability level and his/her academic
skills should be 1.5 standard deviations or 2 to 3 years. LD Ten does not use a standard formula for calculating the severity of the discrepancy between the student's estimated ability level and academic skills.

**Student Records**

The review of the records provides little information regarding the actual discrepancy levels used by LD Ten to establish eligibility. Comments exist in each record stating this student has (or does not have) "a severe discrepancy in...." (Record, LD Ten:1, 2, 3, 4).

**Summary**

LD Ten appears to operate under a psychoeducational model for the younger students and a behavioral model for the older students. Evidence exists in the records of attention paid to the assessment of the psychological processes for the younger students (Record LD Ten: 1 through 4). LD Ten's statements in the brief interview (March 1990, paragraph 6, 7, and 11) support the hypothesis of a behavioral orientation for the older students. In the behavioral model, the emphasis is on observable behavior and structuring for academic success.

**Characteristics of Students and Caseload**

**Student Records**

Four student records were available for examination during this period. These records were all of young (kindergarten through second grade) students being evaluated for the first time. These records support the hypothesis of assessment within the psychoeducational model. Record LD Ten:1 is described as having deficits in auditory processing, sequential processing, and receptive language. Record LD Ten:2 describes the child as having significant discrepancies in the cognitive,
attentional and motoric domains. Record LD Ten:3 describes the child's functioning in terms of auditory skills that are significantly weaker than visual skills, deficits in auditory memory and grammatic closure. Record LD Ten:4 describes the child as having significant discrepancies in linguistic, cognitive, attention, and motoric domains—as well as a delay in auditory skills.

Other Records

Data were available regarding the size of the caseload for this building and this teacher for a three year period. During that time the caseload size has ranged from a low of 17 to a high of 24. The average caseload size has been 20. During that same period of time, the percentage of students evaluated for the first time that have been placed into learning disability services has ranged from 50% (1988-89 academic year) to 60% (1987-88). During the 1988-89 academic year, 10.7% of the population of these two buildings were being served within the learning disability programs. This is more than twice the national incidence level of 4.82% (Baker, 1989).
CHAPTER V CROSS CASE ANALYSIS

This study was designed to analyze and describe differences in procedures for the identification of students with learning disabilities within Buffalo Valley Special Education Unit. This was to be accomplished through the use of a multiple case study approach. The initial analysis of the data was presented in Chapter IV in the form of ten individual case studies. The final analysis of the data is presented in this chapter through a cross case comparison designed to answer the original research questions:

1. What are the differences between and within cases in the implementation of the Step I (pre-referral) process?

2. What are the differences between and within cases in the identification process?

3. What are the differences between and within cases in eligibility criteria?

4. What are the differences between and within cases in student characteristics and caseload size?

These questions will be answered in sequence under the abbreviated headings: (a) Step I, (b) Identification Process, (c) Placement Criteria, and (d) Student Characteristics and Caseload Size.
The data relating to the Step I process was obtained through (a) a survey of all professional stakeholders in each building (parent sampling was not included), (b) brief interviews with the LD teacher and a building administrator, and (c) a review of the records of students evaluated for the first time during the period of this study. The data relating to the Step I process was presented in detail through the individual case studies in Chapter Four. The analysis presented here is specific to the question: What are the differences between and within cases in the implementation of the Step I process? The answer to this question can best be obtained through analysis of the data in relation to four general types of organizational structures: (a) Type I: The original procedure, called the Unitary Model by this writer, (b) Type II: The Child Study Team Model, (c) Type III: The Teacher Assistance Team Model, and (d) Type IV: The Building Level Problem-Solving Model.

**Type I: The Unitary Model**

Case Five, Case Six, Case Eight (the reorganized district), Case Eight (the smaller district), and Case Nine (the larger district) appear to be functioning as Type I schools. In Case Five, 62% of the teachers go to the LD teacher as a first step toward obtaining assistance. Only four teachers report attempting alternate strategies in the classroom and seven contact parents regarding the child's problem. Of the four who attempt alternate strategies in the classroom, two of them discuss the situation with either the LD teacher or the counselor first. Interestingly, of the three teachers who speak to referral, two say this would be the second step in the process; one would try an alternate
strategy in the classroom as the first step and the second would call the parents first.

The building profile is similar for Case Six. In Case Six, all responding teachers report discussing the situation with the LD teacher, the Counselor or Social Worker, or the building administrator. Six teachers also report calling parents. None of the twenty-two teachers reported that they would attempt alternate learning strategies in the classroom or make a referral to special education for assessment. It appears clear that any modifications or referrals for testing must be initiated by the LD teacher.

Case Eight (the reorganized district) presents an identical profile. Six out of seven teachers speak to the building administrator, the LD teacher, and other teachers in the first steps. Three of the seven contact the parents. One reported attempting alternate learning strategies after consulting the LD teacher and the Basic Skills teacher. The same teacher also reported requesting an evaluation.

Case Eight (the smaller district) presents a slight variation on the profile. Teachers in this building are relatively consistent in the sequencing of the steps taken. Typically, another teacher is consulted first, then the LD teacher, and finally, either the building administrator or the parents. Alternate strategies are not part of the sequence of activities for any of the teachers. Seven of the ten teachers responding to this survey mentioned a need for testing.

Case Nine suggests a similar profile to Case Eight, however, only three teachers responded from a total population of sixteen. Therefore,
conclusions can only be used to reflect the practice of these teachers. It cannot be generalized to the school as a whole.

In summary, Type I consists of buildings without an established process for a pre-referral system. The LD teacher provides a gatekeeping function in a manner that insures compliance with special education rules and regulations. This type is considered Unitary because of the nature of the referral and the ensuing assessment.

The structural elements common to a Unitary approach are: (a) low or absent administrative involvement, (b) inconsistent knowledge among general education staff relative to the steps involved, (c) absence of team meetings prior to formal referral, and (d) absence of attempts to solve the problem through alternate strategies for instruction.

The role of the parent in the Unitary approach is primarily reactive. The parent may or may not be aware of seriousness of the perceived problem prior to being asked to attend a formal meeting at the school. The role of the parent at this meeting is typically to approve or disapprove decisions made within the school.

Type II: The Child Study Team Model

Case One, Case Four (the mid-sized building) and Case Ten:One appear to be functioning as Type II schools, under the Child Study Team model. In Case One 85% of the general classroom teachers contact the LD teacher as a first step toward obtaining assistance for the student. LD One appears to organize the remainder of the process, including: (a) organizing necessary meetings, (b) re-evaluating the success of alternate strategies attempted in the classroom and recommending further modifications, (c) arranging for classroom observations, (d) managing
the record-keeping process, etc. Even though a formal plan exists in this building for a TAT (Teacher Assistance Team) process, the data suggests that this building continues to operate in a way more closely aligned with the older Child Study Team model.

In Case Four (the mid-sized building), the LD teacher has established a building level process that is clearly understood by teachers. The teachers contact LD One and the parents of the child. LD One provides consultation services through a Step One process. If classroom modifications fail to correct the problem, permission to evaluate is obtained and a multi-disciplinary assessment is completed. This process is clearly a special education process addressing special education regulations.

In Case Ten (the smaller district), a similar process is found. The initial contact in this building is made to the building administrator. The LD teacher is typically contacted second. LD Ten provides consultation services through a Step One process. As in the case described above, if the student's problems cannot be corrected through classroom modifications, permission to evaluate is obtained and a multi-disciplinary evaluation is completed. LD Ten remains in the role of consultant to the teacher until moving to the case manager role for a formal referral and assessment. Again, the procedures are organized for compliance with special education regulations.

In summary, Type II buildings have a system in place that uses the Child Study Team model. The role of the LD teacher is primarily consultative as the representative of the rules and regulations of a system parallel to (but separate from) the general education system.
The LD teacher provides a gate-keeping function in a manner that insures compliance with special education rules and regulations. In the Child Study Team model, the LD teacher acts as consultant to the classroom teacher until a formal referral is made. At that time the LD teacher assumes case-management of the multi-disciplinary team assessment.

The structural elements common to a Child Study Team approach are:
(a) general understanding of the referral process, (b) inconsistent levels of administrative involvement, (c) absence of team meetings prior to formal referral, and (d) absence of attempts to solve the problem through alternate strategies for instruction.

The role of the parent in the Child Study Team approach remains primarily reactive. The parent may or may not be aware of seriousness of the perceived problem prior to being asked to attend a formal meeting at the school. The role of the parent at this meeting typically remains one of approval or disapproval of decisions made within the school.

**Type III: The Teacher Assistance Team Model**

Type III buildings have a functional TAT process in place. There are two variations on this model.

**Type IIIa**

Case Three (the larger building) and Case Seven appear to be operating within the structure of the TAT process. In Case Three (the larger building), the first contacts are generally made with the building administrator and the LD teacher. The majority of the respondents referred to the need for a TAT meeting as their second or third contact. In this building, LD Three is responsible for organizing the meeting, acting as facilitator, and maintaining the records. The TAT
process in this building has evolved from the district's formal plan for the organization of elementary TAT procedures. Modifications have been made in the forms used for documentation purposes. At the time of the survey used for this study, this process followed the classic TAT model relatively closely. At the time of this writing, the TAT process in this building has continued to evolve until it is beginning to show signs of becoming a building level problem-solving team with a broader focus.

Case Seven illustrates a similar profile. In this building, the first steps listed by teachers were (in order of frequency): (a) contact the parents, (b) attempt alternate strategies in the classroom, (c) speak to the building administrator, and (d) request a place on the TAT team schedule. Eight out of ten teachers specified the need for an appointment with the TAT team. LD Seven acts as a regular member of the TAT. At the time this survey was taken, LD Seven was the primary organizer, facilitator, and recording member of the TAT. During the 1989-90 academic year, the teachers have become more responsible for organizational details.

In summary, in a Type IIIa building, the role of the LD teacher is similar in nature to special education case management. The LD teacher is responsible for the functioning of the process—including scheduling the meetings, keeping records, etc.

The structural elements common to the IIIa Teacher Assistance Team approach are: (a) formal written process, (b) levels of administrative involvement ranging from medium to high, (c) consistent membership of core team, (d) meetings scheduled upon request, and (e) some evidence of
attempts to solve the problem through alternate strategies for instruction.

The role of the parent in the Teacher Assistance Team approach is intended to be interactive as a member of the problem solving team. The role of the parent in these buildings is inconsistent, ranging from contact as a first step in the process to contact after early decisions are made.

Type IIIb

Case Two, Case Three (the smaller building), and Case Ten (the larger building) appear to be functioning as Type IIIb schools. In Case Two, the first steps listed by teachers were (in order of frequency): (a) contact the building administrator, (b) attempt alternate strategies in the classroom, (c) contact the parents, (d) request a TAT meeting, and (e) consult with the LD teacher. In this building, the LD teacher is an invited consultant to the TAT process. The process is a formal, written procedure with regularly scheduled meetings. This team is functionally a building level, general education process.

A similar profile is found in the smaller building of Case Three. First steps identified by the respondents were (in sequential order): (a) contact the building administrator, (b) attempt alternate strategies in the classroom, (c) request a TAT meeting, and (d) contact parents. At the time of the survey, LD Three was not involved in the TAT process. During the 1989-90 academic year, LD Three became a regular member of TAT, however, the role remains primarily consultative.

The larger building of Case Ten has undergone substantial change in Step I procedures during the 1989-90 academic year. At the time of
the survey, this building operated primarily under the Child Study Team format. Throughout this past year, the staff attended in-service meetings regarding the TAT model and began to implement the program. There currently are two separate teams—one at each of the elementary and secondary levels. The role of LD Ten in relation to these teams is consultative in nature.

In summary, a Type IIIb building has a TAT process that is run within the general education framework. The LD teacher is invited as a periodic consultant to the group or when a formal referral needs to be made.

The structural elements common to the IIIb Teacher Assistance Team approach are: (a) formal written process, (b) high levels of administrative involvement, (c) consistent membership of core team, (d) regularly scheduled meetings, (e) evidence of attempts to solve the problem through alternate strategies for instruction, and (f) formal records maintained.

The role of the parent in the Teacher Assistance Team approach is intended to be interactive as a member of the problem solving team. The role of the parent in these buildings remains inconsistent, ranging from contact as a first step in the process to contact after early decisions are made.

**Type IV: The Problem Solving Team Model**

Case Nine (the smaller building) and Case Four (the larger building) appear to be functioning as Type IV schools. The smaller building in Case Nine consists of two teachers. A formal TAT (or other) system does not exist here. The two teachers discuss their students
during normal breaks within the school routine. The discussions are not limited to brainstorming alternate teaching strategies for students who may be possible candidates for special education referral. LD Nine is occasionally invited to participate in these discussions.

At the time of the survey, the larger building in Case Four was functioning under the Child Study Team model. According to LD Four (corroborated by a building administrator), the building attempted to establish a TAT model but found the time required to be a constraint to regular meetings. The process was, therefore, subsumed within the regularly scheduled staff meetings. The TAT team is, in effect, the entire staff of this K-12 school. The LD teacher fills the role of consultant to the team on an irregular basis. This has become a broad-based problem solving team for various problems within the school.

In summary, a Type IV building has a regularly scheduled problem-solving meeting which is used to discuss the needs of all children without consideration of any future referral to special education services.

The Identification Process

The data relating to the identification process were obtained through a file review of all students evaluated for eligibility purposes during the 1988-89 and 1989-90 academic years. The size of the student populations of some of the cases combined with the time limitation placed upon the document review proved to be a serious limitation in the study. Out of ten cases, forty records were identified as meeting the criteria of representing evaluations for initial eligibility. Out of these forty records, fourteen did not contain clear documentation that
could be used to make comments about the identification process. Cases Five and Six contained no documentation of eligibility assessment resulting in initial placements of students. These two cases will be excluded from this discussion.

The analysis presented here is specific to the question: What are the differences between and within cases in the identification process? The answer to this question can best be obtained through analysis of the data in relation to five general assessment models identified in the literature: (a) behavioral, (b) educational, (c) psychoeducational, (d) developmental, and (e) heuristic. All classifications must be considered tentative conclusions due to the small sample of records available within the criteria established.

The Behavioral Assessment Model

LD Seven appears to be functioning primarily under the behavioral assessment model, although there are indications of flux within the basic belief system due to relative inexperience as a learning disability instructor. The key element in the behavioral assessment model is focus on a description of the learning event in context with its environment.

LD Seven evaluated eight students for initial eligibility during the time frame of this study. The procedures used for eligibility purposes include: formal tests, observation of the student in various environments, performance samples, and reliance on the observation skills of other special education disciplines (e.g., teacher of the emotionally handicapped, school psychologist, and occupational therapist). Of the eight students evaluated, three were placed as a result
of visual processing deficits. One student was placed because of severe
deficits in visual and verbal areas combined with a severe discrepancy
in the academic area of reading. A fifth student was placed on delayed
perceptual motor skills and severe social emotional deficits. Three
students did not qualify for services.

The Educational Assessment Model

LD Two and LD Nine appear to be functioning under an educational
assessment model. The key element in this model is the determination
of a learning disability on the basis of a discrepancy between academic
functioning and some indication of estimated ability.

LD Two evaluated four students for eligibility purposes during the
period of this study. The procedures used for eligibility purposes
included parent reports of developmental history, informal academic
screenings, classroom observations, criterion referenced academic
assessments, and some formal assessments. Of the four students evaluat­
ed, two of the students were placed on "discrepancies [that] appear not
correctable without special education" (Record LD Two:1, 3). One was
declared ineligible on the basis of the "lack of an educational discrep­
ancy" (Record LD Two:2). The fourth was placed on "possible auditory
sequential and fine motor" difficulties (Record LD Two:4).

LD Nine evaluated four students during this time frame. The
procedures utilized for eligibility purposes consist of two formal
instruments. Of the four students evaluated, three were placed on the
basis of discrepancies between grade placement and grade achievement
level.
The Psychoeducational Model

LD Three, LD Eight, and LD Ten appear to be functioning under the psychoeducational model for assessment purposes. The key element in this model is the identification of processing deficits.

LD Three evaluated three students for eligibility purposes during the period of this study. The records provide limited data. The procedures used for eligibility purposes included observations and formal testing. The single student declared eligible for learning disability services was placed on the basis of identified processing deficits. Additional information is unavailable.

LD Eight evaluated seven students for initial eligibility during the time frame of this study. The procedures used for determination of eligibility were limited to formal assessment. Five of the students were declared ineligible for services. One of the remaining students was placed on the basis of the Woodcock-Johnson findings of a "severe deficit" (Record LD Eight:4). Documentation indicates that the remaining student was placed on the basis of "significant differences [found on] the DTLA-2" (Record LD Eight:5).

LD Ten evaluated four students for initial eligibility. The procedures for eligibility purposes included observations and formal tests in the areas of cognition, language, and motor functioning. The records indicate that all four were placed on the basis of significant discrepancies in various processing areas impacting in language and academic areas.
The Developmental Model

None of the teachers within Buffalo Valley Special Education Unit were found to be functioning under the developmental model for purposes of assessment.

The Heuristic Model

LD One and LD Four appear to function under the heuristic model for assessment purposes. The key element in this model is the wide range of environments utilized for collection of assessment data.

LD One evaluated four students for eligibility purposes during the period of this study. The procedures used for eligibility purposes included informal tests, observations in various school environments, formal screening and diagnostic level tests, and other issues addressed as appropriate to the student's needs (i.e., intellectual, social/emotional, physical, and environmental). These issues are added to the team process through involvement of the appropriate professionals.

In reviewing the records for documentation of the criteria, it was found that of the four records of students evaluated for eligibility during the period of this study one student was placed on the basis of "spatial concerns" (Record LD One:1). One was placed on the basis of a one-half to one year discrepancy between grade placement and achievement levels. A third student was placed on the basis of approximately a one year discrepancy between grade placement and achievement levels and concomitant "visual motor and auditory visual concerns" (Record LD One:3). The fourth student was declared ineligible for services.

LD Four evaluated eight students for eligibility purposes during the period of this study. The procedures used for establishment of
eligibility included informal tests, observations in various school environments, formal screening and diagnostic level tests, and screening procedures for visual and auditory acuity. Language assessment is typically added through the use of the building speech clinician to the assessment team. Other issues addressed as appropriate to the student's needs are: intellectual, social/emotional, physical, and environmental. These issues are added to the team process through involvement of the appropriate professionals.

In reviewing the records for documentation of the criteria, it was found that LD Four evaluated eight students for eligibility purposes. One of the students was declared eligible on the basis of a severe processing deficit combined with an academic discrepancy. A second student was placed on the basis of a diagnostic IEP in order to allow long range diagnostic testing for identification of the exact nature of the disability. The remaining students were found ineligible for services.

Eligibility Criteria

The data relating to the identification process was obtained through a file review of all students evaluated for eligibility and placed within the learning disability program during the 1988-89 and 1989-90 academic years. The analysis presented here is specific to the question: What are the differences between and within cases in eligibility criteria?

The size of the student populations of some of the cases combined with the time limitation placed upon the document review proved to be a serious limitation in the study. This problem was further compounded by
the documentation practices of the learning disability staff. Out of ten cases, forty records were identified as meeting the criteria of representing evaluations for initial eligibility. Out of these forty records, only nine records contained clear documentation that could be used to make comments about the specific criterion used for establishment of the severe discrepancy as required by federal and state regulation.

The nine records indicated exclusive use of chronological age versus academic achievement levels. Five of the records documented the evaluation of kindergarten and first grade students. The discrepancy level for these five students was consistently in the six month to one year range. Three of the remaining four students were identified with a discrepancy in the one to two year range. The remaining student was found to have a discrepancy in the two to three year range.

Student Characteristics and Caseload Size

The data relating to student characteristics was obtained through review of individual assessment reports, the composite summary report written by the placement team, and the current level of functioning section of the IEP from the files of students placed within the learning disability program during the 1988-89 and 1989-90 academic years. The data relating to caseload size was obtained through statistical comparisons present in the archival records of Buffalo Valley Special Education Unit. The analysis presented here is specific to the question: What are the differences between and within cases in student characteristics and caseload size?
Student Characteristics

Statements cannot be made relative to the characteristics of students served within each case on the basis of the description of the information obtained under the parameters of the data gathering process described above. Information present in the records can only be considered descriptive of the individual student concerned. Descriptions relative to the characteristics of specific students can be found listed within the sub-section entitled "Characteristics of Students and Caseload" of each case study within Chapter IV.

Caseload Size

The average caseload size for a full time position within Buffalo Valley Special Education Unit ranges from a low of sixteen (Case Four) to a high of twenty eight (Case Five). The incidence level ranges are 5%, 4.6%, 3%, 4.9%, 6%, 3%, 11%, 8.75%, 7.5%, 10.7% for cases one through ten respectively. The incidence level for Buffalo Valley Special Education Unit as a whole is 5.5%—slightly over the national 4.82% incidence level (Baker, 1989).
CHAPTER VI CONCLUSIONS AND RECOMMENDATIONS

The purpose of this study was to identify inconsistencies in the process of determining eligibility for learning disability services within Buffalo Valley Special Education Unit. The study was divided into four general areas of investigation: (a) the Step I process, (b) the identification process, (c) eligibility criteria, and (d) student characteristics and caseload size. Differences in general philosophy and practice were identified across the ten case studies relative to each area. The conclusions of the study are discussed in this chapter and recommendations are made relative to the long range goal of developing consistent and systematic practice in the identification procedures within Buffalo Valley Special Education Unit.

Conclusions

Four general findings resulted from the analysis of the data as presented in this document.

1. Inconsistencies identified within Buffalo Valley Special Education Unit correspond to the inconsistencies found within the learning disability field in general. Support of this statement can be found in the comparison of the results of the cross-case analysis with discussions in Chapter II related to general philosophical differences in the field in terms of the definition of learning disabilities, the
pre-referral and assessment models, and the establishment of eligibility criterion.

2. Variations in the procedures used prior to referral to special education services were found to vary with the attendance center rather than with the learning disability (LD) teacher. It was hypothesized that the major influencing factor was the building level administrator in the role of instructional leader.

3. Diagnostic assessment procedures varied between LD teachers but remain consistent within each case. The general philosophy of each learning disability teacher was found to be consistent with the types of diagnostic procedures used and the criteria for determining eligibility for services.

4. Incidence levels in some buildings were greater than twice the national incidence rate. This raised questions regarding the appropriateness of identification procedures in these buildings. Specific conclusions could not be drawn on this issue because of the lack of specificity in the documentation of critical elements of the process. This may have resulted in exaggeration of the severity of the problem.

These general conclusions are discussed in greater detail in the following sections. The discussion was organized in a manner consistent with previous presentations (i.e., Step I, the Identification Process, Eligibility Criteria, Student and Caseload Characteristics).
Four general developmental levels of pre-referral systems were identified through the review of the literature: (a) the original model (previously identified as the Unitary model), (b) the Child Study Team model that evolved out of the requirement in P.L. 94-142 for multi-disciplinary assessment teams, (c) the Teacher Assistance Team (TAT) model that provided a system for screening referrals to special education while providing support for classroom modification for non-handicapped students with special needs, and (d) the newer, building level, Problem-Solving Team (PST) model that is based in general education.

This system of classification is the key to understanding the inconsistencies in practice that were found in pre-referral systems. These models have evolved in response to changing needs and greater understanding of effective practices in both general and special education. The philosophies underlying the newer variations (TAT and PST) are not unique to special education. The literature relating to all areas of education supports the effectiveness of tailoring instruction to meet the needs of students (Goodlad, 1984; Jones, Palincsar, Ogle, & Carr, 1987; Will, 1986). The TAT and PST models are methods of capitalizing on the benefits of collective problem solving in order to move closer to the ideal of meeting the educational needs of all children. These models should be viewed as general education processes that have implications for special education services. Of the two models, it is the opinion of this writer that the PST model is preferable. This statement is made because of the continued presumption of some teachers in buildings using a formal TAT model that the goal of the
process remains 'the eventual referral of the child to special education'.

Perceptions of general education teachers were found to vary with respect to the purpose of the pre-referral process. Teachers operating within the Unitary model consistently failed to document the need to modify instructional practice for students experiencing difficulty. As previously stated, this phenomenon could have occurred for a variety of reasons: (a) the open labelling of the survey as 'special education' may have created an expectation that the purpose of the question was to list steps leading to the removal of the student from the class, (b) modifications to accommodate student need could have been such an automatic teacher response that it was not considered a step toward obtaining help, or (c) teachers in these buildings may not have been in the practice of personalizing instruction to meet the needs of students. Interestingly, the data indicated that the number of teachers reporting this step increased as the building model moved from the Unitary model to the Child Study Team to the Teacher Assistance Team to the Problem-Solving Team.

Similar modification of teacher perceptions could also be seen in other differentiating factors in the four approaches. The perception of general classroom teachers in relation to the role of the learning disability teacher and to the role of the parent were clearly seen in the responses to questions that were open-ended and those that required a forced choice. Again, the separation of the general education system from both special education and from parent participation appears greater within the Unitary model than within models at other levels.
Two other factors that varied along similar lines were the source and the formality of the system that was used. The Unitary model is typically very informal. The system is often unwritten and poorly understood by stakeholders. If records of discussions are made, they take the form of informal notes maintained within private teacher files. In the Child Study Team model, formal procedures are typically written in the form of referral systems by special education personnel. The system becomes increasingly driven by the needs of general education and non-handicapped children as the process takes on the form of a building level Problem-Solving Team.

One of the key elements identified as critical to the nature of the pre-referral/referral system that was adopted within a building was the level of administrative support and involvement within the process of providing quality education for all students within the building. This concept is consistent with the current administrative focus on the role of the principal as the educational leader of the school.

It is clear that establishment of a consistent system of identification across Buffalo Valley Special Education Unit will require narrowing the gaps among buildings operating within older pre-referral/referral (Unitary and Child Study Team) models and buildings operating within the Problem-Solving Team model.

The Identification Process

Five general models of assessment were identified through the review of the literature: (a) the behavioral model, (b) the educational model, (c) the psychoeducational model, (d) the developmental model, and (e) the ecological model (modified and considered "heuristic" in this
document). The assessment practices of learning disability teachers in Buffalo Valley Special Education Unit reflect four of these patterns—behavioral, educational, psychoeducational and ecological.

The key element in differentiating among the models is the primary focus of the evaluation. The behavioral model is distinguished through evidence of consideration of the components of the task the student is required to perform and the environmental conditions at the time the task is presented. Emphasis is on task analysis of the skill sequence and the instructional sequence in terms of the antecedent-behavior-consequence (ABC) paradigm. The educational model focuses on the critical evaluation of reading, written language, and arithmetic skills. Correlative learning disabilities in perception, motor functioning, and behavior are not considered relevant to the instructional process. The psychoeducational model is identified through emphasis on the psychological processes underlying academic functioning. The heuristic model, in the mind of this author, incorporates elements of each of the others and adds the element of the extended environment. The heuristic process includes evaluation of the student, the task, and each of the child's environments (e.g., home, school, neighborhood, community).

Despite development of a consensual definition within the learning disability department, substantial differences were found in the operational definitions used by the ten learning disability teachers. Differences were reflected in the choice of procedures, utilization of additional resource personnel, and in the criteria for eligibility. One of the teachers appeared to be in the process of integrating teacher training with reflective practice. At the time of this writing, this LD
teacher was primarily utilizing the behavioral point of view. Two of the teachers were functioning under the educational model while three others seemed to be coming from a psychoeducational point of view. The final two teachers (for whom documented evidence exists) were utilizing a heuristic approach.

A compounding problem existed in the level of documentation of the procedures being followed. The records typically lacked clear statements of the findings of the assessments in terms of the specificity of the disability and the criteria for the judgement.

These two situations, inconsistency in basic belief systems and lack of clear documentary evidence, are reflective of the condition of the state of the field of learning disabilities (Adelman, 1989; Kavale & Forness, 1985; Keogh, 1982; Vance, Bahr, Huberty, & Ewer-Jones, 1988). It is obvious to this writer that, until some consensus is reached in rudimentary definitional/conceptual issues, practice in the field will continue to be fragmented.

Placement Criteria

The literature revealed five general approaches for establishing placement criteria: (a) informal estimates of ability and academic levels, (b) grade level expectancies, (c) achievement level expectancies, (d) standard score discrepancy formulas, and (e) regression models (Chalfant, 1984, 1985). Data from self-reports suggested that the learning disability teachers of Buffalo Valley Special Education Unit use informal estimates, grade level expectancies, age level expectancies, achievement level expectancies, and a specific standard score formula; however, the limited amount of corroborating data prevents
definitive statements regarding the approaches used within the ten cases.

Two serious problems were found in the students' records. The first problem was a record keeping issue. Documentation of the justification for placement in a learning disability program was incomplete or absent from many student records. The sample from which corroborating evidence could be drawn was, therefore, artificially limited. While this is a significant issue with respect to the purpose of this study, the more serious problem related to the absence of defensible placement procedures and criteria.

The second problem lay in the apparent misunderstanding of some staff members regarding appropriate usage of grade scores, age scores, and standard scores as tools in assessment. This issue will require additional clarification and/or corroboration before a program of intervention is established. There are acceptable uses for each type of score, however, improper use of test scores has serious implications for the determination of eligibility and caseload management.

**Student Characteristics and Caseload Size**

Differences in student characteristics between and within cases could not be established because of the problems in documentation as previously described. The inability to clearly identify the characteristics of the specific learning disabilities of children has implications for obtaining and maintaining defensible program components in terms of staffing patterns, materials acquisitions, etc.

The problem can be clearly illustrated through discussion of the incidence levels within the various cases. The incidence of identified
learning disabled students in Cases One, Two, and Four were near the national incidence level of 4.82% (Baker, 1989). Cases Three and Six were below the national incidence level but within the 3 to 5% estimate considered appropriate by most authors. Cases Seven, Eight, Nine, and Ten, however, were considerably above both the national incidence level and the estimate considered appropriate within the literature. Justification of learning disability services at this level will be difficult in the absence of documentation to substantiate the appropriateness of placement.

Recommendations

The purpose of this study was to identify inconsistencies in the initial identification process within Buffalo Valley Special Education Unit as a first step toward developing consistency in practice. Suggestions are made toward that goal, however, the results of this study have implications reaching beyond the borders of one multi-district special education unit. The close parallel of the findings in this unit to the current situation in the broader field of learning disabilities suggests that internal efforts may be only a 'temporary fix' unless support for that change exists on a broader level. Therefore, recommendations are also made for change in the external systems impacting on local practice. For purposes of clarity, the discussion will be organized into general recommendations for external systems and specific recommendations for Buffalo Valley Special Education Unit.

General Recommendations

Inconsistencies identified in this study must be considered under the general headings of the Step I process and the diagnostic evaluation
process because of the difference in the focus and in the lines of responsibility.

**Step I**

The literature and the evidence from this study support two contentions: (a) the building level Problem-Solving Team model provides teacher support that benefits students inappropriate for special education services as well as providing pre-referral information for students requiring diagnostic evaluation; and (b) the active instructional leadership of the building administrator is important to the success of either the TAT or PST models. Therefore, recommendations are made in this section regarding the needs of the building administrator, the general education teacher, and the learning disability teacher in relation to the Step I process.

**The Building Level Administrator**

Recommendations for change that will impact the building level administrator are made with three assumptions in mind:

1. The building level administrator is expected to be the instructional leader. In the larger districts, this role falls to the principal, while in the smaller districts, the superintendent plays a more active role in the day to day leadership of the staff.

2. The general movement within special education is toward providing direct service to severely handicapped students, while service to mildly and moderately handicapped students focuses on collaboration and consultation services to teachers. The responsibility for instruction will remain with the general classroom teacher.
3. Economic stresses will continue to impact both families and schools. The result is likely to be increased demands on school districts. Districts and staff will have less ability to meet the demands. Increased conflict is the likely result, with accompanying, elevated stress levels.

These factors will result in the need for skills beyond those currently required for administrative credentials. Classroom teachers will need the support of well trained administrators and of peer support systems such as PST.

The first recommendation resulting from this study refers to the need of administrators for additional training beyond current requirements for the administrative credential. Additional training should be provided in three areas: (a) special education, (b) instructional supervision, and (c) skills specific to conflict resolution.

In special education, the minimal requirement should be three pre-service, survey courses. Two of the courses should be introductory level—one in general special education issues and the second in either learning disabilities or mental retardation. The third course should be in special education law. The survey courses should include limited practicums. One would place the student in a special education classroom for a regular amount of time over an extended period (e.g., one hour weekly for one semester). The second practicum would immerse the student in the daily routine of a family with a handicapped child. This could be accomplished through a weekend stay within the home as a mother's helper. Another possibility would involve volunteer work as a respite care provider for a specified number of hours.
In the area of instructional supervision, additional training is needed in specific supervisory skills. Initial training occurs within higher education training programs for administrators. The training curriculum must provide extension of classroom discussion into practice. The literature clearly indicates that discussion of theoretical models (e.g., clinical supervision) does not result in the recommended behavior unless the model is supported during the process of socializing educators into classroom instruction or it is supported with practical experience at the time of the instruction (Britzman, 1986; Yonemura, 1986). At the in-service level, the North Dakota LEAD Center training in instructional supervision provides an excellent alternative to formal University training in the specific skills of instructional leadership.

In the area of conflict resolution, specific training is necessary. Building administrators require the skills of (a) negotiation, (b) mediation, and (c) team problem-solving. These skills could be provided through a pre-service level course in techniques for conflict resolution or through an integrated series of in-service level workshops.

The General Classroom Teacher

Two findings from this study relate to the classroom teacher. The first finding is the apparent relationship between the model under which the building functions and the separation of special education and general education. The second finding has to do with the frustration expressed by many of the teachers in Unitary or Child Study Team buildings regarding the 'amount of time that it takes to remove students from the classroom'.
Recommendations for change that will impact general classroom teachers are made with the following assumptions in mind:

1. Classroom teachers generally want to provide the best instruction possible for their students.

2. Current stress levels of classroom teachers are high. Curricular areas are expanding. Resources are dwindling. Classroom management becomes more difficult as student behaviors reflect increased family stresses. Parent expectations are increasing.

3. Historically, pre-service training for classroom teachers has focused on providing instruction for the average and the above-average ability child. Classroom teachers may not feel equipped to handle the student who is difficult to teach.

These factors combine to create a circumstance where many teachers feel unprepared to cope with the increased demands made by low functioning children. Classroom teachers need the support of well trained administrators, of peer support systems such as PST, and of outside support personnel (e.g., school psychologists).

The second recommendation resulting from this study refers to the need of classroom teachers for training beyond the typical pre-service program. Additional skills must be provided in three areas: (a) special education, (b) advanced instructional pedagogy, and (c) group communication skills.

In the area of special education, all pre-service training of teachers should contain at least the core requirements of the two survey courses (with their accompanying practical experiences) previously described as necessary for building administrators. With the current
emphasis on integrating handicapped students into the general classroom, it is critical that classroom teachers have at least basic knowledge of the population. This should become a requirement for recertification.

In the area of advanced instructional pedagogy, skills should be grouped into a single course and placed in the pedagogical sequence after the basic methods courses. This course could effectively be combined with the student teaching experience. It should not be taught until the pre-service teacher has had some experience in a classroom. The course should contain such basic skills as task analysis, functional behavior management, and instructional modification. It should also encourage establishment of the habit of reflective practice (Zeichner & Liston, 1987).

In the area of communication skills, classroom teachers need training in group problem-solving skills and in peer support techniques such as collaboration and coaching. Classroom teachers also need to gain professional self-confidence that will allow the freedom to seek assistance and to provide supportive reinforcement to peers.

The Learning Disability Teacher

Recommendations for change that will impact learning disability teachers are made with the following assumptions in mind:

1. The role of the learning disability teacher within the building is one of support to the general education program.

2. Communication is an interaction between two people. Indications of distance between general education and special education personnel are likely to be the result of the attitudes of the individuals on both sides.
3. Typical preparation programs for learning disability teachers have not prepared teachers for current expectations. Historically, LD teachers have been encouraged to think of their role in terms of being a specialist in educational problems.

4. Major changes are occurring in the field of learning disabilities. The definitional issue, while still confused, shows some evidence of coalescing viewpoints. Current research in issues related to identification and program establishment may bear little relationship to the precepts taught during the pre-service training of experienced LD teachers.

   These factors combine to foster continuation of the separation of the general and special education functions. Learning Disability teachers need the support of their superiors and their peers in order to make the transition to newer methods of thinking with the least amount of disequilibrium and stress.

   The third recommendation resulting from this study refers to the need of LD teachers for training in skills that will enhance their ability to work as part of a team. These skills can be categorized in terms of group dynamics, collaboration, and consultation and could be embodied in a single course. This course must include a laboratory or practical experience component to enable the students to practice the newly developing skills under the supervision of an instructor. These skills should be included as part of the conscious focus of the student teaching experience.
Summary

Three general recommendations are made in relation to the Step I process as it exists in North Dakota. These recommendations all require the establishment of additional requirements for coursework relative to skills pertinent to the role of the individual staff member within a building level support system. Implementation of these recommendations will require the combined effort of the North Dakota Department of Public Instruction, the University training programs, and the support of state professional organizations. Funding sources will need to be found for provision of in-service activities to upgrade the skills of those practitioners currently in the field.

Diagnostic Assessment

The literature and the evidence from this study supports two contentions related to the topic of diagnostic assessment; (a) the inconsistencies found in assessment practices are a direct result of different philosophical constructs of learning disabilities, and (b) the eligibility criterion used for determination of the handicap appears to vary between and within the practices of learning disability teachers. Recommendations made in this section are specific to the development of consistent practice in diagnostic assessment and eligibility determination in the state of North Dakota.

The fourth recommendation of this study is a recommendation to the Department of Public Instruction, Division of Special Education (DPI:SE) to actively encourage and support the development of consistency in the identification and placement practices of learning disability teachers. This can be accomplished across the local special education units
through development of a special project. The first step would be organization of a statewide unification committee consisting of the coordinators of various learning disability programs in the state (plus representatives from those units without coordinators). This group would serve the functions of both a steering committee and an implementation committee. The second step would be to support at least partial replication of this study in other parts of the state for the purpose of determining the degree of diversity within the identification practices of each unit. The third step would consist of the formation of plans for development of appropriate consistency within and between the local special education units. The involvement of DPI:SE will be critical in providing support to participating units through on-going technical assistance and discretionary funding of efforts toward consistency in evaluation and placement practices across the state.

The fifth recommendation of this study relates to the involvement of the University system. Teacher training personnel representing the learning disabilities portion of the special education departments must be involved in the development of consistency in the field. The purposes for this involvement would be (a) to provide reasonable assurance of the inclusion of the most current research related to the issues under consideration, (b) to provide in-service training to upgrade skills found to be lacking within current LD personnel in the field, (c) to provide newly trained personnel to the public school programs, and (d) to provide reasonable assurance of maintaining appropriate currency with research developments that have direct impact in service provision.
The involvement of each of the three components (local special education unit, DPI:SE, and University teacher education personnel) is critical to the establishment of a viable system with appropriate balance. The local education unit provides the pragmatic element. The Department of Public Instruction provides the accompanying regulatory function. The University provides the idealism and the research base that anchors the system in the future.

The sixth recommendation is made to both the Department of Public Instruction: Special Education and the University system. In the opinion of this writer, the learning disability credential should remain limited to categorical graduate level training despite the trend toward the establishment of non-categorical training programs in other states. A successful learning disability teacher must have skills in (a) child development and cognitive theories of psychology, (b) language development and disorders, (c) fundamental pedagogy at the level of choice (elementary or secondary), (c) general curricular issues, (d) theoretical and practical aspects of learning disabilities, (e) diagnostic assessment, and (f) consultation and collaboration skills. This is not possible to provide at an undergraduate level. It is also not possible to provide at the graduate level when combined with training needs related to other exceptionalities.

**Specific Recommendations**

The original purpose of the study was to provide data upon which to build program change at the local unit level. Change cannot occur without the recognition of the need for change and the ownership of the stakeholders in the process. Therefore, this data must be presented to
the administrators and staff of Buffalo Valley Special Education Unit in such a way as to minimize barriers and to establish future direction in the form of a concrete plan. Components of this plan will address the development of consistency in: (a) the handling of classroom problems prior to referral to special education, (b) the practice of appropriate diagnostic assessment procedures, and (c) the development of specific skills in assessment and documentation.

Step I Issues

The unification of Step I systems across the various buildings is necessary in order to equalize the opportunity for all children to receive the benefit of team problem solving process without the need for identification as handicapped. The cooperation and active involvement of general educators and special educators will be required to accomplish this goal.

It appears that general education personnel may require training in the skills necessary for instructional flexibility in terms of curricular and environmental modification. This perception should be checked and, if correct, inservice activities can be sponsored through Buffalo Valley Special Education Unit.

The establishment of effective team process will require training in group communication and problem solving skills. This will be a need for both general and special education personnel. Consideration should be given to inservice activities that provide training for building level teams.
Assessment Procedures

The philosophical constructs related to the definition of learning disabilities bear a direct relationship to diagnostic assessment procedures and the eligibility criteria utilized by each learning disability teacher. The development of consistency across the unit will require modification of these constructs. This will require updating the knowledge base of the learning disability teachers in relation to current issues in the field.

A concerted effort must be made to develop group consensus regarding a standard screening battery and an organizational format for complete diagnostic assessment. In addition, defensible eligibility criteria must be established and implemented by all members of the learning disability department.

Further data should be gathered in those cases where the incidence level of students seems inordinately high. This first step toward determining defensibility of current statistics will serve as additional clarification of the current state of the learning disability program in Buffalo Valley Special Education Unit.

A serious problem was identified in the limited or absent documentation available in the student records supporting the determination of the presence of a handicapping condition. This is a problem that must be rectified. Appropriate documentation of student eligibility is critical to maintaining justification for resource allocation. In addition, appropriate documentation is required by state and federal regulation. This is a compliance issue. Poor or inadequate documenta-
tion exposes the teacher, the district, and the unit as a whole to risk in terms of vulnerability to due process actions.

**Summary of Recommendations**

This study resulted in six general recommendations for change in the learning disability programs across the state. These recommendations are as follows:

1. The knowledge of building administrators and classroom teachers regarding special education must be broadened. Practical experiences with handicapped children and their families must be provided as part of the additional training.

2. Building administrators must be provided with additional skills in the areas of negotiation, mediation, and team problem-solving. Courses focusing on theoretical aspects of personnel supervision should be expanded to include supervised practice over a period of time.

3. The teacher training curriculum must be expanded to include additional pedagogical skills (e.g., task analysis, functional behavior management, and instructional modification). The skills of reflection on instructional practice must be taught and encouraged until it becomes automatic level behavior for practicing teachers.

4. All instructional personnel (administrators, general classroom teachers, special education teachers) must improve in the ability to communicate—particularly in stressful situations. The skills of group problem-solving, collaboration, coaching, and consulting are specifically mentioned.

5. A recommendation is made to the Department of Public Instruction to support replication of this project in other areas of the state and
to encourage a state-wide effort toward establishing defensible consistency in assessment practices.

6. The final recommendation is made to the University system to join in the effort to establish the skills necessary to develop general problem-solving teams in the schools and to assist in the effort to establish consistency in diagnostic assessment.

Specific recommendations are made for the development of consistency within Buffalo Valley Special Education Unit. These recommendations are summarized as follows:

1. The results of this study will be presented to the Advisory Committee (which consists of district superintendent and board members) and to the learning disability department. The discussion will focus on (a) understanding the differences discovered within and between cases, (b) identifying the 'ideal' (in terms of the Step I process, identification procedures, and defensible eligibility criterion, (c) taking steps toward attaining the ideal, and (d) identifying variables that will facilitate or obstruct progress toward the ideal. A structured plan will be developed within each group.

2. The issue of appropriate documentation will be investigated further and, if current perceptions are accurate, steps will be taken to remediate the problem.

In conclusion, this study resulted in the identification of many points of variance among the ten cases. Variability in building level responses to student problems in learning seemed to be more closely related to the active involvement of the building level administrator than to the philosophical underpinnings of the learning disability
teachers. Differences in diagnostic assessment occurred among cases but remained constant within each case. Incomplete or missing documentation in the student records resulted in inconclusive findings related to eligibility criteria and the characteristics of students served within each case.

The impact of the diversity of definitions of learning disabilities on practice in the field is clear. Consensus regarding appropriate procedures and eligibility criterion are difficult to reach when professionals hold diverse opinions as to the nature of the subject. If a defensible level of consistency is to be established, however, some agreement must be reached. If the agreement cannot come from the leaders in the field, then it must begin in the field—in the schools and in the day to day provision of services to students identified as learning disabled.
APPENDIX A  RESEARCH PLAN
Research Question: What are the differences between and within cases in implementation of the Step I (pre-referral) process?

Focus Area: Compliance

<table>
<thead>
<tr>
<th>Purpose</th>
<th>Strategy</th>
<th>Procedure</th>
<th>Instrument</th>
<th>Investigator</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Identify components of Step I process used in each building.</td>
<td>Survey staff: Administra., reg.ed. tchrs, LD tchrs, soc workers, counselors.</td>
<td>Admin. during admin. mtg; LD tchrs during dept mtg; All general ed teachers in ea bldg; soc. wkrs; counselors</td>
<td>Survey</td>
<td>J. Trefz</td>
<td>Perceptions of admin, reg.ed, soc. workers, counselors, and LD staff</td>
</tr>
<tr>
<td>Member check (Guba &amp; Lincoln, 1981; Lincoln &amp; Guba, 1985)</td>
<td>Brief interview</td>
<td>LD teachers, building administrators</td>
<td>Semi-structured interview based on survey results</td>
<td>J. Trefz</td>
<td></td>
</tr>
<tr>
<td>Triangulation (Guba &amp; Lincoln, 1981; Lincoln &amp; Guba, 1985)</td>
<td>File review/referral during 1988-89, 89-90 for initial evaluation</td>
<td>Examine files for students</td>
<td>Checklist developed from survey LD group</td>
<td>J. Trefz</td>
<td>Files in central ofc; may need bldg asst team records</td>
</tr>
<tr>
<td>Observation of actual practice</td>
<td>Visit TAT or other meetings</td>
<td>Running notes or chronolog</td>
<td>J. Trefz</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Research Question: What are the differences between and within cases in the identification process?

Focus Area: Compliance and coordination

<table>
<thead>
<tr>
<th>Purpose</th>
<th>Strategy</th>
<th>Procedure</th>
<th>Instrument</th>
<th>Investigator</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Identify components of evaluation process used by each LD teacher. (i.e., CAPSL)</td>
<td>Individual and group survey techniques</td>
<td>1) check tests used; add other procedures also used</td>
<td>1) Checklist developed from all tests available to teachers</td>
<td>J. Trefz</td>
<td>LD teachers; BVSEU inventory list</td>
</tr>
<tr>
<td>Member check</td>
<td></td>
<td></td>
<td>2) combine/ categorize</td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td>3) write summary; check group perceptions</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>4) individual interview</td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

Examine actual practice:

1) assessment techniques & instruments

1) Survey of LD tchrs

Delphi Technique re: current practices

Process as described by Cunningham (1982)

J. Trefz

Beliefs of LD staff.

2) criterion elements

2) Observer participant

Nominal group process

Process as described by Delbecq, Van De Ven, & Gustafson (1975)

J. Trefz

Beliefs of LD staff.

3) discrepancy cut-offs/ models

3) Search archived records

File review

Develop checklist

J. Trefz

New student records
**Research Question:** What are the differences between and within districts in eligibility criterion?

**Focus Area:** Coordination and Compliance

<table>
<thead>
<tr>
<th>Purpose</th>
<th>Strategy</th>
<th>Procedure</th>
<th>Instrument</th>
<th>Investigator</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Identify LD definition used by each LD teacher.</td>
<td>Individual and group survey techniques</td>
<td>1) critical elements</td>
<td>1) Survey</td>
<td>Jaci Trefz</td>
<td>Personal belief system of each LD teacher</td>
</tr>
<tr>
<td>Determine group consensus.</td>
<td></td>
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<tr>
<td>Identify See above elements for operationalization</td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1)criterion elements</td>
<td>Participant observer</td>
<td>Nominal group process</td>
<td>Process described by Delbecq Van De Ven, Gustafson (1975)</td>
<td>J. Trefz</td>
<td>Beliefs of LD staff.</td>
</tr>
<tr>
<td>2)discrepancy cut-offs/ models</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Examine actual practice</td>
<td>Examine archived records</td>
<td>File review</td>
<td>Develop format for recording elements (a) required in regulation (b) identified by staff</td>
<td>J. Trefz</td>
<td>New student and exited student records (include drop outs)</td>
</tr>
</tbody>
</table>
**Research Question:** What are the differences between and within cases in students characteristics and caseload sizes?

**Focus Area:** Compliance and coordination.

<table>
<thead>
<tr>
<th>Purpose</th>
<th>Strategy</th>
<th>Procedure</th>
<th>Instrument</th>
<th>Investigator</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Examine actual practice vs</td>
<td>File review</td>
<td>Examine student files and historical data</td>
<td>Format as described above</td>
<td>J. Trefz</td>
<td>Central ofc. files. (eval reports and</td>
</tr>
<tr>
<td>stated standards</td>
<td></td>
<td>records</td>
<td></td>
<td></td>
<td>summaries, end-of-year reports, etc.)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Compare list of evaluated students with</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>caseload list</td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>
APPENDIX B  CASE STUDY INSTRUMENTS
BUFFALO VALLEY SPECIAL EDUCATION UNIT

SURVEY I

This survey deals with the process of referring a student for special education evaluation and/or services. We are looking for ways to make this process more helpful to you. Please take a few minutes and answer the questions as completely as you can.

PLEASE SKIM THE ENTIRE SURVEY BEFORE STARTING TO ANSWER THE QUESTIONS.

Johnny _______ is a student in your building. He is having moderate to severe difficulty in class. He may also be having behavior problems.

1. Describe the steps you would go through to get help. (Continue on the back of the page if necessary.)

2. Is the process you just described a formal process in your building (written down)?

3. Will you need to submit any of the following items in writing? _____
   a. a description of the problem
   b. a description of ways the usual teaching methods/strategies have been modified for this student?
   c. documentation of a specific number of interventions that have been tried?
   d. other (specify) ________________________________

   written documentation will not be needed.
   (Please attach copies of any forms that are used.)

4. Describe when and how Johnny's parents would be involved.

5. Who would contact Johnny's parents?

6. Does your building have a Building Assistance Team (Teacher Assistance Team)?
   a. Does it meet regularly?
   b. Regular members are (please list by position, not name):
7. Are you aware of any state or federal regulations that may be affecting this process? If the answer is yes, how did you hear about them?

8. What do you think could/should be done to improve the referral process in your school?

If you would be interested in hearing about the results of this survey, please put your name and school in the blanks below. IT IS NOT NECESSARY TO IDENTIFY YOURSELF UNLESS YOU WANT A COPY OF THE RESULTS.
L. D. TESTING INSTRUMENTS SURVEY

DIRECTIONS: Check the instruments you use in your routine evaluations in determining a learning disability.

COGNITIVE ABILITY

_____ Chicago Nonverbal Test
_____ Differential Aptitude Test
_____ Detroit Test of Learning Aptitude (DTLA)
_____ Detroit Test of Learning Aptitude - Primary (DTLA-P)
_____ Otis Lennon Mental Ability Test
_____ Slosson Intelligence Test (SIT)
_____ Woodcock Johnson Psycho-Educational Battery-Part I (WJPEB-J)
_____ Other - ____________________________________________
_____ Other - ____________________________________________

ACHIEVEMENT

_____ Basic Skills Inventory (BESI)
_____ Brigance Preschool Screening
_____ Brigance Test of Basic Skills (BTBS)
_____ Brigance Test of Early Development (BTED)
_____ Brigance Test of Essential Skills (BTES)
_____ Diagnostic Achievement Battery (DAB)
_____ Diagnostic Achievement Test for Adolescents (DATA)
_____ Durrell Analysis of Reading Difficulty
_____ Gallistell Ellis Test of Coding Skills
_____ Gates MacGinitie Reading Readiness Test
_____ Kaufman Test of Educational Achievement-Brief Form (KTEA-B)
_____ Kaufman Test of Educational Achievement-Comprehensive Form (KTEA-C)
_____ KeyMath
_____ Peabody Individual Achievement Test (PIAT)
_____ Slosson Oral Reading Test
_____ Stanford Diagnostic Reading Achievement Test
_____ Test of Early Reading Ability (TERA)
_____ Test of Written Spelling (TWS-2)
_____ Vallet Developmental Survey of Basic Learning Ability
L. D. Testing Instruments Survey

_____ Woodcock Johnson Psycho-Educational Battery - Part II (WJPEB-II)
_____ Woodcock Reading Mastery Form A
_____ Woodcock Reading Mastery Form B
_____ Woodcock Reading Mastery Form G
_____ Woodcock Reading Mastery Form H
_____ Wide Range Achievement Test (WRAT)
_____ Other -________________________________________________
_____ Other -________________________________________________

PROBLEM AREAS

_____ Audiometrics
_____ Heuristic (Jim Jones)
_____ Keystone Telebinocular
_____ Medical
_____ Observation
_____ Other -________________________________________________
_____ Other -________________________________________________

SENSORY PERCEPTION

_____ Auditory Integrative Abilities Test
_____ Developmental Test of Visual-Motor Integration (DTVMI)
_____ Bender Gestalt for Young Children
_____ Frostig Developmental Test of Visual Perception
_____ Goldman Fristoe Woodcock Auditory Discrimination Test Part I
_____ Goldman Fristoe Woodcock Auditory Memory Test
_____ Goldman Fristoe Woodcock Diagnostic Auditory Discrimination
_____ Goldman Fristoe Woodcock Selective Attention Test
_____ Goldman Fristoe Woodcock Sound Symbols Test
_____ Goodenough Harris Drawing Test
_____ Harris Test of Lateral Dominance
_____ Illinois Test of Psycholinguistic Abilities (ITPA)
_____ Motor Free Visual Perception Test
_____ Slosson Drawing Coordination Test
_____ Southern California Figure Ground Test
<table>
<thead>
<tr>
<th>Instrument</th>
</tr>
</thead>
<tbody>
<tr>
<td>Speech Sound Discrimination Test (Washington)</td>
</tr>
<tr>
<td>Visual Retention Test (Benton)</td>
</tr>
<tr>
<td>Wepman Auditory Discrimination Test</td>
</tr>
<tr>
<td><strong>LANGUAGE</strong></td>
</tr>
<tr>
<td>Bankson Language Screening</td>
</tr>
<tr>
<td>Basic Language Concepts Scale</td>
</tr>
<tr>
<td>Bracken Basic Concepts Scale</td>
</tr>
<tr>
<td>Expressive One Word Picture Vocabulary Test (EOWPVT)</td>
</tr>
<tr>
<td>Fluharty Preschool Speech Language Screening Test</td>
</tr>
<tr>
<td>Interpersonal Language Skills Assessment</td>
</tr>
<tr>
<td>Joliet 3-Minute Speech &amp; Language Screening</td>
</tr>
<tr>
<td>Language Acquisition Program for MH (LAP)</td>
</tr>
<tr>
<td>Slingerland Screen for Language Disability</td>
</tr>
<tr>
<td>Peabody Picture Vocabulary Test Form L (PPVT-L)</td>
</tr>
<tr>
<td>Peabody Picture Vocabulary Test Form M (PPVT-M)</td>
</tr>
<tr>
<td>Preschool Language Scale</td>
</tr>
<tr>
<td>Preschool Language Assessment Instrument</td>
</tr>
<tr>
<td>Preschool Language Assessment Instrument</td>
</tr>
<tr>
<td>Receptive One Word Picture Vocabulary Test (ROWPVT)</td>
</tr>
<tr>
<td>Structured Photographic Expressive Language Test</td>
</tr>
<tr>
<td>Structured Photographic Expressive Language Test - Preschool</td>
</tr>
<tr>
<td>Test of Auditory Comprehension of Language (TACL)</td>
</tr>
<tr>
<td>Test for Examining Expressive Morphology (TEEM)</td>
</tr>
<tr>
<td>Test of Language Competence</td>
</tr>
<tr>
<td>Test of Adolescent Language 2 (TOAL-2)</td>
</tr>
<tr>
<td>Test of Language Development - Intermediate (TOLD)</td>
</tr>
<tr>
<td>Test of Language Development - Primary (TOLD)</td>
</tr>
<tr>
<td>Verbal Language Development Scale</td>
</tr>
<tr>
<td>Woodcock Language Proficiency Battery</td>
</tr>
<tr>
<td>WORD test</td>
</tr>
<tr>
<td>Other -</td>
</tr>
<tr>
<td>Other -</td>
</tr>
</tbody>
</table>
L. D. Testing Instruments Survey

___ Adaptive Behavior Scale (AAMD)
___ Test of Early Socioemotional Development (TOESD)
___ Vineland Social Maturity
___ Other - ______________________________________________________
___ Other - ______________________________________________________
ACHIEVEMENT/APTITUDE DISCREPANCY
Factors to be Considered

DIRECTIONS: Please answer the following questions in terms of an initial assessment of a third or fourth grade student for identification purposes.

1. Which of the following kinds of scores do you prefer to use when obtaining an estimate of the student's ABILITY level?

___ Standard scores  ___ Percentile Ranks  ___ Grade
___ Criterion referenced  ___ Curriculum based norms (local)
___ Age  ___ Other (____________________)  

Why?

____________________________________________________________________

____________________________________________________________________

____________________________________________________________________

2. What would you consider as a minimal IQ score (or standard score) for the student to still qualify as Learning Disabled?

___ Average (90-95)  ___ Low average (80-85)
___ Borderline (70-75)  ___ No cut-off

3. Which of the following kinds of scores do you prefer to use when evaluating the student's ACADEMIC SKILLS?

___ Standard scores  ___ Percentile Ranks
___ Grade  ___ Curriculum based norms (local)
___ Criterion referenced  ___ Age
___ Other (____________________)  

Why?

____________________________________________________________________

____________________________________________________________________

____________________________________________________________________

4. What would you consider as a MINIMAL discrepancy between the student's estimated ability level and his/her academic skills to qualify as Learning Disabled?

___ 6-10 POINTS  ___ 11-15 POINTS  ___ 16-20 POINTS
___ 21+ POINTS  ___ 1 SD  ___ 1.5 SD  ___ 2 SD
___ 6 months-1 yr  ___ 1-2 years  ___ 2-3 yrs  ___ 3-4 yrs

Why?

____________________________________________________________________

____________________________________________________________________

____________________________________________________________________
5. Which of the following kinds of scores do you prefer to use when obtaining an estimate of the student's various PROCESSING abilities?

- Standard scores
- Grade
- Criterion referenced
- Other (_____________)

Percentile Ranks
Curriculum based norms (local)
Age

Why?

__________________________


6. Do you use a formula to determine the severity of the discrepancy between the student's estimated ability level and his/her academic skills?

- Yes
- No

If you answered yes, which formula do you use?

- "Years Behind" (CA-5)
- Bond and Tinker $\frac{\text{YIS} \times \text{IQ} + 1.0}{100}$
- Harris $\frac{2\text{MA} + \text{CA} - 5.2}{3}$
- Erickson $\frac{\text{Z-score R - GMRG}}{\text{SD of Scores}}$
- BEH $\frac{\text{CA (IQ + .17) - 2.5}}{100}$
- Other _______________________________
APPENDIX C  DATA REGISTERS
<table>
<thead>
<tr>
<th>Pupil ID</th>
<th>PreRef. Date</th>
<th>Refer. Date</th>
<th>Eval. Date</th>
<th>Team Members</th>
<th>Evaluation Procedures</th>
<th>Specific Disability</th>
<th>Entrance Criterion</th>
<th>IEP Date</th>
<th>Exit Date</th>
<th>Exit Criterion</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>One:1</td>
<td>11/2/89</td>
<td>2/5/90</td>
<td>2/8/90</td>
<td>Parent Principal Teacher LD</td>
<td>Observation DTLA-2 Woodcock Rdg KeyMath Beery VMI Informal test</td>
<td>(not specified) &quot;yes&quot;</td>
<td>&quot;spatial concerns&quot;</td>
<td></td>
<td></td>
<td></td>
<td>In G4: academic skills range 3.5 to 4.0; Low average ability; No significant difficulties</td>
</tr>
<tr>
<td>One:2</td>
<td>Eval done othr Unit</td>
<td></td>
<td></td>
<td>IEP from other Unit</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>One:3</td>
<td>10/10/90</td>
<td>3/12/90</td>
<td>3/15/90</td>
<td>LD Principal Speech Parent</td>
<td>Woodcock Rdg-R Observation Informal tests KeyMath, DTLA</td>
<td>&quot;Yes-Evaluation process&quot;</td>
<td>1/2 - 1 year acad. discrepancy. Uncertain estimate of potential</td>
<td>4/4/90</td>
<td></td>
<td></td>
<td>Recommend psych. eval. in 1990-91</td>
</tr>
<tr>
<td>One:4</td>
<td>10/16/89</td>
<td>2/12/90</td>
<td>2/22/90</td>
<td>Parent, Teacher LD</td>
<td>Observation Informal tests DTLA-2 KeyMath Woodcock Rdg Beery VMI</td>
<td>&quot;Yes-Evaluation process&quot; placed for visual-motor-auditory-visual concerns&quot;</td>
<td>slower than avg ability-academic skills 1 yr +/- discrepancy; prob. w/concept develop, vis-motor memory, verb. expr. accdg to W-J</td>
<td>3/6/90</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>One:5</td>
<td>10/16/89</td>
<td>3/12/90</td>
<td>3/21/90</td>
<td>Parents Principal Teacher LD, Speech OT</td>
<td>Beery VMI Informal Obs KeyMath Psych review K-TEA</td>
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<td></td>
<td></td>
<td></td>
<td>Kg placement</td>
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<td>Pupil ID</td>
<td>PreRef. Date</td>
<td>Refer. Date</td>
<td>Eval. Date</td>
<td>Team Members</td>
<td>Evaluation Procedures</td>
<td>Specific Disability</td>
<td>Entrance Criterion</td>
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<td>Inf screening DTLA, VMI KeyMath, Woodcock Rdg</td>
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<td>G1: word ident @ grade; comp. -.5 no signif. math weakness; problems atten/distract/socia l skills</td>
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<td>4/3/89 4/25/89</td>
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<td>slower than avg ability; rdg at mid g1; no signif math weakness; no serious concerns in spatial percep organization or verbal conceptualization. Possible aud. sequential and fine motor</td>
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<td>10/27/88</td>
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<td>I,II K-TEA Stossan</td>
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<td>10/24/89 11/14/89 10/16/89</td>
<td>11/14/90</td>
<td>1/22/90 1/4/90 2/26/90</td>
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<td>WJPEB I.II DTVMI, Frostig Test of Visual Perception, Informal samples, Motor functioning, Kinetic Family Drawing, DAP, open ended questionnaire</td>
<td>&quot;Yes&quot;</td>
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<td>Seven B</td>
<td>9/12/89</td>
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<td>11/13/89</td>
<td>LD, School Psychologist, Parent, Principal, Teacher, Coordinator</td>
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<td>(1) visual-motor perception 1-2 yrs below expectancy (2) verbal skills 1.1 - 2.2 years below expectancy (3) severe discrepancy in reading</td>
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<td>Nine:3</td>
<td>9/22/89</td>
<td>10/5/89</td>
<td>11/1/89</td>
<td>LD Parent Teacher</td>
<td>WJPEB I,II WRAT</td>
<td>Moderate deficit in written language</td>
<td>Written language score on WJPEB 1 year below grade</td>
<td>11/30/89</td>
<td></td>
<td></td>
<td>Service request says no alternate learning strategies attempted</td>
</tr>
<tr>
<td>Nine:4</td>
<td>4/8/90</td>
<td>4/8/900</td>
<td>5/1/90</td>
<td>Parent Teacher Speech LD</td>
<td>WJPEB I,II WRAT</td>
<td>memory and verbal reasoning</td>
<td>&quot;scores very low&quot; no aptitude-achievement discrepancy; Below average functioning in all areas; Rec. psych</td>
<td></td>
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<tr>
<td>Pupil ID</td>
<td>PreRef. Date</td>
<td>Referral Date</td>
<td>Eval. Date</td>
<td>Team Members</td>
<td>Evaluation Procedures</td>
<td>Specific Disability</td>
<td>Entrance Criterion</td>
<td>IEP Date</td>
<td>Exit Date</td>
<td>Exit Criterion</td>
<td>Comments</td>
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<tr>
<td>Ten:1</td>
<td></td>
<td>2/13/89</td>
<td>3/1/89</td>
<td>Parent Principal Teacher Chapter I LD, Sp, Supt., School Psy</td>
<td>WJPEB I,II DTLA-2 K-ABC, Bender DAP, Vineland, File review, Neurological (outside agency), CELF, PPVT, Observations DTVMI</td>
<td>Auditory processing, Sequential processing, Receptive language</td>
<td></td>
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<tr>
<td>Ten:2</td>
<td>Spring 1989, 10/2/89</td>
<td>10/11/89</td>
<td>12/4/89</td>
<td>Parents Teacher LD</td>
<td>WJBEP I,II DTLA-2 Classroom observation, Informal observation</td>
<td>Cognitive domain Attentional domain Motoric domain</td>
<td>Significant discrepancies in the areas listed at left</td>
<td></td>
<td></td>
<td></td>
<td>Enrolled in lang for language comprehension; moderate delay in vocab. and word recall</td>
</tr>
<tr>
<td>Pupil ID</td>
<td>PreRef. Date</td>
<td>Referral Date</td>
<td>Eval. Date</td>
<td>Team Members</td>
<td>Evaluation Procedures</td>
<td>Specific Disability</td>
<td>Entrance Criterion</td>
<td>IEP Date</td>
<td>Exit Date</td>
<td>Exit Criterion</td>
<td>Comments</td>
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<tr>
<td>Ten:3</td>
<td>3/9/88</td>
<td>5/13/88</td>
<td>10/7/88</td>
<td>Teacher, Parents, LD, Sp, School Psychologist Administrator</td>
<td>WJBE P I, II ITPA K-ABC, Bender, Children's Anxiety Scale, Aud. Discrim. Test, DAP, Burks' Behavior Rating, Vineland Adap Behavior</td>
<td>Auditory memory deficits; visual motor deficits</td>
<td>Auditory skill weakness signif. weaker than visual; aud. memory; grammatic closure are specific weak areas</td>
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<tr>
<td>Ten:4</td>
<td>10/88</td>
<td>1/27/89</td>
<td>2/27/89</td>
<td>Parents, LD, Teacher Principal Chapter I</td>
<td>WJBE P I, II DTLA-2 Informal observation VMI</td>
<td>Linguistic, cognitive, Attention, Motoric Domain, Memory Cluster, Structural Domain weak; auditory skills delay.</td>
<td>&quot;significant discrepancy&quot;</td>
<td></td>
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</tbody>
</table>
REFERENCES


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