CHARACTERISTICS OF MILDLY HANDICAPPED CHILDREN
IN A SMALL SCHOOL DISTRICT

by

Karen E. Trump

Dissertation submitted to the Faculty of the
Virginia Polytechnic Institute and State University
in partial fulfillment of the requirements for the
degree of:

DOCTOR OF EDUCATION

in

Administration and Supervision of Special Education

APPROVED:

P. Jones, Chairman

H. Cobb                      R. Covert

R. McKeen                   W. Worner

June, 1988

Blacksburg, Virginia
CHARACTERISTICS OF MILDLY HANDICAPPED CHILDREN
IN A SMALL SCHOOL DISTRICT

by

Karen E. Trump

Committee Chairman: Phil Jones
College of Education

(ABSTRACT)

The study was designed as one component of a program evaluation in special education funded by the State Department of Education in Virginia. The purpose was to identify the characteristics of mildly handicapped children who had been identified as learning disabled, educable mentally retarded and emotionally disturbed in a small school district. The parameters of the study included demographic information, school-based characteristics and assessment data. Student data were collected from the confidential folders maintained by the school district which included all written reports required for assessment and placement. Demographic data were taken from cumulative folders maintained in the schools for the students and reports developed by the building principal. A regression formula was used with the assessment data to determine if learning disabled students exhibited a severe ability-achievement discrepancy statistically. The regression formula and grade equivalent comparisons were conducted with
emotionally disturbed students to determine if the emotional disturbance was adversely affecting their educational performance as measured by standardized tests. A constant comparative method was used to analyze the minutes from eligibility committee meetings to determine the important features school-based teams used for their assignment of labels to handicapped children. Comparisons were made between the characteristics of the children identified as handicapped and the state and federal definitions for those handicapping conditions. A discriminant analysis was used to investigate the possibility of predicting which students considered eligible for special education services would be classified learning disabled or emotionally disturbed based on 10 variables. Interviews were conducted with the program evaluation stakeholders committee to solicit their feedback concerning the results of the study.
Dedication

This dissertation is dedicated to my parents, my husband, Gordon and my advisor Phil Jones. These four people know exactly how difficult it has been to get me to finish a project of this magnitude and work full time. They also knew the right buttons to push to make me want to do it and the right amount of support to give when I was truly ready to give up. So my thanks and love to you.
ACKNOWLEDGEMENTS

Completion of this project would not have been possible without the receptiveness of the school district and most of all the superintendent. Frankie Rodwell was of particular help to me in completing the overall program evaluation. The stakeholder's committee and my secretary have also been extremely helpful in finalizing this project. I would like to thank my Tech colleagues Melanie and Pat who never allowed a statement including "if I finish" to get by without commenting "you mean when you finish". And last but not least a special thanks to everyone on my dissertation committee who gave me lots of support and asked the list of "easy" questions during my defense.
# TABLE OF CONTENTS

**TITLE - CHARACTERISTICS OF MILDLY HANDICAPPED CHILDREN IN A SMALL SCHOOL DISTRICT**

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABSTRACT</td>
<td>ii</td>
</tr>
<tr>
<td>DEDICATION</td>
<td>iv</td>
</tr>
<tr>
<td>ACKNOWLEDGEMENTS</td>
<td>v</td>
</tr>
<tr>
<td>CHAPTER I - INTRODUCTION</td>
<td>1</td>
</tr>
<tr>
<td>Background</td>
<td>2</td>
</tr>
<tr>
<td>Assumptions</td>
<td>3</td>
</tr>
<tr>
<td>Statement of the Problem</td>
<td>4</td>
</tr>
<tr>
<td>Research Questions</td>
<td>4</td>
</tr>
<tr>
<td>Delimitations</td>
<td>5</td>
</tr>
<tr>
<td>Limitations</td>
<td>5</td>
</tr>
<tr>
<td>Need for the Study</td>
<td>5</td>
</tr>
<tr>
<td>Definitions of Terms</td>
<td>6</td>
</tr>
<tr>
<td>CHAPTER II - LITERATURE REVIEW</td>
<td>13</td>
</tr>
<tr>
<td>CHAPTER III - METHODOLOGY</td>
<td>48</td>
</tr>
<tr>
<td>CHAPTER IV - RESULTS</td>
<td>65</td>
</tr>
<tr>
<td>CHAPTER V - FINDINGS, CONCLUSIONS, DISCUSSION AND IMPLICATIONS</td>
<td>130</td>
</tr>
<tr>
<td>REFERENCES</td>
<td>155</td>
</tr>
<tr>
<td>APPENDIX A - STUDENT DATA FORM</td>
<td>167</td>
</tr>
<tr>
<td>APPENDIX B - STATISTICS FOR NUMBERS OF CHILDREN SERVED</td>
<td>172</td>
</tr>
</tbody>
</table>
TABLE OF CONTENTS, cont.

APPENDIX C - LD DISCREPANCY TABLE . . . . . . 174
APPENDIX D - LD ADDENDUM . . . . . . . . . . . . . 175
VITA . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 176
CHAPTER I
INTRODUCTION

Early efforts to provide special education programs to handicapped children were primarily targeted for mentally retarded or severely handicapped children. In recent years, the category of specific learning disabilities has become the single largest and fastest growing category of special education services in the United States. Identification and placement of school-aged children into learning disabilities programs is characterized by varying practices not only between states and school districts but between schools within the same district. As early as 1977, Algozzine and Sutherland criticized the identification of learning disabilities on the basis that definitions were relatively obscure, that ability-achievement discrepancies were unreliable based on most currently used assessment devices, and that little real evidence existed to support learning disabilities as a separate diagnostic category. Shepard & Smith (1981) suggest that professionals identify those pupils in need of remedial and support services as learning disabled. Is it possible to differentiate learning disabilities from other mildly handicapping conditions? What are the differences between children labeled under the handicapping classifications of learning disabled,
educable mentally retarded and emotionally disturbed? What variables predict classification within a particular category?

The purpose of this study was to investigate the identification practices for learning disabled, educable mentally retarded and emotionally disturbed children in a small school district within a framework that included school district variables.

Background

One appropriate information base for investigating issues related to identification of handicapped children is to examine the assessment data gathered about the students for decision-making purposes. Yet, these data do not represent the entire range of variables that influence the identification of children as handicapped. Factors other than assessment data can significantly contribute to the placement of a child in a special education program. Ysseldyke, Algozzine, & Thurlow (1980) suggest that placement decisions made by multidisciplinary teams have very little to do with data collected about the student. Algozzine, Christenson, and Ysseldyke (1982) suggest that the most important factor influencing placement of a student as handicapped is teacher referral. Sarason and Doris (1979) have coined this effort of decision-making teams to identify learning
disabled children as a "search for pathology". This process results in a rationale for provision of services based on the ability to verify the problems expressed by the referring teacher rather than data-based decisions.

The literature reveals that there exists an under-representation of blacks and other minority groups in programs for the learning disabled (Das, Mulcahy, & Wall, 1982) as well as an over-representation of males (Lambert & Sandoval, 1980) in programs for not only the learning disabled but also the emotionally disturbed. Documentation exists to suggest that there is an over-representation of blacks in programs for the mentally retarded (Larry P. vs. Wilson Riles, 1979).

Other possible factors that may influence identification practices are the child's age, sex, grade level tested, IQ, number of retentions, reason for referral, interventions attempted prior to referral, the child's socioeconomic status, the parent's educational background, and the local policies and procedures for identification.

Assumptions
1. Evidence exists that differentiates handicapping conditions.
2. Evidence exists that differentiates handicapped children from non-handicapped children.
3. Any sample of handicapped children is inherently biased in unknown ways by the political and social pressures that were exerted during the identification process.

4. Documentation of the identification practices for mildly handicapped children in a small school district is a valuable contribution to the field of special education.

5. Evidence exists that supports different subgroups within the population of learning disabled students.

6. It is appropriate to apply the ability-achievement discrepancy requirement to the identification of learning disabled students.

Statement of the Problem

The problem of the study was to determine the prominent factors associated with the identification practices used in a small school district for placement of mildly handicapped children who were classified as learning disabled, educable mentally retarded and emotionally disturbed. No studies were found which examine factors other than test performance. Little evidence exists on the characteristics of mildly handicapped children currently found in small school districts.

Research Questions

1. What are the characteristics of children identified as learning disabled, educable mentally retarded and
emotionally disturbed in a small school district for the past four years?

2. How well do the characteristics of these students match state and federal definitions?

3. What factors are associated with the identification practices of the school district?

Delimitations

The sample used in the study was limited to those students who had been evaluated within the past four years. This approach is used to assure examination of current identification practices.

Limitations

The study was limited by transposition of test data for purposes of implementing the regression formula. For example, when a test score was reported as a grade equivalent, a standard score was calculated to determine the ability-achievement discrepancy on an age-based normative basis. Another limitation was that the eligibility committee minutes reflect a number of teams with different members. Therefore, interpretation of rationale for placement must consider this complicating factor.

Need for the Study

The investigation of the identification practices used for labeling mildly handicapped children was part of a
larger program evaluation effort that was funded through a grant by the state education agency. This research effort was only one aspect of the activities designed under this project. Since the school district did not have local policies or procedures in place the results of the research activity were intended to assist the special education administrator with the development of these needed local policies and procedures and would also suggest areas for in-service training of the staff. In addition to this practical application, information about identification practices in small school districts is a valuable contribution to the growing knowledge base regarding the difficulties rural areas face in meeting state and federal requirements.

The majority of the current research in this area has focused on describing the characteristics of handicapped children by examining the assessment data gathered for eligibility. No research has used an approach that incorporates other school district variables associated with the decision-making process.

Definitions of Terms

**Ability -achievement discrepancy** - is the difference between a student's expected achievement as calculated using a regression equation approach and the student's actual achievement as reflected by an age-based
standardized score on an individually administered achievement test.

**Learning Disabled (LD)** - refers to those children exhibiting the characteristics set forth under the state and federal definitions of specific learning disability. The state definition is the same as the federal definition and is set forth in the Regulations Governing Special Education Programs for Handicapped Children and Youth in Virginia (1985) as follows:

k) "Specific learning disability" means a disorder in one or more of the basic psychological processes involved in understanding or in using language, spoken or written, which may manifest itself in an imperfect ability to listen, think, speak, read, write, spell, or to do mathematical calculations which adversely affects the child's educational performance. The term includes such conditions as perceptual handicaps, brain injury, minimal brain dysfunction, dyslexia, and developmental aphasia. The 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 (p. 13).
**Educable mentally retarded (EMR)** - refers to those children exhibiting the characteristics set forth under the state and federal definitions of mentally retarded. The state definition is the same as the federal definition and is set forth in the Regulations Governing Special Education Programs for Handicapped Children and Youth in Virginia (1985) as follows: "e) "Mentally retarded" means significantly subaverage general intellectual functioning, existing concurrently with deficits in adaptive behavior and manifested during the developmental period, which adversely affects a child's educational performance" (p. 10).

**Emotionally disturbed (ED)** - refers to those children exhibiting the characteristics set forth under the state and federal definitions of seriously emotionally disturbed. The state definition is the same as the federal definition and is set forth in the Regulations Governing Special Education Programs for Handicapped Children and Youth in Virginia (1985) as follows:

i) "Seriously emotionally disturbed" is defined as follows:

(1) The term means a condition exhibiting one or more of the following characteristics over a long period of time and to a marked degree which adversely affects educational performance:
(a) an inability to learn which cannot be explained by interpersonal relationships with peers and teachers;
(b) an inability to build or maintain satisfactory interpersonal relationships with peers and teachers;
(c) inappropriate types of behavior or feelings under normal circumstances;
(d) a general pervasive mood of unhappiness or depression; or
(e) a tendency to develop physical symptoms or fears associated with personal or school problems.

(2) The term includes children who are schizophrenic. The term does not include children who are socially maladjusted, unless it is determined that they are seriously emotionally disturbed (p. 11).

Eligibility committee - is a decision-making committee of professionals as set forth under the Virginia guidelines who determine if a child is eligible for special education and related services. There are many references to the eligibility committee throughout the regulations. For purposes of this section the following criteria found in the Regulations Governing Special Education Programs for Handicapped Children and Youth in Virginia (1985) are appropriate:

a) Membership of the eligibility committee shall
include, but not be limited to, school division personnel representing the disciplines providing assessment components and the special education administrator, or designee. At least one school division representative serving on the eligibility committee must have either assessed or observed the child.

b) The eligibility committee shall review the assessment components, any pertinent information reported by an agency assigned legal custody of the child, and any other special reports to determine if the child has a handicapping condition which requires a special education program and related services.

c) The eligibility committee shall follow due process procedures in the determination of eligibility and in ensuring the confidentiality of records.

d) The eligibility committee shall have a written summary of minutes which consists of essential deliberations supporting its findings as to the eligibility of each child for a special education program and related services. The minutes shall be signed by each eligibility committee member present (p. 25).
Multi-disciplinary team - is a decision-making team of professionals with representation across different disciplines for activities such as school-based screening or eligibility determinations.

Child study team - is the school based screening committee as set forth in the Regulations Governing Special Education Programs for Handicapped Children and Youth in Virginia (1985):

c) There shall be established a formal child study committee in each school to review records and other performance evidence of those children referred through a screening process. All referrals shall be made to the principal or designee. The committee shall consist of at least three persons, including:

(1) Principal, or designee;
(2) Teachers;
(3) Specialists; and
(4) Referring source, as appropriate (except when referring source would breach confidentiality of child) (p. 16-17).

Identification practices - are those procedures used by the school district from the time of student referral for evaluation due to suspected handicapping condition through eligibility committee determinations.

Individualized education program (IEP) - is an educational
program designed to meet the unique needs of a handicapped child.

Small school district - is a school district ranging in enrollment from 1 to 1,770 children located in a geographical district incorporating from less than 50 to 50,000 people.
CHAPTER II
LITERATURE REVIEW

The literature base relevant to this study includes issues related to the definitions of the three handicapping conditions under investigation, issues related to measurement and identification of these handicapping conditions and school district variables that may influence identification practices of decision making teams. These three areas will be discussed in relationship to each of the three mildly handicapping conditions under investigation.

Definition Issues

A survey of state departments of education (Mercer, Forgnone, & Wolking, 1976) documented the negative impact of the controversial climate surrounding the topic of learning disabilities. This survey revealed wide variation in the definitions of learning disabilities and identification practices among the states. The diagnostic guidelines proposed by the Bureau of Education of the Handicapped (BEH) were a direct response to the results of this survey and relied on the former definition of the National Advisory Council on Handicapped Children (NACHC), 1968, which specified the following components:

1) A disorder in one or more of the psychological processes involved in the use of language with possible
etiology in central nervous system dysfunction.

2) Exclusion of children with learning problems due primarily to visual, hearing, or motor handicaps, mental retardation, emotional disturbance, or environmental disadvantage.

3) Academic deficits involving listening, thinking, talking, reading, writing, spelling or arithmetic abilities.

The BEH proposals focused on the identification of a severe discrepancy between intellectual ability and academic achievement by a multidisciplinary team because of the difficulty in diagnosing a processing disorder or central nervous system (CNS) dysfunction. The severe discrepancy component was suggested as the central criterion for identification of a learning disability in the absence of any of the primary causes listed in the exclusionary clause. The use of a formal procedure was also proposed to introduce objectivity into determination of the severe discrepancy. This procedure was a discrepancy formula adapted from Harris (1970) as follows:

\[
\text{SDL} = \frac{\text{CA} (\text{IQ} + .7) - 2.5}{100}
\]

where SDL is a "severe discrepancy level" and CA is "chronological age". If a child's ability-achievement discrepancy was below this level a learning disability was
indicated. Criticism of this approach contributed to its exclusion from the final version of the regulations.

The federal definition of learning disabilities states:

"Specific learning disability" means a disorder in one or more of the basic psychological processes involved in understanding or in using language, spoken or written, which may manifest itself in an imperfect ability to listen, think, speak, read, write, spell, or to do mathematical calculations which adversely affects the child's educational performance. The term includes such conditions as perceptual handicaps, brain injury, minimal brain dysfunction, dyslexia, and developmental aphasia. The 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 (Education for All Handicapped Children Act of 1975, 20 U.S.C. 1401(1), (15) 300.5).

This definition is a direct result of the proposed diagnostic guidelines developed by BEH in 1976 with the exception of the proposed formula for determining a severe discrepancy between ability and achievement.

The ability-achievement discrepancy concept is found in the additional federal requirements for evaluation of a
learning disability. These requirements set forth criteria for determining the existence of a specific learning disability that include the consideration that the child does not achieve commensurate with his or her age and ability levels in one or more of the areas listed in the definition of learning disabilities when provided with learning experiences appropriate for the child's age and ability levels and that the child has a severe discrepancy between achievement and intellectual ability in one or more of the following areas: oral expression, listening comprehension, written expression, basic reading skill, reading comprehension, mathematics calculation, or mathematics reasoning.

The current foundation of learning disabilities suggests that this handicap is a disorder in the basic psychological processes involved in the use of language. This language disorder is also believed to be related to CNS dysfunction. The concept of identifying a severe discrepancy between intellectual ability and achievement was developed because of the difficulty in diagnosing a processing disorder or CNS dysfunction. However, other possible factors can contribute to a child's evaluation profile exhibiting a discrepancy between ability and achievement. Because there was a need to rule out these possible influences when identifying a true learning
disability exclusionary criteria were developed. The Code of Federal Regulations for implementing P.L.94-142 includes these exclusionary criteria as additional procedures for evaluating specific learning disabilities. They are as follows:

300.540 Additional team members.
In evaluating a child suspected of having a specific learning disability in addition to the requirements of 300.532, each public agency shall include on the multidisciplinary evaluation team:
(a)(1) The child's regular teacher; or
(2) If the child does not have a regular teacher, a regular classroom teacher qualified to teach a child of his or her age; or
(3) For a child of less than school age, an individual qualified by the State educational agency to teach a child of his or her age; and
(b) At least one person qualified to conduct individual diagnostic examinations of children, such as a school psychologist, speech-language pathologist, or remedial reading teacher.

300.541 Criteria for determining the existence of a specific learning disability.
(a) A team may determine that a child has a specific learning disability if:
(1) The child does not achieve commensurate with his or her age and ability levels in one or more of the areas listed in paragraph (a)(2) of this section, when provided with learning experiences appropriate for the child's age and ability levels; and

(b) The team may not identify a child as having a specific learning disability if the severe discrepancy between ability and achievement is primarily the result of:

(1) A visual, hearing, or motor handicap;

(2) Mental retardation;

(3) Emotional disturbance; or

(4) Environmental, cultural or economic disadvantage

300.541

300.542 Observation

(a) At least one team member other than the child's regular teacher shall observe the child's academic performance in the regular classroom setting.

(b) In the case of a child of less than school age or out of school, a team member shall observe the child in an environment appropriate for a child of that age.

300.543 Written report

(a) The team shall prepare a written report of the results of the evaluation.

(b) The report must include a statement of:
(1) Whether the child has a specific disability;
(2) The basis for making the determination;
(3) The relevant behavior noted during the observation of the child;
(4) The relationship of that behavior to the child's academic functioning;
(5) The educationally relevant medical findings, if any
(6) Whether there is a severe discrepancy between achievement and ability which is not correctable without special education and related services; and
(7) The determination of the team concerning the effects of environmental, cultural, or economic disadvantage.

c) Each team member shall certify in writing whether the report reflects his or her conclusion. If it does not reflect his or her conclusion, the team member must submit a separate statement presenting his or her conclusions (The Education for All Handicapped Children Act of 1975, 20 U.S.C. 1411 note).

The current federal definition of learning disabilities is the result of a controversial developmental period. The majority of research and theory in the field of learning disabilities can be described from three perspectives. These perspectives are the information
processing paradigm, the neuropsychological paradigm, and the applied behavior paradigm (Adelman & Taylor, 1986). Torgesen (1986) discusses the information processing paradigm from the perspective of its underlying assumption. This assumption is that "learning disabilities are caused by limitations or deficiencies in basic psychological processes that are not adequately measured by standard intelligence tests, but that are required to successfully perform academic tasks" (p. 399). The information processing paradigm focuses on how information is stored and retrieved in the mind. Terms such as coding, transforming, comparing, sorting, storing, and retrieving are believed to be important with regard to their sequence in relation to particular performance of the individual. Stanovich (1986) reports that there is current research within this paradigm that supports the importance of a variety of linguistic, or language-based processing skills in explaining early reading failure.

The underlying assumption of the neuropsychological paradigm is that "these cognitive limitations are caused by naturally occurring variation in the neurological substrata that supports all intellectual activity, or by damage to this substrate caused by accident or disease" (p. 399). This paradigm suggests that intellectual performance is a result of the degree of intactness and
organization of various brain systems involved with specific tasks. Current researchers such as Hartlage and Telzrow (1983) claim that distinguishing between sequential/linguistic and visuo-spatial processing is a useful way to characterize individual differences in brain functioning among LD children and that it is also useful in planning alternate remedial strategies for them.

The applied behavior paradigm analyses behavior in relation to observable events in the environment. The application of this theory is achieved through structuring and manipulating the environment to obtain desired changes in behavior. This approach has contributed to the development of effective educational programming for LD children despite it's limitation of not providing a conceptual framework for studying organismic variables that contribute to children's learning failure. The influence of this approach can be observed in the ability-achievement discrepancy requirement. This component of the LD definition can be documented through application of behavior analysis for measurement purposes. However, it is a widely accepted practice to document the ability-achievement discrepancy on two standardized test instruments.

The information and neuropsychological paradigms have influenced the development of several well known theories;

Controversy over the LD definition has led to the development of alternative definitions. The National Joint Committee for Learning Disabilities (NJCLD) offered the following alternative definition:

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).
Similarly, the Association for Children and Adults with Learning Disabilities (ACLD) developed an alternative definition:

Specific Learning Disabilities is a chronic condition of presumed neurological origin which selectively interferes with the development, integration, and/or demonstration of verbal and/or nonverbal abilities. Specific Learning Disabilities exists as a distinct handicapping condition in the presence of average to superior intelligence, adequate sensory and motor systems, and adequate learning opportunities. The condition varies in its manifestations and in degree of severity. Throughout life the condition can affect self-esteem, education, vocation, socialization, and/or daily living activities (taken from Adelman & Taylor, 1986, p. 515).

The influence of the three paradigms presented by Torgesen (1986) is evident in these definitions. The National Task Force (Chalfant, 1985) conducted a study to investigate all the LD definitions used by state education agencies in the United States. This study revealed five factors cited in various combinations: a component referring to (a) academic failure, (b) psychological processes, (c) exclusionary factors, (d) etiology, and (e) significant discrepancy between aptitude and achievement.
Definitional issues related to mental retardation include disagreement over what test score indicates significantly subaverage general intellectual ability, controversy over the meaning of adaptive behavior for purposes of teaching academics and the age range necessary to satisfy the term "developmental period". The federal definition of mental retardation states:

(4) "Mentally retarded" means significantly subaverage general intellectual functioning existing concurrently with deficits in adaptive behavior and manifested during the developmental period, which adversely affects a child's educational performance ((Education for All Handicapped Children Act of 1975, (20 U.S.C. 1401(1), (15) 300.5).

General intellectual functioning is operationally defined by professionals as an intelligence quotient (IQ) derived from an individually administered intelligence test. There are four subtypes of mental retardation reported in the American Psychiatric Association: Diagnostic and Statistical Manual of Mental Disorders (DSM-III). These subtypes are "(a) mild, 50 - 70 IQ level, (b) moderate, 35 - 49 IQ level, (c) severe, 20 - 34 IQ level and (d) Profound, below 20 IQ level" (p.39).

School systems have traditionally coined their own terminologies for referring to the degrees of impairment.
The first term "educable mentally retarded" refers to those persons characterized by a level of mental development impaired to the extent that the individual requires special education services but is able to function independently in society. A second commonly used term is "trainable mentally retarded" which refers to those persons characterized by a level of mental development impaired to the extent that the individual can profit from training in social and occupational skills but are unlikely to make similar gains as educable mentally retarded students in academic subjects. They may profit from vocational training and may eventually take care of themselves with moderate supervision. The third term reflects a combined term "Severe/Profound" and refers to those individuals whose level of mental impairment will require extensive life skill training and only possible supervised employment.

The concept of adaptive behavior has been influenced by three major sources. The most commonly referenced definitional source has been the American Association on Mental Deficiency (AAMD) which asserts:

Adaptive behavior is defined as the effectiveness or degree with which an individual meets the standards of personal independence and social responsibility expected for age and cultural group (AAMD Manual,
Specifications are included within the remaining explanatory language of the AAMD definition regarding the expectations for adaptive behavior for different age groups. Other sources of definitions for adaptive behavior can be found from the work of Mercer (1977), Office of Civil Rights (1972), and the President's Committee on Mental Retardation (1975). Two common features to all definitions are the recognition of the need for consideration of cultural influences and age appropriate criteria.

The requirement that significantly subaverage intellectual functioning exist concurrently with deficits in adaptive behavior and manifested during the developmental period has been technically interpreted in as "onset before age 18" (American Psychiatric Association: Diagnostic and Statistical Manual of Mental Disorders (DSM-III), p. 41). However, many professionals are reluctant to identify adolescent students as mentally retarded with no prior childhood indicators of impairment.

The definition for emotionally disturbed (ED) children is as controversial as the definition of learning disabilities. The federal definition for emotionally disturbed children states:

(8) "Seriously emotionally disturbed" is defined as
follows:

(i) The term means a condition exhibiting one or more of the following characteristics over a long period of time and to a marked degree, which adversely affects educational performance:

(A) an inability to learn which cannot be explained by intellectual, sensory, or health factors;

(B) an inability to build or maintain satisfactory interpersonal relationships with peers and teachers;

(C) inappropriate types of behaviors or feelings under normal circumstances;

(D) a general pervasive mood of unhappiness or depression; or

(E) a tendency to develop physical symptoms or fears associated with personal or school problems.

(ii) The term includes children who are schizophrenic. The term does not include children who are socially maladjusted, unless it is determined that they are emotionally disturbed (Education for All Handicapped Children, 1975, 20 U.S.C. 1401(1), (15) 300.5).

Particular areas of concern arise in every area of the definition but most notably with the interpretation of the following terms: over a long period of time and to a marked degree, an inability to learn, normal circumstances, depression and socially maladjusted.
Issues related to the definition in the area of the terms "over a long period of time and to a marked degree" center around interpretation of the intent of this requirement. Assuring that children are not identified who have transient problems appears to be the major focus for these criteria. This aspect of the definition has been criticized by Brown (personal communication, May 15, 1980) as "a political judgement rather than a professional explanation of a particular behavior pattern". The DSM-III descriptor that most accurately defines "to a marked degree" is POOR and is defined as "marked impairment in either social relations or occupational functioning (for children this is the school setting) or moderate impairment in both" (p. 29).

An important issue related to the term "inability to learn" has focused on whether the term refers to the child exhibiting deficient academic performance on a standardized test for his age and grade placement or if it refers to a child's inability to apply his academic skills as measured on a standardized test instrument in the regular classroom setting.

Concerns over interpretation of "normal circumstances" are based on situational considerations. Webster's New World Dictionary defines normal as "conforming with an acceptable standard or norm" (p. 310). An acceptable
standard or norm in a school environment may not match the child's socioeconomic, cultural or developmental status and have little to do with being emotionally disturbed.

The question of whether childhood depression is a distinct disorder remains controversial. Wicks-Nelson and Israel (1984) report that "manifestations of depression in children do seem in some ways to be different from the adult disorder, and the problems of situational specificity and developmental considerations must be incorporated into any explanation" (p. 161). In general, this problem is best described as a single internalizing syndrome characterized by anxious and withdrawn behavior (Wicks-Nelson & Israel, 1984). There is no separate DSM-III category for childhood depression. Commonly accepted factors related to childhood depression are separation and loss (Wicks-Nelson & Israel, 1984); learned helplessness (Seligman, 1974); frequent crying spells, marked sensitivity to criticism, extensive worry, sadness, listlessness, easy discouragement in the face of failure and a lack of enthusiasm and interest (Ross, 1974); significant conduct disorder, anxiety, impulsive hyperactivity, learning problems, psychosomatic problems, perfectionism and muscular tension (Leon, Kendall, & Garber (1980), withdrawal from others, loss of sleep or appetite, lethargy or agitation, feelings of guilt and
worthlessness (Davison & Neale, 1974), and the perception of a non-contingent relationship between one's behavior and the outcome of that behavior (Seligman, 1975).

Issues surrounding the term socially maladjusted focus on the assertion that the characteristics are indistinguishable from characteristics associated with emotionally disturbed children. Walker & Holland (1979) suggest the following characteristic behavioral traits of socially maladjusted children: the child hits, argues, disrupts others, doesn't listen to teacher instructions and directions, doesn't comply with teacher commands, disrupts the class, is negative or aggressive with other children, doesn't cooperate in joint activities, doesn't attend to assigned tasks, doesn't complete assignments, and breaks classroom rules deliberately. For the socially maladjusted child a pattern of social interaction characterized by conflicts that can only be resolved through authority figures is present.

Measurement and Identification Issues

Response to the controversies surrounding LD identification have led some to propose that the category of learning disabilities represents "an opinion rather than a diagnosis" (Mann, Davis, Boyer, Metz & Wolford, 1983). The formerly accepted concepts about learning disabilities are now under attack because they cannot be
measured by psychometric measures of cognitive processing skills, and because samples of poor learners exhibit the same patterns as samples of children identified as learning disabled (Ysseldyke, Algozzine, Shinn, & McGue, 1982). Therefore, these assumptions, concepts, and theories have not been useful in the development of educational practices that are valid or reliable. This situation has been described as "the repeated failure of neuropsychological or cognitive processing theories to provide explanations of learning disabilities that offer power either to make accurate prognostic statements or to program effective instruction" (Torgesen, 1986, p. 400).

Concerns that arose in response to the BEH proposed formula included deficiencies in the use of quantitative formulas generally, the inconsistencies that arose across age and IQ levels using the formula, the uncertain percentages of students who would be targeted by the approach, validity issues related to IQ and achievement measures (Danielson & Bauer, 1978) and the likely over-identification of high IQ students and under-identification of low IQ students (Algozzine, Forgnone, Mercer, & Trifletti, 1979). With regard to the identification of LD students "there is little agreement as to how to measure such concepts as discrepancy, achievement deficit, scatter, or process deficit"
(Ysseldyke, Algozzine, & Epps, 1983, p. 61). Disagreement still exists as to the specific procedures for measuring these variables.

The results of IQ tests and achievement tests are highly correlated. The achievement level predicted for students of both high and low ability regresses toward the mean compared to their actual IQ scores. The practices of evaluation teams in computing ability-achievement discrepancy have traditionally not addressed this regression factor. In fact, many local practices compare grade score equivalents to a child's IQ score or the child's current grade placement. Several ability-achievement discrepancy formulas which account for regression effects have been developed (McLeod, 1979; Cone & Wilson, 1981).

The primary concern in the area of identifying mildly retarded children is accurate assessment. The measurement of significantly subaverage general intellectual functioning has traditionally been documented through test performance on a standardized intelligence test that falls more than two standard deviations below a mean of 100. Significantly subaverage general intellectual functioning is defined as an IQ of 70 or below using this approach. However, a common practice in accordance with directions of IQ test manuals is to calculate a child's IQ score in a
range statistically calculated on the basis of a standard error of measurement. This calculation is based on the child's chronological age and a probability estimate of achieving that score on a repeated number of test administrations. Therefore, if a child obtained an absolute IQ score of 70, the IQ range estimated for the child would extend into a higher range between absolute scores of 70 to possibly as high as 80 depending on the child's age. The practice of calculating IQ ranges has generated considerable concern over the validity of identifying children whose IQ ranges extend beyond 70 absolute points as mildly retarded. The importance of including assessment information about the child's adaptive behavior becomes more crucial to identification of mild mental retardation when the practice of calculating IQ standard errors of measurement is considered. Other concerns in the accurate measurement of children's IQ for mildly retarded children are the effects of sociocultural factors, socioecomomic factors, test bias, previous educational experiences of the child, and expertise of the examiner on test performance. 

Hobsen v. Hansen (1967) was the first federal court case concerning the disproportionate number of black children in lower ability groups due to decision-making that was based on test data. A significant finding of the court was that
reliance on standardized tests to group black children contributed to the misclassification of approximately 820 of 1,272 students. The well known *Larry P. v. Wilson Riles* (1979) case responded to the disproportionate numbers of black children placed in special education programs for the mildly retarded in the Los Angeles public schools. For purposes of this study the variable to investigate is whether evidence exists that supports disproportionate numbers of black children identified as handicapped in the school district.

The requirement that the subaverage intellectual functioning exists concurrently with significant impairments in adaptive behavior and manifested during the developmental period are in place to ensure that identification of mental retardation is not based on IQ test scores alone. Despite this requirement and increased professional recognition of the importance of considering adaptive behavior, "it appears that systematic assessment of adaptive behavior is relatively infrequent at the present time" (Reynolds & Gutkin, 1982, p.220). Most measures of adaptive behavior are useful for either identification decisions or planning intervention but not both of these purposes. For purposes of this study investigation of whether a norm-referenced test (appropriate for identification decisions) or a criterion
referenced test (appropriate for intervention planning) was made.

Additional areas of concern related to measurement of adaptive behavior include the inadequacy of research on adaptive behavior; the relationship of adaptive behavior and intelligence; the effects of adaptive behavior measurement on classification and placement; the generalizability of adaptive behavior test norms; the impact of "declassifying" students on the basis of their measured adaptive behavior in public schools; and the effects of sociocultural background, socioeconimic status, and race on adaptive behavior.

Measurement and identification issues for emotionally disturbed children are extensive. This discussion will focus on the most prominent issues related to school based assessment and identification. There are no agreed upon parameters for satisfying the requirement that the child's condition is exhibited "over a long period of time and to a marked degree" found in the literature. The importance of determining how long and to what degree a child has been experiencing an emotional difficulty appears to be a practical consideration that alerts the decision-making team to the possibility that causes or conditions that may be influencing the child's problem behaviors may be realistic stressors or influences. According to Benson
(personal communication, May 15, 1980) "criteria for this requirement will most likely be consistent with a degree that falls outside the bounds of "normally" observed behavior for the particular class, school, and community". Normal in this case is most likely defined through behavioral observation and comparisons among the target child and others of his or her environment. This also implies looking at the behaviors in a number of settings.

The first area listed in the definition refers to an inability to learn which cannot be explained by intellectual, sensory or health factors. One possible intent of including this characteristic is to provide an exclusionary clause similar to the requirements for identification of learning disabilities. In this case, a process of ruling out other explanations for the child's learning difficulty would be appropriate before concluding that the cause of the problem is emotionally disturbed functioning. For purposes of this study investigation will be made to determine if this process is implemented.

The second area listed of an inability to build or maintain satisfactory interpersonal relationships with peers and teachers focuses on patterns and quality of interpersonal relationships beyond the ordinary developmental stages of childhood. Unfortunately the
developmental stages of interpersonal relationships exhibited by handicapped and non-handicapped children is not well established. The failure of children to develop interpersonal relationships usually isolates the child's growth and development in other areas of adjustment such as ability to follow directions, engage in conversation, participate in class activities and to develop friendships. Measurement of this characteristic is problematic. If a child has one or two friends, does that disqualify his ability to meet this criterion? Anecdotal reports of social skills and other reactions of the child in various situations can be a valid indicator of the depth and quality of relationships the child has built or maintained. Projective techniques or role playing can reveal the child's attitude toward relationships. For purposes of this study investigation of whether documentation is attempted for identification on this basis is appropriate.

The third area listed of inappropriate types of behavior or feelings under normal circumstances also requires documentation that is difficult to obtain in a school setting. One goal for documentation of this characteristic may be to determine functional relationships within the environment that influence particular behaviors. Observable data are needed to
document how the child is acting in particular situations and what criteria apply for appropriate behavior under that set of circumstances. The most controversial aspect of documenting this characteristic is the accuracy of determining which behaviors for a particular child under a particular set of circumstances are appropriate. The impossibility of accurate measurement in this area is a justifiable assertion. For example, which school situations reflect normal circumstances? When is noncompliance acceptable behavior from a child in school? What types of feelings should accompany normal circumstances? When are a child's feelings inappropriate and how do you know?

Measurement issues with regard to the fourth area listed in the ED definition of a general pervasive mood of unhappiness or depression are twofold. Not only is assessment difficult but qualifications of the person conducting assessment may be an issue. A child's moods are an important factor in assessment of personality characteristics. The use of such qualifiers as "general and pervasive mood" can be particularly problematic. The use of the terms unhappiness and depression can be misleading. A child may exhibit a general pervasive mood of unhappiness over the death of a parent. He or she may exhibit this unhappiness over a long period of time and to
a marked degree. Unhappiness can be fostered by a variety of factors that are not likely to be as easily discovered through a school-based assessment such as the death of a parent. Diagnosis of depression is considered by Minskoff (personal communication May 15, 1980) to require examination by a clinical psychologist as opposed to the personnel usually employed by school districts.

The final characteristic listed in the ED definition of a tendency to develop physical symptoms or fears associated with personal or school problems is controversial with regard to this characteristic satisfying the existence of a serious emotional disturbance. Childhood fears have played a major historical role in the development of modern theories of behavior (Barrios, Hartmann, and Shigetomi, 1981). Many childhood fears appear to be short lived and are common at particular ages. Table I presents some of the more commonly accepted fears for particular ages.

Physical symptoms are commonly referred to as "psychosomatic" complaints. The DSM-III diagnostic criteria for Psychogenic Pain Disorder describe some aspects of this phenomenon:

(1) a temporal relationship between an environmental stimulus that is apparently related to a psychological conflict or need and the initiation
Table 1

Common Fears at Different Age Levels

<table>
<thead>
<tr>
<th>Fears</th>
<th>Age</th>
</tr>
</thead>
<tbody>
<tr>
<td>Loud noises, loss of support</td>
<td>0 - 6 months</td>
</tr>
<tr>
<td>Strangers</td>
<td>6 - 9 months</td>
</tr>
<tr>
<td>Separation, injury, toilet</td>
<td>1st year</td>
</tr>
<tr>
<td>Imaginary creatures, death, robbers</td>
<td>2nd year</td>
</tr>
<tr>
<td>Dogs, being alone</td>
<td>3rd year</td>
</tr>
<tr>
<td>Dark</td>
<td>4th year</td>
</tr>
<tr>
<td>School, injury, natural events, social</td>
<td>6 - 12 years</td>
</tr>
<tr>
<td>Injury, social</td>
<td>13 - 18 years</td>
</tr>
<tr>
<td>Injury, natural events, sexual</td>
<td>19 + Years</td>
</tr>
</tbody>
</table>

(taken from Miller, Barrett, & Hempe, 1974)
or exacerbation of the pain.

(2) the pain's enabling the individual to avoid some activity that is noxious to him/her.

(3) the pain's enabling the individual to get support from the environment that otherwise might not be forthcoming (p. 247).

The child's complaint is assumed to have no organic base. A complicating factor is that psychologically induced pain or illness can cause physical changes such as developing an ulcer. Common psychosomatic complaints include headache, nausea, vomiting, stomach-ache, and asthma attacks. Medical evaluation is most likely the safest assessment technique for ensuring that a child's physical complaints are psychosomatic.

The clarifying statements at the end of the definition indicate that children who are schizophrenic are included within the definition but children who are socially maladjusted are to be excluded. Childhood schizophrenia falls under the DSM-III category of Pervasive Developmental Disorders. This disorder is characterized by development of the full syndrome after 30 months of age and before 12 years of age. Many basic areas of psychological development are affected to a severe degree at the same time. The child exhibits profound disturbance in social relations and multiple bizarre behaviors. These
are severe qualitative abnormalities that are not normal for any stage of development. Symptoms include inappropriate clinging, abnormalities of speech, an inability to be consoled when upset, lack of interpersonal relationships, lack of appropriate fear reactions, peculiar hand or finger movements, fantasies, over or under sensitivity to sensory stimuli, and head banging or biting. This syndrome may be difficult to differentiate from infantile autism. Appropriate areas of assessment include a history of development and behavior, an analysis of self-control, grammatical structure, delayed or immediate echolalia, pronominal reversals, pronominal aphasia, inability to use abstract terms, socially inappropriate facial expressions and gestures, ritualistic behavior, fascination with movement or music, a lack of eye contact, aversion to physical contact and affection, ability to cuddle as an infant, and the ability to develop cooperative play and friendships. Qualifications of the person conducting assessment are an issue for identification of schizophrenia are an issue as discussed for assessment of depression.

A lack of integrated literature is problematic for identification and measurement of emotional disturbance. A study conducted in Iowa (Smith, Frank, & Snider, 1985) of children placed in ED programs revealed that
approximately one-half of pairs of raters agreed that insufficient information was present in the student files for the purposes of identification decision-making. All raters considered intellectual and academic assessment data to be of high quality but the least valuable for placement decisions. The raters considered information concerning actual behavior and social functioning to be the most important but the actual data collected in these areas received the lowest quality rating. Earlier investigations suggest that it is extremely difficult to determine the specific data that are used in making placement decisions (Hollander, 1980; Morrow, Powell & Ely, 1976; Peterson & Hart, 1978).

Little research has investigated the differences between the prevalence of behavior problems of children who have been identified as ED and non-identified children or which have dealt with a restricted age range (Schultz, Salvia, & Fein, 1974, Werry & Quay, 1971). The only large-scale study to investigate the prevalence of behavior problems and social competencies of normal and emotionally disturbed children was conducted by Achenbach & Edelbrock (1981) who obtained their data from parents. A suggested appropriate criterion against which to validate identification of behavioral disordered students has been referral for mental health services (Cullinan,
Although it is sometimes inferred that emotionally disturbed children exhibit average intelligence, research in this area is inadequate. It may be that emotionally disturbed children also exhibit severe discrepancies between ability and achievement or some other equally confusing achievement pattern.

It may be that students identified as emotionally disturbed are placed on the basis of documentation of the characteristics more commonly associated with socially maladjusted characteristics as opposed to the intended characteristics of the definition of emotionally disturbed. It is difficult to determine whether these behaviors are also reflective of emotional disturbance. Decision-making is complicated further by the underlying assumption that there is a difference between the maladjusted child and the culturally disadvantaged child. Investigation for purposes of this study attempted to determine if children identified as emotionally disturbed are culturally or economically disadvantaged and if an emotional condition can be determined in addition to behaviors that may be considered to constitute social maladjustment. Many state definitions include a criterion that the child exhibit behaviors that are dangerous to self or others. It may be that this factor is also used
in decision-making.

The issue of racism in labeling and placing handicapped children was first confronted in the area of special education for emotionally disturbed children (Johnson, 1969; Kelly, 1971; Paul & Epanchin, 1981; Rhodes & Paul, 1978). Paul (1985) asserts that "nowhere are issues of multicultural, pluralistic assessment more focused than in the area of emotional disturbance" (p. 149). As mentioned earlier racial representation is a variable for investigation in the study.

The socially maladjusted child's inability to adjust to social structures may be documented through DSM-III criteria provided in the category of Conduct Disorder. The Conduct Disorder is considered to begin before age 15 but may terminate spontaneously or develop into another disorder such as Schizophrenia or Antisocial Personality Disorder. According to Slankovich (1985) because the DSM-III diagnosis of Conduct Disorder constitutes social maladjustment it should not be used for placement of emotionally disturbed children. According to Slankovich (1985) the child must exhibit another DSM-III diagnosis and it should be carefully analyzed to determine if it qualifies as a P.L.94-142 indicator of serious emotional disturbance. The handicapping condition of emotional disturbance is one area where the DSM-III criteria may be
more appropriately applied for assessment purposes than others. Criticism of the DSM-III approaches have been summarized by Begelman (1976):

excessive reliance on the medical model of abnormal behavior, facilitating the stigmatization of individuals, employing debatable theoretical notions, poor or low reliability and validity, little relevance toward prognosis, treatment, and future prediction of behavior, dehumanizing the client-therapist relationship, poor consistency of categorical groupings, promoting biases that stem from arbitrary decision rules, and promoting a perception of homogeneity among individuals labeled as the same (p. 23-24).

School District Variables

Affecting Identification of Handicapped Children

It has been hypothesized by some researchers (Algozzine, Christenson, & Ysseldyke (1982) that the most important factor influencing placement of a student as learning disabled is teacher referral. This hypothesis is based on the examination of data about the referral to placement process that indicated that of those students referred for evaluation, 92% were tested and 78% of those students tested were found eligible for special education services. Ysseldyke, Algozzine, & Thurlow (1980) suggest
that placement decisions made by multidisciplinary teams have very little to do with the data collected about the student. Combined with the practice of the previously mentioned "search for pathology" (Sarason & Doris, 1979), the resulting process may generate rationales for identification based on the ability to verify the problems expressed by the referring teacher rather than data-based decisions. Therefore, the examination of student characteristics described by those individuals referring the student for evaluation combined with an examination of minutes from the decision making team is appropriate.

Other possible factors that may influence identification practices are the composition of the eligibility team, the child's socioeconomic status, the parent's educational background and the local procedures for placement.
CHAPTER III
METHODOLOGY

Sample

The sample consisted of all children (82) who had been identified as handicapped under the classifications of learning disabled, educable mentally retarded and emotionally disturbed over the past four school years. The total population of handicapped children receiving special education and related services during 1987/88, the final year of data gathering, is 246 students. This figure includes all handicapped children identified under the variety of possible classifications. Approximately 65 of these students receive speech and/or language services on an itinerant basis (between 20 to 40 minutes per week). The learning disabled, educable mentally retarded and emotionally disturbed who are not included in the study are students who were identified more than four years ago because their placement data would not represent initially identified students. The most recently identified students are believed to represent the most up-to-date identification practices which are the focus of the study. Students transferring into the school district from another county or state were excluded from the study to maintain the integrity of the study's focus upon local identification practices.

48
Data Collection

All data were collected using a student data form (see Appendix A for form). The student data form was developed as a result of knowledge gained from three of the school districts involved in similar investigations through the state grant project and from a review of 18 confidential folders in the school district using a student data form prototype. These 18 case reviews included two folders from each handicapping condition across the four school years. One folder contained information about a child who had been identified under that category and the other contained information about a child who had been referred with concern in the handicapping area but not identified. This paired approach was intended to reveal any possible unknown limitations of the forms for the school district. Each student's test protocols were available to verify and/or expand data provided through narrative reports.

The student data form relied primarily on the following information located in the confidential folders of the students:

1. Actual test scores (taken from original psychological reports or the student's test protocol).
2. The level of special education and related services recommended for a student at the time of eligibility (reflected on the eligibility committee
3. Verification of the services actually provided (made by examination of the IEP).

4. Information concerning reason for referral, interventions attempted prior to referral and behavior problems (taken from student referral forms).

5. Information regarding unusual family or living situation (taken from the social history reports).

6. Psychological, sociological, educational, medical, and summary statements including the LD addendum information (as taken from the eligibility minutes of the placement team which summarize the important essential deliberations of the committee when the identification decision was reached).

Additional information about the parent's educational level and estimated family income had to be gathered from other sources. Parent's educational level was obtained from cumulative folders maintained in the schools. For purposes of data analysis there was only one entry for parent educational level which reflected the parent with the highest educational level achieved. The estimated income level of the child's family was made by determining if the child was on a free or reduced lunch Program. This information came from school records maintained by the building principal.
Analysis

The following data were collected: information regarding the child's age at the time of testing, sex, race, grade level at time of referral, the reason for referral, behavioral problems, interventions attempted prior to referral, the number of retentions and the grade level(s) repeated at the time of referral, the tests administered for assessment, test results, significant medical information, parent's educational level, estimated family income, the child's area of residence, unusual living or family situation, the composition of the eligibility team, the identified handicapping condition, the level of special education and related services recommended, the special education and related services actually provided, the eligibility minutes including the written report requirements for learning disabled students.

SPSS-X Crosstabs procedure was used to obtain summary statistics for the variables age, sex, race, reason for referral, grade level tested, number of retentions, IQ, income, parent's educational level, and label. This information answered in part the first research question concerning the identification of the characteristics of the handicapped children in the categories of LD, EMR and ED. Supplemental information to answer this question was
obtained from the content analysis procedure employed to analyze the information provided in the eligibility minutes.

A method referred to as constant comparison (Glaser & Strauss, 1967) was used with the eligibility minutes in order to answer the second research question of how well the characteristics of the handicapped children met State and Federal definitions. The procedure involved assigning the summary statements from the eligibility minutes to the pre-existing definitional areas. A quantitative procedure based on a regression formula was employed to determine the ability-achievement discrepancy requirement for the learning disabled students.

The process of constant comparison stimulates the researcher to think in ways that leads to both descriptive and explanatory categories. This procedure was used to provide information across all three research questions. The eligibility statements were initially categorized into a priori categories that reflected the component system employed for identification in the local school district. All eligibility committee minutes were typed into a computer under six pre-determined categories: sociological, psychological, educational, medical, summary statement and LD addendum.

The second stage of analysis involved comparisons of
the statements within the categories to allow emergence of descriptive properties within the categories. This approach requires reading the statement within one of the six categories and making a determination on tacit or intuitive grounds whether its contents are similar to the next statement within the category. If so, the two statements are grouped together. If not, the statement is set aside. Continuation with successive statement comparisons are made in this fashion resulting in the development of sets of information. A miscellaneous group emerges through this approach which is comprised of the statements set aside. The sets of information are then reviewed for overlap and adjusted accordingly. Final examination is focused on identification of possible relationships among the sets of information within the categories to determine if certain sets may be integrated. Assigning formal titles and rules for the categories is the final stage of analysis.

There are a number of different procedures which are used by local school systems to determine what constitutes a significant discrepancy between ability and achievement. The ability-achievement discrepancy is required by both state and federal regulations for identification of a child as learning disabled. Quantitative procedures have been developed by many school districts in an attempt to
address the following issues:

1. Disagreement among professional staff as to what constitutes a learning disability,
2. The variability that occurs between school districts and between schools of a district in the composition of eligibility teams,
3. Lack of a consistent operational definition, and
4. The desire to foster consistent practices within a particular school district for identification of learning disabled students.

The quantitative procedure used for this analysis was a regression equation approach frequently recognized as the best way to determine academic discrepancy (Thorndike, 1963; Wilson, 1974; McLeod, 1979; Cone & Wilson, 1981). The tests where expected achievement levels were calculated were the Wechsler Intelligence Scale for Children - Revised (WISC-R) and the Woodcock-Johnson Achievement Tests. Age-based standard scores for all tests are used for comparative purposes. Achievement test scores compared were in the area of reading. The amount of discrepancy is determined with the regression to the mean (calculated with the correlation between the aptitude and achievement tests) computed as part of the formula. Table 2 illustrates the resulting discrepancy table using this formula.
Table 2

Expectancy Table for the WISC-R and Woodcock-Johnson Achievement Test Reading Cluster Score

<table>
<thead>
<tr>
<th>IQ</th>
<th>Expected Reading Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>70</td>
<td>82</td>
</tr>
<tr>
<td>73</td>
<td>84</td>
</tr>
<tr>
<td>76</td>
<td>86</td>
</tr>
<tr>
<td>79</td>
<td>87</td>
</tr>
<tr>
<td>82</td>
<td>89</td>
</tr>
<tr>
<td>85</td>
<td>91</td>
</tr>
<tr>
<td>88</td>
<td>93</td>
</tr>
<tr>
<td>91</td>
<td>95</td>
</tr>
<tr>
<td>94</td>
<td>96</td>
</tr>
<tr>
<td>97</td>
<td>98</td>
</tr>
<tr>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>103</td>
<td>102</td>
</tr>
<tr>
<td>106</td>
<td>104</td>
</tr>
<tr>
<td>109</td>
<td>105</td>
</tr>
<tr>
<td>112</td>
<td>107</td>
</tr>
<tr>
<td>115</td>
<td>109</td>
</tr>
<tr>
<td>118</td>
<td>111</td>
</tr>
<tr>
<td>121</td>
<td>113</td>
</tr>
<tr>
<td>124</td>
<td>114</td>
</tr>
<tr>
<td>127</td>
<td>116</td>
</tr>
<tr>
<td>130</td>
<td>118</td>
</tr>
<tr>
<td>133</td>
<td>120</td>
</tr>
<tr>
<td>136</td>
<td>122</td>
</tr>
<tr>
<td>139</td>
<td>123</td>
</tr>
<tr>
<td>142</td>
<td>125</td>
</tr>
</tbody>
</table>
The expectancy table is based on the following regression formula:

Expected achievement based upon:

\[ \text{Exp} = (r \times \frac{\text{Sy}}{\text{Sx}}) \times (\text{IQ} - \text{X}) + \text{Y} \]

where:

- \( \text{exp} \) = expected achievement for a given IQ
- \( r \) = correlation between achievement and IQ test
- \( \text{Sy} \) = standard deviation of achievement test
- \( \text{Sc} \) = standard deviation of IQ test
- \( \text{IQ} \) = IQ score
- \( \text{X} \) = mean IQ for sample
- \( \text{Y} \) = mean achievement for sample

The mean IQ and achievement scores for the WISC-R and the Woodcock-Johnson Achievement Tests are 100 with the standard deviations for IQ and achievement at 15. The following estimates of correlation were used to calculate scores:

- The correlation of WISC-R to Woodcock-Johnson Reading = .60
- The correlation of WISC-R to Woodcock-Johnson Mathematics = .60
- The correlation of WISC-R to Woodcock-Johnson Written Language = .68

No discrepancy was assigned the value of 0 - 10 points, a mild discrepancy was 11 - 15 points, a significant
discrepancy was 16 - 22 points and a significant discrepancy was defined as 23 points (1.5 standard deviations) or more between the expected achievement score and the measured achievement score for children who are eight years old or above. Children under the age of eight were considered to not have sufficient exposure to academic curricula for their age to justify the use of a quantitative comparison technique.

The constant comparative method was also used to supplement descriptive and statistical approaches used to answer the third research question of identifying the factors associated with the identification practices of the school district. A multivariate procedure called discriminant function analysis was used to investigate other factors associated with the identification practices of the school district. This procedure permitted determination of the possibility of predicting (with a meaningful degree of accuracy) which students considered eligible for special education services would be classified LD or ED based on the variables identified through the literature review. For ease of reading, this approach will be referred to throughout the rest of this discussion as discriminant analysis.

Discriminant analysis is a multivariate procedure involving two groups of dependent variables and two or
more independent variables. This statistical technique was first developed by Fisher (1936) for the purpose of classifying objects into two groups (Pedhazur, 1982). It is used for predicting group membership on the basis of a variety of predictor variables. The objectives of this technique are to find the dimensions upon which groups differ the most and to predict group membership for individuals on the basis of variables that make up the dimensions (Tabachnick & Fidell, 1983).

While this approach was utilized to address the broad research question of what factors are associated with the identification practices of the school district a more specific set of research questions is generally addressed when using the discriminant analysis approach. The overall research question was which of the criteria considered by the eligibility committee are predictive of whether a child is classified as LD or ED? The specific research questions involved in using predictive discriminate analysis are summarized by Huberty (1982):

1. What is the rule used to classify units?
2. What are good estimates of separate groups and total group percents of correct classifications (hit rate)?
3. Are the "hit rate" estimates better than those expected by chance?
4. Is there a subset of the original response variables that yields a hit rate as good as, or better than, that yielded by the original set?

5. What is a reasonable ordering of the retained set of variables in terms of their relative contribution to classification accuracy?

The sample for this analysis consisted of seventy-five students each classified as either LD or ED. There were too few children identified as educable mentally retarded (seven) for inclusion in the discriminant analysis. Fifty-four of the subjects had been classified as LD and 21 as ED. The variables age, sex, race, reason for referral, grade level tested, number of retentions, IQ, income, parent's educational level, and label were the independent or predictor variables. The classification of LD and ED were the dependent variables.

Reason for referral included reading, written language, math behavior and other. Two levels of socioeconomic status were identified. Low income families were identified as those students receiving free or reduced lunch assistance. All other families not receiving free or reduced lunch assistance were considered to reflect middle to high income levels. Parent education level was assigned to the parent with the highest level of education completed.
Two-group discriminant analyses were conducted using the SPSS-X (1988) statistical package. Both direct entry and stepwise procedures were employed to investigate possible sensitivity of either approach to the data. Ten independent or predictor variables were identified from a review of the literature that may be related to classifying children LD or ED (dependent variables). Because assignments of handicapping conditions are not equal, probabilities of classification were specified to reflect probabilities of being classified as LD or ED in all districts in the state of Virginia. A more sensitive approach was attempted of computing probabilities for school districts similar in size to the one in this study. However, because they were almost identical to the state figures they were not needed in the analyses.

Discriminant analysis is used to predict which group an individual belongs to rather than an individual's score on a continuous variable (Marascuilo & Levin, 1983). The classification into groups employs a nominal scale rather than an interval scale (Shell, 1978). The discriminant analysis procedure is a special case of Canonical correlation (Baggaley, 1981) which is described by Hinkle (1979) as a correlation between groups of independent and dependent variables. The procedure involves creating two single "artificial" variables. One
artificial variable is derived from a combination of dependent variables and the other from a combination of independent variables. The procedure determines the weights to be assigned to the variables maximizing the difference between groups. The mean scores for each group are calculated and group variances determined. The goal is to maximize the difference between the mean scores for the groups. A test of significance can then be conducted on the derived "artificial variables." The test of significance used was the Wilks' Lambda Criterion which is the most commonly used for testing significance of discriminant scores and is the only one available for most computer programs (Tabachnick & Fidell, 1983). Equal means results in a Wilk's Lambda of one, while smaller values indicate increasing differences (Baggaley, 1981). The SPSS-X package also computes the Univariate F ratio to determine whether each predictor variable is significantly correlated with the discriminant function.

The next step in the discriminant analysis procedure involves combining the information from predictor variables in order to discriminate members of the groups as well as possible (Nunnally, 1967). An example of this process is provided by Nunnally (1967):

$$ Y = a_1X_1 + a_2X_2 \ldots $$

where $Y =$ scores on the discriminant function
\[ x_1 \times x_2 = \text{raw scores on predictor (independent) variables} \]
\[ a_1 \times a_2 = \text{weights for predictor (independent) variables} \]
The weights or coefficients are applied to each of the predictor variables for each individual which results in a linear equation of weighted variables that "maximizes the individual differences \textit{among} groups and minimizes the individual differences \textit{within} each group" (Shell, 1978, p.2). Once the weights have been determined, the discriminant function is obtained and each individual has a score on the Y discriminant function.

A critical value or cut-off point can be determined which will minimize errors of misclassification. Overall (1972) describes this function as one which will produce known (but unequal) probabilities of error within the two groups (Overall, 1972). Each individual's Y score is then be compared against the cutoff score and classified to a group accordingly. In two-group discriminant analysis the cutoff score is midway between the two group means.

Discriminant analysis procedures have limited applications in many research endeavors. One limitation is inherent in procedures referred to as tests of significance. It is possible for the groups to have a non-significant test of differences on all variables individually and yet be significantly different overall. The opposite situation which is considered to be less
serious is when there is a significant difference on some of the variables and not on the overall test of significance. These difficulties create limitations for interpretive purposes.

A second limitation of the discriminant analysis procedure is the degree of overlap that can exist among groups (Glasnapp, 1981). The most effective identification procedure is one that results in no overlap in group memberships. Yet, in many situations involving human subjects it is possible that groups will differ to varying degrees but overlap considerably. In these situations, consideration must be given to what percentage of error is acceptable when classifying individuals to groups. Overall (1972) addresses this issue in the following way: "the probability of error that one may be willing to accept will depend upon the relative seriousness of misclassification of individuals ..." (p.248).

A final limitation with the use of discriminant analysis is in the area of causality. A discriminant score can identify groups but does not explain in a comprehensive manner the basis for that particular group's formation. While it is possible to predict group membership, interpretations regarding the nature of that membership must be made cautiously and include other types
The final stage of analysis involved focused interviews with the staff involved in the program evaluation committee concerning the results of the research endeavor. This strategy was consistent with the larger project and is based on the belief that research should include feedback from those people it involves to aide in accurate interpretation of the results.
CHAPTER IV
RESULTS

The results of the study will correspond to the presented order of the research questions. The purpose of the first research question was to identify the characteristics of learning disabled, educable mentally retarded and emotionally disturbed children in the school district. Overall, there were 54 students identified as learning disabled, seven students identified as educable mentally retarded and 21 students identified as emotionally disturbed. Statistics reported for the school district as a whole (Virginia Department of Education, 1987) suggest that the number of students classified as ED in the school district is more than twice the number of seven other school districts of similar size in the state and the state average. The numbers of students classified as learning disabled or educable mentally retarded are more consistent with school districts of similar size and the state averages. Appendix B illustrates the actual statistics these conclusions were drawn from. Percentages for this illustration were rounded for ease of reading.

The data reflecting the specific characteristics of the handicapped children identified are grouped into the following areas: demographics, school district characteristics, and test performance characteristics.
Demographics

The most significant demographic finding was that 50% of the children came from low-income families and that 48% of the parents had not finished high school. Low-income families comprised 20% of the school population as a whole. Within the total school population of low income families, 20% of the children were placed in LD, EMR and ED programs. However, when examining just the LD, EMR and ED sample the number of low-income families is 50%. Thirty-eight percent of the parents had obtained a high school level education with a remaining 14% beyond the 12th grade. Five percent of the parent's had a college level education.

The higher prevalence of males identified as handicapped was supported by the findings with 55 (67%) boys and 27 (33%) girls. The higher frequency of boys was observed in the LD and ED category while in the EMR group girls outnumbered boys. The majority of these children were white (64%) with elevated numbers of blacks (22%) at all levels but most notably in the ED population. The minority group population is 19.2% in the community. Figures were not available regarding just the black population.

The majority of the children in the study (67%) lived in the two most populated areas of the county.
Examination of social history reports was made to determine unusual family or living situations. For LD children a number of family and living situational factors emerged. The following conditions were reported: the parent's were not married, the father was abusive, there was a handicapped sibling, the parent was disabled, the child lived with the grandparents, there were marital difficulties, there had been recent deaths in family, the child was taught at home by the parent, the father was unemployed, the mother had been recently assaulted, there was a combined family, the father couldn't read, there was a history of family turmoil, the parent had a speech impairment, there was alcoholism in the extended family, the child was removed from school due to the death of grandparent, the natural parent undermined the ex-spouse's new marriage partner, the child called the grandparents mom and dad, the child had been sexually abused by the parent, the parent lived with a boyfriend, the child had limited exposure to readiness skills prior to school and there was violent behavior of relatives in the home.

Unusual family or living conditions for EMR children were that half of them lived with their grandparents. The only other reports of an unusual home situations were that one child slept with another sibling and that one child did not have school readiness emphasized prior to school
Unusual family or living conditions for ED children were: a suicide of a family member, the parent was depressed, the parent was an alcoholic, the child had witnessed physical abuse of the parent by the other parent, the parent was abusive to the child, the parent was unstable, the parents were not married, the child's parent had been murdered in the home, the child had a poor reaction to birth of sibling, the child engaged in physical fights with the parent, the child was born to a teen-age parent, the household was comprised of various relatives, the child was moved among various relatives, and the child was abandoned by natural parent.

School District Characteristics

On the average there are approximately 20 students identified per year. Presented in table 3 are the numbers of children identified per year. The highest overall number of children identified as handicapped was during the 1985/86 school year.

The most frequently occurring reason for referral was reading (51%) followed by behavior (21%). There were five referrals for math, two for written language and one in the other category. Some judgement was needed to ascertain what the presenting problem was from the referrals. For purposes of classification children were
Table 3

Numbers of Children Identified Per Year

<table>
<thead>
<tr>
<th>School Year</th>
<th>LD</th>
<th>EMR</th>
<th>ED</th>
<th>Number of Children Identified</th>
<th>total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1984/85</td>
<td>10</td>
<td>4</td>
<td>4</td>
<td>18</td>
<td></td>
</tr>
<tr>
<td>1985/86</td>
<td>16</td>
<td>0</td>
<td>7</td>
<td>23</td>
<td></td>
</tr>
<tr>
<td>1986/87</td>
<td>11</td>
<td>1</td>
<td>8</td>
<td>20</td>
<td></td>
</tr>
<tr>
<td>1987/88</td>
<td>17</td>
<td>2</td>
<td>2</td>
<td>21</td>
<td>82</td>
</tr>
</tbody>
</table>

| total       | 54 | 7   | 21 | 82                            |       |
Examination of the teacher's comments on referral forms was made to determine the behavior problems of handicapped children. The presentations are the exact terms used by teachers to describe their students. The LD students were described by their teacher's in the following ways: sullen & tired, doesn't interact, immature, cries over reading, steals, easily frustrated, easily excited, easily distracted, short attention span, hyperactivity, refusing to enter the building, whining, doesn't complete assignments, disruptive, class clown, lazy, daydreams, won't wear glasses, shy, makes jokes, excessive talking, temper tantrums, doesn't follow directions, off-task, impulsive and restless.

The following behavioral descriptions were provided by teachers regarding problem areas for the children identified as EMR: off-task, limited vocabulary, moody, quick temper, unusual behaviors, inappropriate social behaviors, physically and verbally aggressive and difficulty getting along with others.

The following descriptors were used by teachers to describe the behavioral problems encountered with children identified as ED: temper outbursts, refuses to work, poor social interaction, bad attitude, encopresis, destroys property, runs from grounds, hyperactivity, out of seat, aggressive behavior, genital touching, picks nose,
doesn't follow directions, clings to teacher, inappropriate behavior, verbally abusive, easily frustrated, tattling, doesn't get along with others, complains frequently, easily angered, skips class, smokes at school, defiance of teachers, distracts others, doesn't turn in homework, fighting with peers, wanders halls, somatic complaints, shouts out answers, bangs things, rocks chair, kicks file cabinets, curses, refuses to come to school, punches holes in wall, threatens suicide, lies, cries, temper tantrums, attacks others, inflexible, throws rocks, easily distracted, demands teacher attention, stubborn and negative, resistent, poor attention, sense of persecution, threatens with weapons, cheats, steals, moodiness, very active, freezes when called on, binging, falls out of chairs, off task, daydreams, isolates self, inappropriate socialization, disruptive, uncooperative, immature, non-compliance, emotional outbursts, inability to get along with peers or authority figures, runs in front of the school bus, expresses emotions inappropriately and doesn't respond to punishment.

Interventions attempted prior to referral were also examined from referral forms to determine the efforts made to remediate the problem within regular options available to the teachers. The interventions reported for the LD
students are presented in table 4. Interventions attempts for LD students reported only once were repeated reading level, changed reading level, placed in lower reading group, moved from sight word to phonics approach, phonetic emphasis since visual-motor is poor, small group instruction, emphasis on vocabulary development, a ten week individualized intervention to increase sight word, less words assigned for spelling tests, child allowed to dictate written work, use of concrete objects to supplement text, adjustments in work expectations, extra time to complete assignments, taught study skills, child required to re-do assignments, use of cooking activities to reinforce concepts, self-monitoring program, taught at home full-time, exercise program for eye focusing problems, glasses and no special arrangements or strategies used.

Pre-referral interventions reported for EMR children included one-to-one instruction from a classroom aide, one-to-one instruction from parent volunteers, speech therapy, retention, placing the child in a montessori school for pre-school, and referral to general supervisor for readiness testing.

Pre-referral interventions reported for ED students are presented in Table 5. Pre-referral interventions reported with a frequency of only one were consultation with the
Table 4
Pre-Referral Interventions Reported for LD Students

<table>
<thead>
<tr>
<th>Pre-Referral Intervention</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blank</td>
<td>15 (28%)</td>
</tr>
<tr>
<td>Retention</td>
<td>10</td>
</tr>
<tr>
<td>Chapter I</td>
<td>9</td>
</tr>
<tr>
<td>Individual instruction from teacher</td>
<td>7</td>
</tr>
<tr>
<td>Individual help with assignments</td>
<td>8</td>
</tr>
<tr>
<td>Speech</td>
<td>6</td>
</tr>
<tr>
<td>Parent Conference</td>
<td>4</td>
</tr>
<tr>
<td>Individual directions</td>
<td>3</td>
</tr>
<tr>
<td>Use of parent volunteers</td>
<td>3</td>
</tr>
<tr>
<td>Work sent home</td>
<td>3</td>
</tr>
<tr>
<td>Tutoring</td>
<td>3</td>
</tr>
<tr>
<td>Counseling</td>
<td>2</td>
</tr>
<tr>
<td>Seated near teacher</td>
<td>2</td>
</tr>
<tr>
<td>Behavioral contracts</td>
<td>2</td>
</tr>
<tr>
<td>Changed reading level</td>
<td>2</td>
</tr>
<tr>
<td>Reward system</td>
<td>2</td>
</tr>
<tr>
<td>Individual work with classroom aide</td>
<td>2</td>
</tr>
</tbody>
</table>
Table 5

Pre-Referral Interventions Reported for ED Students

<table>
<thead>
<tr>
<th>Pre-Referral Intervention</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Behavioral Programs</td>
<td>13 (62%)</td>
</tr>
<tr>
<td>Counseling</td>
<td>6</td>
</tr>
<tr>
<td>Parent Contacts</td>
<td>7</td>
</tr>
<tr>
<td>Family Therapy</td>
<td>3</td>
</tr>
<tr>
<td>Consultation with psychologist</td>
<td>2</td>
</tr>
<tr>
<td>Teacher consultation</td>
<td>3</td>
</tr>
<tr>
<td>Speech</td>
<td>2</td>
</tr>
<tr>
<td>Chapter I</td>
<td>2</td>
</tr>
<tr>
<td>Seating Near Teacher</td>
<td>2</td>
</tr>
<tr>
<td>Changed teacher</td>
<td>2</td>
</tr>
</tbody>
</table>
guidance counselor, social skills training, less work assigned, simplified directions, lower expectations, more time to complete assignments, isolated lunch, removal of P.E., detention, punishment, checklist between school and parents, hospitalization, tutoring and consultation with the local mental health center.

More than half (63%) of the children tested had been retained once with 26% never having been retained. The number of children identified who had never been retained were predominantly within the LD group. Eleven percent of the students had been retained more than once.

The majority of LD children were tested at ages 7, 8 and 9. EMR children were, with the exception of one child, tested at ages 6 and 7. There was a wider age range for ED children where the majority of the children were tested at ages 6, 7, 8 and 9. Most children were tested during their first (28%) or second (27%) grade year. Third-graders were the next most frequently tested grade level group at 17%.

Information was gathered about the tests administered for assessment purposes. In the area of psychological tests the following tests were used for determining a child's IQ:

1. Wechsler Intelligence Scale for Children - Revised-

This test was administered to 80% of the LD students,
67% of the ED students and 57% of the EMR students.

2. Kaufman Assessment Battery for Children – This test was administered to 11% of the LD students, 57% of the EMR children and 24% of the ED students.

3. McCarthy Scales of Children's Ability – This test was administered to two LD students, one EMR student and one ED student.

4. Stanford-Binet Intelligence Test – This test was administered to one EMR student.

Seven students were administered two intelligence tests.

In the area of personality assessment there were primarily six tests used on a regular basis. These personality tests and the percentage of children taking them are presented in Table 6. Additional tests give with less frequency (less than 10% of the children) were the Children's Personality Questionnaire, Tasks of Emotional Development, the Hand Test, the Children's Anxiety Scale, the Button's Projective Technique, the Self-Evaluation Questionnaire, the Interpersonal Checklist, the House-Tree-Person, the Vineland Scales of Adaptive Behavior, the Pupil Rating Scale, the Thematic Aperception Test, the Robert's Aperception Test for Children and the Childhood Depression Inventory.

In the area of educational testing there were ten tests used on a regular basis. These educational tests are
Table 6

Personality Tests Administered

<table>
<thead>
<tr>
<th>Test Administered</th>
<th>Percentage of Children</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sentence Completion</td>
<td>54%</td>
</tr>
<tr>
<td>Kinetic Family Drawings</td>
<td>52%</td>
</tr>
<tr>
<td>Burk's Behavior Rating Scales</td>
<td>43%</td>
</tr>
<tr>
<td>Kinetic School Drawings</td>
<td>29%</td>
</tr>
<tr>
<td>Piers-Harris Children's Self-Concept Scale</td>
<td>24%</td>
</tr>
<tr>
<td>Draw-A-Person</td>
<td>18%</td>
</tr>
</tbody>
</table>
presented in Table 7 with the percentage of handicapped children taking them. Additional tests administered with low frequency (less than five) were the Spache Diagnostic Reading Scales, the Wepman Auditory Discrimination, the Tests of Written Spelling, the Neurological Dysfunction of Children Test, the Kaufman Tests of Achievement, the Gates McGinitie Reading Tests, the Stanford-Binet Memory Scales, the Informal Comprehension Inventory, the Informal Word Analysis Test, the Basic Sight Word Test, the Dolch Sight Words Test, and the Motor-Free Perception Test. The average IQ scores were 97 for the LD students, 67 for the EMR students and 93 for the ED students. The eligibility committee minutes reveal that all IQ statements for children were recorded in standard error of measurement ranges based on the child's age. These statements based on range of functioning suggest that the majority of IQ scores for children identified as LD was in the average range (37%) with 21% in the low average to average range, 13% within the low average range and 10% below the low average range. IQ statements for children labeled EMR revealed that the scores for the majority of these children fell outside of the mentally deficient range which is considered to be necessary for satisfying the significantly subaverage intellectual ability criterion. Three of the seven students had IQ scores falling well
Table 7

**Educational Tests Administered**

<table>
<thead>
<tr>
<th>Test Administered</th>
<th>Percentage of Children</th>
</tr>
</thead>
<tbody>
<tr>
<td>Woodcock-Johnson Tests of Achievement</td>
<td>39%</td>
</tr>
<tr>
<td>The Woodcock Reading Mastery Test</td>
<td>27%</td>
</tr>
<tr>
<td>Peabody Picture Vocabulary Test - Revised</td>
<td>13%</td>
</tr>
<tr>
<td>The Boehm Test of Basic Concepts</td>
<td>13%</td>
</tr>
<tr>
<td>The KeyMath Diagnostic Arithmetic Test</td>
<td>12%</td>
</tr>
<tr>
<td>The Wide Range Achievement Test</td>
<td>11%</td>
</tr>
<tr>
<td>The Achievement Tests of the</td>
<td></td>
</tr>
<tr>
<td>Kaufman Assessment Battery for Children</td>
<td>11%</td>
</tr>
<tr>
<td>The Tests of Written Language</td>
<td>11%</td>
</tr>
<tr>
<td>The Peabody Individual Achievement Test</td>
<td>10%</td>
</tr>
<tr>
<td>The Visual-Aural Digit Span Test</td>
<td>9%</td>
</tr>
</tbody>
</table>
within the mentally deficient range. Two of the students scored in the mentally deficient to borderline range, one student scored in the borderline range and one student scored in the borderline to low average range. The most frequently reported IQ range for students classified as ED was the average range. In an overall analysis, 48% were performing below the average range. Only two students were observed to perform in the average to high average range with no students in ranges beyond that category. Two students did not have IQ statements included in the eligibility minutes.

Significant medical history was investigated as a factor associated with identification practices of the school district. These indicators were taken from all available sources in the child's confidential folder including the medical form when available. The medical problems identified for learning disabled students are: (a) ear infections (30%), (b) pneumonia (13%), (c) bronchitis (11%), (d) birth complications (9%), (e) broken bones (7%) and (f) head injury (7%). Medical concerns mentioned with low frequency (one-two) were developmental delays, premature birth, allergies, sinus conditions, vision, poor eating habits, poor dentition, heart murmur, hearing loss, hernia, ruptured eardrum, serious prenatal
illness of mother, speech delays, fall from 2nd story window, seizures, hit in face with baseball bat, tumors, enuresis, salmonella, color blindness, chronic nose bleeds, chronic constipation, nodules on vocal chords, molluscum contagiosum on chest wall, Reyes Syndrome, and appendectomy.

Medical problems of EMR children were not detailed but included frequent ear infections for 50% of the children. Problems reported once were a hospitalization for three months and a case of bronchitis.

The medical problems of ED students were (a) ear infections (24%), (b) heart murmer (10%), (c) hearing loss (10%) and somatic complaints (10%). Medical concerns with a frequency of one report each were possible organic brain syndrome, hydrocephalus, neurological impairment, allergies, fluctuating blood pressure, obesity, binging, asthma, bronchitis, anorexia tendencies, infancy, hospitalization, broken bones, encopresis, enuresis, convulsions with fever, and kidney infection.

The second research task was to determine how well the characteristics of the handicapped children matched state and federal definitions and guidelines for placement. The federal definitions are identical to the state definitions in all three handicapping areas of this study. There was one difference found between federal and state regulations
in the area of the accompanying regulations for the LD identification requirements. The federal regulations specify that the identification of learning disabled children must include additional team members. The state regulations addressed these additional team members with the exception of the regular classroom teacher. The constant comparative method was used with summary statements from eligibility minutes to ascertain the basis for identification. The use of a regression approach was used to examine the ability-achievement discrepancy for LD students. Using eligibility committee summary statements for EMR and ED definition comparisons worked well. However, because eligibility minutes for LD students include additional written report requirements, two related sections of these reports were helpful to the analysis of how well the district met the LD definition. The additional statements included were the basis for making the determination that the child has a specific learning disability and the statement reflecting the team members conclusions. The inclusion of the written report requirements by the school district was not initiated until the 1985/86 school year. Therefore, only those summary statements found in the eligibility minutes similar to the EMR and ED procedure could used for the LD students during the 1984/85 school year.
The definition of learning disabilities involves identification of a disorder in one or more of the basic psychological processes involved in understanding or in using language whether it is spoken or written. This disorder is further described as one that may manifest itself in an imperfect ability to listen, think, speak, read, write, spell, or to do mathematical calculations. The disorder is intended to include such conditions as perceptual handicaps, brain injury, minimal brain dysfunction, dyslexia, and developmental aphasia. Children to be excluded from identification as learning disabled include those who have learning problems which are primarily the result of other causes. The causes specified in the definition are visual, hearing, or motor handicaps; mental retardation; emotional disturbance; and environmental, cultural, or economic disadvantage.

The accompanying federal regulations to the LD definition specify that determination of program eligibility is achieved through documentation by a comprehensive evaluation that the child does not achieve commensurate with age and ability in oral expression, listening comprehension, written expression, basic reading skill, reading comprehension, mathematics calculation, or mathematics reasoning. The additional piece of the requirement indicates that this discrepancy in achieving
commensurate with age and ability exists when the child has been provided with learning experiences appropriate for the individual's age and ability levels (Education for All Handicapped Children Act of 1975, (20 U.S.C. 1401(1), (15) 300.541). Only two students were identified on the basis of consideration of a discrepancy statement and a statement that the child was not achieving commensurate with age and ability when provided with appropriate learning experiences. Eighty-three percent of the students were placed on the basis of the concept of discrepancy between ability and achievement while 13% of the students were identified on the basis of a language disorder. It was not possible to identify the basis for identification of the remaining 4% of the students.

There were 45 "discrepancy" statements in the eligibility minutes. Twenty of these statements described the children as having either a "severe discrepancy between ability and achievement" (13) or some other type of statement using the term "severe discrepancy" (seven). Thirteen statements described the children as having a "significant discrepancy between ability and achievement" (four) or some other type of statement using the term "significant discrepancy" (nine). Twelve statements described the children as having "a discrepancy between ability and achievement" (seven) or some other type of
statement using the term "a discrepancy" (five) or some other type of statement using the term "a discrepancy". There was a miscellaneous category of nine (17%) other types of statements used for a rationale for placement that included: (a) low performance in remedial reading (two cases), (b) deficits in reading and written language with higher ability in math and oral expression, (c) does not progress commensurate with potential due to handwriting difficulty, (d) variation between intellectual performance and achievement, (e) learning deficits with behavior overtones, (f) average intelligence with substantial difference between verbal and performance skills and (g) average ability with specific deficits in basic reading and written language (spelling).

The results of the regression formula used to statistically determine the discrepancy of the children identified suggest a 25% hit rate with regard to eligibility committees identifying a "severe" discrepancy. The team exhibited a 50% rate of agreement with regard to calling a discrepancy significant and having it fall in a significant rating as opposed to a severe rating. Appendix C illustrates the results of applying the formula in the form of a discrepancy table.

The LD regulations requiring a "severe discrepancy" between ability and achievement is followed by
areas of achievement. Examination of the minutes reveals that 39% of the students did not have the achievement area specified. The instances where the achievement area was specified are presented in Table 9. Statements with similar specificity to the areas listed in the regulations such as math calculation, math reasoning, basic reading skill, reading comprehension, and listening comprehension were found for 11 (20%) students in addition to the original statements indicating the deficit area. No instance of documentation in the area of oral expression was found.

A grouping of interest emerged from using the constant comparative method with the LD eligibility minutes. This grouping included statements about specific descriptions related to the child's learning disability. The first set of descriptors used the term "processing" and included the following types of references: (a) processing deficits, (b) sequential processing, (c) processing oral information, (d) auditory processing, (e) processing difficulties and (f) processing language. Other descriptors included reports of deficits in memory, perception, visual-motor and conceptualization. Specific descriptors not included elsewhere in this section under rationales for placement are: (a) difficulty with sequencing, (b) sequencing deficits, (c) delays in fine-
## Table 8

### Specified Achievement Areas

<table>
<thead>
<tr>
<th>Achievement Area</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reading</td>
<td>12</td>
</tr>
<tr>
<td>Reading and reading comprehension</td>
<td>1</td>
</tr>
<tr>
<td>Reading and written language</td>
<td>9</td>
</tr>
<tr>
<td>Math and reading</td>
<td>2</td>
</tr>
<tr>
<td>Math</td>
<td>2</td>
</tr>
<tr>
<td>Spelling</td>
<td>1</td>
</tr>
<tr>
<td>Reading, written language and math</td>
<td>3</td>
</tr>
<tr>
<td>Written language and math</td>
<td>1</td>
</tr>
<tr>
<td>Written language and expressive language</td>
<td>1</td>
</tr>
<tr>
<td>Handwriting</td>
<td>1</td>
</tr>
</tbody>
</table>
motor, (d) auditory discrimination, (e) trouble remembering words, (f) sound blend, (g) sensitivity to failure, (h) auditory and visual discrimination and (i) overactive.

Five students were described on the basis of problems with attention. Statements relative to the child's deficits in attention abilities included using the terms attention and concentration, attentional, distractibility, and attention and impulse control.

More than half (57%) of the children identified on the basis of a language disorder included a rationale for placement based on an ability-achievement discrepancy. The remaining students identified on the basis of a language disorder had no basis or rationale statement. Five students were receiving speech/language services at the time of identification. Two students identified on the basis of a language disorder did not have a speech and/or language component as part of the comprehensive evaluation. Rather it was subsequently recommended at eligibility to be completed after placement. Two students were not receiving speech/language services at the time of identification, did not have the speech/language evaluation component as part of the evaluation and did not have a recommendation for evaluation at eligibility. Four additional students
identified as learning disabled on a basis other than language disorder were recommended for speech/language evaluations after placement.

Other additional requirements for identification of children as learning disabled specify that a written report must be prepared describing the results of the evaluation. The report must include a statement of:

(1) Whether the child has a specific disability;
(2) The basis for making the determination;
(3) The relevant behavior noted during the observation of the child;
(4) The relationship of that behavior to the child's academic functioning;
(5) The educationally relevant medical findings, if any;
(6) Whether there is a severe discrepancy between achievement and ability which is not correctable without special education and related services; and
(7) The determination of the team concerning the effects of environmental, cultural, or economic disadvantage.

(8) Each team member shall certify in writing whether the report reflects his or her conclusion. If it does not reflect his or her conclusion, the team member must submit a separate statement
team member must submit a separate statement presenting his or her conclusions (The Education for All Handicapped Children Act of 1975, 20 U.S.C. 1411 note).

The school district implemented the use of a form to supplement the eligibility committee minutes sheet to address these additional written report requirements. This form is called Addendum to Eligibility Committee Summary of Deliberations for Learning Disabled Student. See Appendix D for LD addendum. The additional written report requirements were provided for 78% of the total sample of LD students. As mentioned previously the inclusion of the written report requirements was not initiated until the 1985/86 school year. There was one missing LD addendum for the remainder of the sample.

The first item on the LD addendum combined two of the report requirements. The first part of the item was a statement specifying that the above student was determined to have a specific learning disability. This section went on to prompt the team to indicate their basis for making the determination. Because this section was used for analysis earlier it will not be addressed again in this section.

The second item on the LD addendum combined two more of the requirements in a section for description of the
relevant behavior noted during the observation of the child and the relationship of that behavior to the student's academic functioning. One section was left blank for the LD addendum forms in this area. These statements revealed that 44% of the LD children exhibited appropriate behavior in the classroom or that behavior was not a concern. The most frequently reported relevant behavior (20%) was difficulty with distractibility and attention. Low frequency reports (below five) addressed the following areas: ability to work independently in class, statements that the child was working at a frustration level, the child had difficulty following directions, the child was hyperactive, the child was immature and the child was withdrawn. One statement specifically described behavior observed during assessment of the child.

The third item of the LD addendum provided space for indicating any educationally relevant medical findings. Two LD addendum forms were left blank in this section. A majority (77%) of the response here indicated no educationally relevant medical findings. The medical findings reported with low frequency (2 or less) were found in the following areas: ear infections, visual problems, poor coordination, significant birth complications and further diagnostic medical work needed.
The fourth item on the LD addendum was presented as a question about whether the information indicates that there is a severe discrepancy between achievement and ability which is not correctable without special education and/or related services followed by the prompt that if the answer to this question is yes to provide a description. All addendum forms were completed in this section. More than half (52%) of these responses referred to the previous interventions attempted with the student. All statements of this type were found for eligibility minutes during the 1986/87 and 1987/88 school years. Nineteen percent of the responses were statements targeted to the nature and severity of the child's discrepancy. All of these statements were in the minutes for the 1985/86 school year. A final grouping of 14% of the responses addressed the child's need for specialized or individualized instruction. All of these statements were found in the minutes for the 1985/86 school year.

The remaining statements were in a miscellaneous category where no pattern emerges regarding their content. They are descriptive statements about the child's performance levels.

The fifth item on the LD addendum requested description of the effects of any environmental, cultural, or economic disadvantage as determined by the team. All LD addendum
93

(67%) had no indication of disadvantage in environmental, cultural or economic areas as determined by the team. Environmental factors (17%) were the most frequently cited area for difficulties. The influences discussed were limited opportunities of the parents to attend to educational needs, marital discord, stress of a handicapped sibling, absenteeism, deaths in the family and fires destroying the home. Cultural influences were mentioned twice. One was a general statement without clarification of the problem and one specific to the problem being based on culturally different values. Financial limitations were mentioned twice. Two statements were assigned to a miscellaneous category where it was indicated that the child's situation was "adequate" and "stable".

The last item on the LD addendum was a request to provide a statement reflecting team member's conclusions. This last requirement was satisfied in two ways by the school district. Signature sections were located on the eligibility form for those staff members to indicate their support or opposition to the decision and the last item on the LD addendum provides a statement reflecting members' conclusions. During the last year that data were collected, this form was revised. A section now referred to as a summary statement was placed on the eligibility
minutes form so that this statement would be provided for all handicapped children. The forwarding of a summary statement to the IEP committee is a state requirement for all handicapped children. The revised format for eligibility minutes satisfies two areas for the school district. Because this section was used for analysis earlier it will not be addressed separately in this section. During the 1984/85 school year eligibility committee minutes were signed by committee members but there was no indication of whether this signature reflected support or opposition of the decision. There was one missing addendum for the remaining school years.

The final federal requirement for LD identification addresses additional team members. The first requirement is to include the child's teacher; or in cases where the child does not have a regular teacher, a regular classroom teacher qualified to teach a child of his or her age. In the case of children of less than school age, an individual qualified by the state educational agency to teach a child of his or her age should be included. The team must also include at least one person qualified to conduct individual diagnostic examinations of children, such as a school psychologist, speech-language pathologist, or remedial reading teacher. The requirement for eligibility to include the child's teacher or a
regular classroom teacher qualified to teach a child of his or her age could not be found in the state regulations. However, the requirement for inclusion of a person qualified to conduct individual diagnostic examinations of children was part of the State requirement. This study did not include any children of less than school age. With regard to inclusion of the child's teacher, the school district did so on 83% of the eligibility committee meetings. Examination of the children who did not have their teacher's in attendance revealed 67% were at the K - 3 grade level with the remaining 33% at the secondary level. Inclusion of a person qualified to conduct diagnostic evaluations occurred 95% of the time when that person is interpreted to be a school psychologist and 97% of the time when that person is considered to be a special education teacher.

The definition of educable mentally retarded requires that a child exhibit significantly subaverage general intellectual functioning that exists concurrently with deficits in adaptive behavior and is also manifested during the developmental period. Adaptive behavior is considered to be behavior that is effective in meeting the natural and social demands of one's environment. The rationale for identification of EMR students in the school district included five students identified as having
significantly subaverage intelligence, one student identified as having substantial delays in cognitive and motor areas with some development significantly subaverage and one student as scoring in the EMR to borderline range with a flat profile. This latter case was unusual in comparison to the other six because it further specified that the child had low average ability in non-verbal areas. The rationale for identification in this case was that the child would require special education assistance in order to develop adequate academic success in school. Other descriptors used as a basis for identification of children as EMR were:

1. Consistently delayed development in all areas,
2. Sub-average intellectual capacity but generally overall poor academic achievement, and
3. Performance seems to be rather evenly low across the board.

In the area of adaptive behavior only three of the seven evaluations measured adaptive behavior or addressed it in any way in the eligibility minutes. No reference was made in the three instances of reporting adaptive behavior to when it was manifested. This analysis was complicated by the definition not specifying or defining operationally the "developmental period".

The definition for emotional disturbance means a
condition exhibiting one or more of five characteristics over a long period of time and to a marked degree, which adversely affect a child's educational performance. These five areas are listed below with the left margin reflecting how many of the 21 students were identified using that characteristic.

1 student  

a. An inability to learn which cannot be explained by intellectual, sensory or health factors;

3 students  
b. An inability to build or maintain satisfactory interpersonal relationships with peers and teachers;

2 students  
c. Inappropriate types of behavior or feelings under normal circumstances;

1 student  
d. A general pervasive mood of unhappiness or depression; or

0 students  
e. A tendency to develop physical symptoms or fears associated with personal or school problems.

One student was assigned as a and b, one student was assigned as a and c, one student was assigned as a, c and e and five students were assigned as b and c.

The definition includes children who are schizophrenic but excludes children who are socially maladjusted, unless
it is determined that they are emotionally disturbed. No children were identified as schizophrenic and no discussion or use of the term "socially maladjusted" could be found.

The other six cases not considered to properly fit into the existing criteria are presented as they were reported:

1. S has exhibited a serious emotional disturbance difficulty for a long period of time.
2. This need for services is justified by disruptive and off task behaviors which interferes significantly with educational progress.
3. Based upon the emotional distress S seems to be experiencing and has experienced over a long period of time and to a marked degree, the eligibility committee feels that S be considered eligible for special education and served as an emotionally disturbed child.
4. The eligibility committee feels that S's inability to attend class, attention getting and acting behaviors are at a level severe enough to warrant placement within an ED setting.
5. Due to the severe nature of S's interfering behaviors, high level and duration of these activities, the eligibility committee feels that S should be considered for services provided by a qualified teacher of severe emotional difficulties.
6. Based upon S's significant emotional and behavioral difficulties the eligibility committee recommends that S be considered eligible for services provided to emotionally disturbed children.

The requirement that a child exhibit one of the five listed characteristics "over a long period of time and to a marked degree" for identification as emotionally disturbed is referred to in this section as the intensity and duration requirement. There were four references related specifically to the requirement of "over a long period of time and to a marked degree" using that terminology and one referenced both areas using other terms. Other descriptors that were used to refer to these requirements are presented in Table 10. Overall use of both terms for a student either formally or using other terms occurred in 38% of the eligibility minutes. Use of only one term formally or informally occurred in 14% of the cases. Only one of these classifications referred to the long period of time requirement while all the rest addressed the marked degree aspect.

The ED definition requires that the condition adversely affects educational performance. This reference to the effect of the emotional disturbance on the child's educational performance was found in only 24% of the students eligibility minutes. Only one reference used the
Table 9
Other Descriptors Used to Refer to the Intensity and Duration Requirement

<table>
<thead>
<tr>
<th>Long Period of Time</th>
<th>Marked Degree</th>
</tr>
</thead>
<tbody>
<tr>
<td>on-going</td>
<td>high level</td>
</tr>
<tr>
<td>over a period of time</td>
<td>severe nature</td>
</tr>
<tr>
<td>high duration of these activities</td>
<td>significant problem</td>
</tr>
<tr>
<td>existed since S entered school</td>
<td>incredibly</td>
</tr>
<tr>
<td>(severe) this year</td>
<td>significant</td>
</tr>
<tr>
<td></td>
<td>severe enough</td>
</tr>
</tbody>
</table>
actual terms "adversely affects". Other descriptors found that satisfy this requirement are (a) interferes significantly, (b) interferes with his obvious educational performance, (c) a significant problem toward his academic development and (d) impacting substantially.

It was possible to compute a discrepancy score for ten students in the area of reading using the LD regression formula. Six of these students scored above their expected achievement. Two students had no discrepancy (0-10 points) between their ability and reading achievement, one student had a mild discrepancy (11-15 points) and one student exhibited a significant (16-22 points) discrepancy. The remaining 11 students had diagnostic reading scores reflected in grade equivalents. Four of these students achieved grade equivalents consistent with their placement, five students achieved grade equivalents in the grade level below their grade placement, one student achieved a grade equivalent two grade levels below grade placement and one student achieved a grade equivalent three grade levels below grade placement.

The final section of the ED definition refers to the inclusion of children who are schizophrenic and to the exclusion of children who are socially maladjusted. There were no references in the minutes to either of these conditions.
The third research question identified the factors associated with the identification practices of the school district. The constant comparative method was used to analyze the total eligibility minutes to discover factors related to the identification practices. In addition to this approach determinations were made about the professional staff in attendance at eligibility meeting, the recommended level of service and the actual special education services provided.

In addition to these approaches a discriminant analysis was conducted to determine which students considered eligible for special education services would be identified as either LD or ED based on the variables identified through the literature review and also the variables generated for research purposes. There were too few EMR students for inclusion in this analysis.

Finally, interviews were conducted with the staff on two different days to present the results of the study and solicit their feedback about the data. A period of ten days was allowed for any written feedback that they may want to add after the interview sessions.

One aspect about the identification practices of the school district that was learned from content analysis of eligibility minutes was that the school district gathers essentially the same core evaluation components for all
children including Psychological, Social History, Educational, Medical and other areas related to the condition as requested. The analysis of eligibility minutes is presented in the component areas. An indication is made with reference to the frequency of statements within a particular component area. A percentage is reported in the subcategories or groupings that emerged through analysis which reflects the relationship of these subcategories to the total number of statements in the component area. Through this method the evaluation components are presented in rank order with the most reported statements to the least reported statements. Subcategories within a component area are similarly ranked.

I. Educational Information

Educational statements comprised the majority of the information found in eligibility committee reports with 537 total entries. Analysis of these educational statements revealed five general categories: description of academic skills, current status of the child, behavior, emotional indicators and reason for referral. A miscellaneous category emerged with these data that includes comments that didn't make sense grammatically possibly due to typographical errors. The descriptions of the five general categories are as follows ranked from the
most frequently mentioned to the least frequently mentioned:

1. Description of Academic skills - These statements comprised the majority of the educational information (53%) and included both teacher report and descriptions of skill development as revealed through standardized testing. Because it was not always possible to determine if statements about a child's skills were based on skills observed in the classroom or test indicators these statements were grouped together. References to reading skills included readiness development for younger children, basic reading skill development such as knowledge of letters and their sounds, decoding skills and reading comprehension. Information about written language focused on knowledge of grammar and punctuation, spelling ability, organization, ability to read what has been written and word usage. For 18% of the students reference was made to the child's handwriting ability. In the area of mathematics 14 students were identified as having particular difficulty. Math information included computational ability, math concepts, memorization of multiplication, rote ability, homework and speed.

In 48% of the student's eligibility reports there were combined achievement statements exhibiting the following combinations: reading and math; reading and written
language; reading, math, and written language; and reading, math, written language and knowledge (information).

There was discussion in five instances regarding a comparison between math and reading ability with math skills higher. Standardized test performance indicators were presented in the following formats: descriptive ranges such as average, grade equivalents, percentiles, standard scores, standard score with the grade equivalent in parenthesis, standard score with percentiles in parenthesis, standard score, percentile and grade equivalent displayed together in a chart. Descriptive statements not related to particular academic skills emerged in this category. The most frequently mentioned area was the child's inability to follow directions. Other areas addressed in this section include information processing, ability to make things, quality of play, visual perceptual ability, concept development, best subject performance, fluctuation of performance, ability to work independently, ability to verbalize, listening skills, general information acquisition, ability to answer questions in class, facial expressions, preparation for class, ability to apply what is learned, and copying of other's work.

2. Current status of the child - These statements
comprised 23% of the total educational statements. The topics discussed under this category included retention, the child's attendance, the child's grades, distractibility, memory, speech, test taking and study skills, the child's effort put forth in the classroom, educational progress prior to referral, where the child was placed with regard to instructional grouping, available school services received and what individualized approaches have been attempted with the child including their degree of success.

4. Behavior - Statements about student's behavior comprised 13% of the educational statements. Comments in this area were primarily related to difficulties of children identified as emotionally disturbed, however 15 other students had descriptive comments concerning their behavior in school included in the eligibility minutes. Areas of concern were the child's work habits, participation in class activities, response to behavioral contracting, activity level, aggressiveness, attention-seeking behavior, acting-out, ability to interact with other children and adults, temper tantrums, reaction to reinforcement and punishment, impulsivity, overall self-control, inappropriate sexual behavior, social skills and the child's verbalizations.

5. Emotional Indicators - Statements emerging in this
section comprised 11% of the educational statements. Comments in this area focused on the child's motivation, frustration with work presented, confidence with regard to academic ability, affect, anxiety levels, maturity, shyness, fatigue levels, ability to enter into competitive situations, attitudes toward school, fears, mood swings, beligerence, ability to control anger, friendships, perceptions about school and interpersonal difficulties, daydreaming, imagination ability and the quality of relationships with others.

6. Reason for Referral - The reason for referral was either a general statement or a very specific statement. There were only seven references overall within the minutes to the reason for referral constituting approximately 1% of the educational statements.

7. Classroom Observation

There were 58 statements found in eligibility committee minutes regarding classroom observations. The classroom observations were most often conducted by the school psychologist during the 1984/85 and 1985/86 school years. Changes in administration resulted in a broadening of staff members involved in conducting classroom observations for the 1986/87 and 1987/88 school years. This information was analyzed individually without assignment to the Educational category because of its
potential overlap with educational statements about the child creating a double entry situation. However, it will be presented in the Educational section due to its relevance to the educational arena.

There were 30 classroom observations conducted for the handicapped students (37%). Eight specific areas emerged with regard to statements made in classroom observations. They are as follows and are rank ordered from most frequently mentioned to the least frequently mentioned:

a) Academic Skills - These statements described what the child exhibited in the way of academic skills while being observed. Such skills included accuracy levels on assignment, ability to follow directions given by the teacher, reliance on the instructor to complete work, whether the child volunteered answers or participated during lessons and the child's pace with regard to completing assignments (first or last to finish).

b) Appropriate Classroom Behavior - The focus of these comments was on the child's effort put forth in class, ability to stay on task, ability to wait for teacher's attention and motivation.

c) Off-task - The off-task behaviors identified were looking out the window, thumb sucking, rushing through assignments, looking at other student's work to find place, inability to attend to activity, playing with toys
on desk and ignoring the activity going on.

d) Interaction with Peers - Areas reported with regard to interaction with peers were in the areas of isolating from others, engaging in parallel play, tattling, non-directed activity, remarks made to others, attempts to engage others and others reactions to initiations for interaction.

e) Setting - This category described what subject area was being taught while the observation was being conducted.

f) Out of Seat - These statements indicated the child's activity level and ability to stay in an assigned seat.

g) Person Conducting Observation - These explanatory remarks were made to indicate the professional position of the person conducting the observation not the person's name.

h) Attention-seeking Behavior - These statements indicated behaviors of calling out, being out of seat, asking irrelevant questions and non-specific references of stating that the child was "attention-seeking".

8. Speech and Language - There were 66 statements made about students' speech and language functioning found in the eligibility minutes. This evaluation component was not assigned to the educational component because it is
considered an additional component that is only gathered in specific cases when requested. These statements were grouped into the following 4 subcategories and are rank ordered: performance indicators, current therapy, behavioral aspects and recommendations.

a. Performance indicators - This subcategory comprised 85% of the speech and language statements. The majority of these indicators were descriptive in nature with only five indications of a student's performance on the evaluation reported as a score.

b. Current therapy - This information indicated the frequency and duration of therapy per week, goals of therapy and the child's progress. Statements in this area constituted 6% of the overall statements.

c. Behavioral aspects - This information included how the child reacted during evaluation and behavioral aspects of the speech and language difficulty. This information was infrequently reported representing 5% of the total statements.

d. Recommendations - This section was focused on the need for further diagnostic evaluation or the recommendation to dismiss the child from current services. These statements were the least frequently found and represented 3% of the total statements.

In the area of speech and language evaluation, 41% of
the students were evaluated at the time of referral. Of those children evaluated 59% were identified as eligible for services. There were nine students identified in the area of articulation impairment, eight students identified in the area of language impairment and three students identified in both areas.

9. Vocational

There were four statements found in the eligibility committee minutes related to vocational interests of upper-grade level students. There were nine students tested in the grade range of 7 - 12. Due to the low frequency of these statements they were not assigned to the Educational component.

II. Psychological

There were 515 statements about psychological information found in the eligibility minutes. Overall, psychological information emerged in the five following areas: strengths and weaknesses, statement of IQ, behavior observed during assessment, personality functioning and visual-motor ability.

1. Strengths and Weaknesses - Information about the child's strengths and weaknesses as a learner comprised 40% of the psychological statements. These data focused on the child's performance on the IQ test administered. Standardized educational tests were administered by the
school psychologists but were included under the educational information section. Strengths reported in order of the most frequently mentioned to least frequently mentioned for the students are presented in Table 11. Categories mention once were motor, verbal/spatial, problem solving.

Weaknesses reported in order of the most frequently mentioned to least frequently mentioned for the students are presented in Table 12. Categories mentioned once were visual-processing, understanding cause and effect, nonverbal, holistic thinking, organizing parts into a whole, social, time limits, adaptive behavior, nonreflectiveness and no strengths or weaknesses.

2. Statement of IQ - Statements about a child's IQ comprised 20% of the total psychological statements in eligibility minutes. There were IQ statements for 96% of the students. This information was always presented in an individually determined range employing a standard error of measurement calculated for the child's age. Two cases were missing a statement of IQ. These were cases where the eligibility committee had been re-convened at a later date because the child had not been identified at the initial eligibility meeting. It was not clear if the IQ was considered for these children but it was not included in the minutes. Under this section reference was made
Table 10

Strengths Reported in Psychological Reports

<table>
<thead>
<tr>
<th>Strengths</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>reasoning/conceptual thinking</td>
<td>1</td>
</tr>
<tr>
<td>perceptual organization</td>
<td>2</td>
</tr>
<tr>
<td>auditory memory</td>
<td>3</td>
</tr>
<tr>
<td>social functioning</td>
<td>4</td>
</tr>
<tr>
<td>visual-motor</td>
<td>4</td>
</tr>
<tr>
<td>attention and concentration</td>
<td>5</td>
</tr>
<tr>
<td>attention to detail</td>
<td>5</td>
</tr>
<tr>
<td>mental arithmetic computation</td>
<td>5</td>
</tr>
<tr>
<td>verbal</td>
<td>5</td>
</tr>
<tr>
<td>speed in copying</td>
<td>5</td>
</tr>
<tr>
<td>sequencing</td>
<td>5</td>
</tr>
<tr>
<td>simple assembly skills</td>
<td>6</td>
</tr>
<tr>
<td>visual</td>
<td>6</td>
</tr>
<tr>
<td>motor free</td>
<td>6</td>
</tr>
<tr>
<td>memory</td>
<td>6</td>
</tr>
<tr>
<td>Weaknesses</td>
<td>Rank</td>
</tr>
<tr>
<td>----------------------------------------</td>
<td>------</td>
</tr>
<tr>
<td>auditory memory</td>
<td>1</td>
</tr>
<tr>
<td>attention and concentration</td>
<td>2</td>
</tr>
<tr>
<td>acquired knowledge</td>
<td>3</td>
</tr>
<tr>
<td>memory</td>
<td>4</td>
</tr>
<tr>
<td>motor</td>
<td>5</td>
</tr>
<tr>
<td>attention to detail</td>
<td>6</td>
</tr>
<tr>
<td>sequential</td>
<td>6</td>
</tr>
<tr>
<td>visual-motor</td>
<td>7</td>
</tr>
<tr>
<td>speed in copying</td>
<td>7</td>
</tr>
<tr>
<td>vocabulary development</td>
<td>7</td>
</tr>
<tr>
<td>concept development</td>
<td>7</td>
</tr>
<tr>
<td>problem solving</td>
<td>8</td>
</tr>
<tr>
<td>perceptual</td>
<td>9</td>
</tr>
<tr>
<td>simple assembly skills</td>
<td>9</td>
</tr>
<tr>
<td>spatial relationships</td>
<td>10</td>
</tr>
<tr>
<td>verbal intelligence</td>
<td>10</td>
</tr>
<tr>
<td>abstract thinking</td>
<td>10</td>
</tr>
<tr>
<td>reasoning</td>
<td>10</td>
</tr>
<tr>
<td>organizational</td>
<td>10</td>
</tr>
<tr>
<td>language development</td>
<td>10</td>
</tr>
</tbody>
</table>
regarding differences between Verbal and Performance IQ scores and subtest scatter.

3. Behavior Observed During Assessment - Statements about the child's behavior during the testing sessions constituted 14% of the psychological statements. This information addressed whether the child exhibited appropriate interaction with the examiner and the quality of rapport during the testing. Other factors discussed were the child's ability to attend to tasks, the child's pace while working, speech and language abilities, emotional indicators and the child's comments revealed to the examiner.

4. Personality Functioning - Statements about a child's personality functioning were reflected in 14% of the psychological statements. Personality assessment was individualized and child specific creating a widely diverse set of data. However, the following three areas emerged which are considered to incorporate sets of similar concerns and are presented in a rank order from the most frequently mentioned to the least frequently mentioned:

a. Adjustment - Information in these areas was drawn from a variety of sources such as test performance, observation during assessment and teacher reports. Descriptors used included the child's affect, social
skills, maturity, dependency, self-confidence, cooperativeness with others and self-expectations.

b. Self-Concept - The references to children having poor or low self-concept were stated as such without supporting reasons for the conclusion.

c. Behavioral - References toward behavioral aspects of personality functioning were overwhelmingly aimed at those students who were identified as emotionally disturbed. Descriptors in this area included aggressiveness, inflexibility, inability to respond to stressors appropriately, acting-out to resolve conflicts, low tolerance for frustration, poor impulse control and hyperactivity.

5. Visual-Motor - Statements about children's visual-motor abilities comprised 12% if the total psychological statements in eligibility minutes. A majority of the eligibility minutes included a statement about the child's performance on a measure of visual-motor ability with 72% of all students having such a statement in their eligibility report. This area was evaluated in all cases with the exception of one by the school psychologists in their battery of tests. Only nine of the 60 evaluations in this area indicated no impairments. The evaluation instruments used for evaluation were the Bender Visual-Motor Gestalt Test and the Developemental Test of Visual-
Motor Integration. The results were presented in five different formats: ranges of below average, average, etc; statements of delayed or not delayed; percentile scores; and age-equivalents. A miscellaneous category included six summary statements that included other ways to address the child's performance such as; poor performance, appear to be difficult, a particular weakness, abilities are immature.

III. Social History

There were a total of 433 statements concerning home information. The parameters of the sociological information included in the minutes was extensive resulting in the emergence of the following 11 broad subcategories: family and parent characteristics, emotional/behavioral functioning and personality descriptors, the child's guardianship, school related issues, developmental history, parent's employment, parent's marital status, prenatal and birth factors, child's interests, medical concerns and the parent's educational level.

1. Family and Parent Characteristics - There were 92 (21%) statements made about characteristics of the family and the parents. These characteristics were previous services from other agencies, counseling services, alcoholism, psychological disturbances of the parents,
family support, significant childhood factors of the parents, family stressors, financial matters, status of siblings and the child's interaction with siblings.

2. Emotional/Behavioral Functioning and Personality Descriptors - There were 91 (21%) statements regarding the child's emotional/behavioral functioning and personality descriptors. The descriptors included how well the child gets along with others, ability to control temper, distractibility, activity level, aggressiveness, attitudes, behavioral difficulties, maturity, affect, self-concept and the child's ability to separate from home to enter school.

3. Child's Guardianship - There were 52 (12%) statements regarding who the child lived with combined with an indication of the guardianship involved with the residence. While this item is ranked third in relation to social history statements it is ranked first with regard to the most frequently mentioned social history item for all students where it was gathered for 63% of the students. Twenty-two (42%) children lived with both natural parents, 16 (3%) children lived with a natural parent and a step-parent, seven (14%) children lived with a single parent, three (6%) children lived with a natural parent and an unmarried partner, two (4%) children lived with their grandparents and one child lived with a legal
guardian. One child lived in an unspecified setting referred to as an "extended situation". One child was reported to live with different relatives. Four children had one natural parent who was deceased.

4. School Related Issues - There were 49 (11%) statements related to the parent's perception of the child's difficulties in school, aspects of the evaluation process and other school concerns. Reported aspects of school functioning were in the areas of academic skill level, homework, memory ability, attention and concentration ability, attitudes of the parents and the child toward school, emphasis and support of parents toward schooling, self-confidence, opinion of special education services, attitude about retention, school moves, parents participation in school activities and aspects related to other schools the child has attended.

5. Developmental History - There were 35 (8%) statements about the child's developmental history with 83% of these statements indicating normal acquisition of developmental milestones as reported by the parents. Of the five indications of delayed history, talking was the identified problem. Mention of developmental history was the next most consistent social history finding for all students where it was gathered for 43% of the students.

6. Parent's Employment - There were 3 (7%) statements
concerning the parent's employment with several references as to the parent's occupation. Seventeen (55%) of the families reported both parents working, ten (32%) had one parent working and four (13%) of the families had neither parent employed.

7. Parent's Marital Status - There were 28 (7%) statements regarding the parents' marital status. These statements referred to explanatory remarks about the parents' marriage, indications of separations and divorce, custody issues, visitation schedules of the non-resident parent and the child's adjustment to marital difficulties and divorce agreements.

8. Prenatal and Birth Factors - There were 24 (6%) statements made regarding prenatal and birth factors. Prenatal factors included alcohol consumption during pregnancy, toximia, emotional status of the mother and obesity of the mother. Birth factors included delivery method, any complications during birth and the child's birth weight.

9. Child's Interests - There were 15 (4%) references to the child's interests. There was little overlap in interest areas.

10. Medical Concerns - There were 13 (3%) statements made specifying that information was provided by the parent concerning medical aspects of the parent or the
Medical concerns reported were in the areas of vision, seizure disorders, high blood pressure, hospitalizations, obesity, eating habits, ear infections, premature birth and high temperatures.

11. Parent's Educational Level - Three references were made to parents whose educational levels were limited.

IV. Medical Information

There were 154 medical statements found in the eligibility committee minutes. A formal medical evaluation was indicated for 63% of the students, while 27% of the students had statements that indicated they had normal physical and health status. It was not possible to make an accurate count of medical examinations conducted by review of the actual medical forms in the confidential folders because reports from the School Nurse who coordinates the medical examinations suggests that this documentation is not a reliable indicator due to record keeping problems in the school district. Accurate reporting would require a review of the physicians records which was not possible. The medical concerns reported are rank ordered in Table 13 from most frequently mentioned to least frequently mentioned. Concerns mentioned with a frequency of one were high blood pressure, allergies, headaches and dizziness, hyperactivity, fetal alcohol syndrome, pink eye and a severe reaction to an improperly
Table 12

Medical Concerns Reported

<table>
<thead>
<tr>
<th>Medical Problem</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>ear infections</td>
<td>1</td>
</tr>
<tr>
<td>birth complications</td>
<td>2</td>
</tr>
<tr>
<td>urinalysis findings</td>
<td>3</td>
</tr>
<tr>
<td>questionable hearing status</td>
<td>4</td>
</tr>
<tr>
<td>heart murmur</td>
<td>4</td>
</tr>
<tr>
<td>hospitalization/surgeries</td>
<td>4</td>
</tr>
<tr>
<td>broken bones/injuries</td>
<td>5</td>
</tr>
<tr>
<td>encopresis</td>
<td>6</td>
</tr>
<tr>
<td>pneumonia</td>
<td>6</td>
</tr>
<tr>
<td>bronchitis</td>
<td>6</td>
</tr>
<tr>
<td>obesity</td>
<td>7</td>
</tr>
<tr>
<td>somatic complaints</td>
<td>7</td>
</tr>
<tr>
<td>vocal nodules</td>
<td>7</td>
</tr>
</tbody>
</table>
prescribed medication regime. Three children were recommended for further evaluation.

Vision and Hearing Screening

The screening of children's vision and hearing was conducted by the school nurse as part of the medical evaluation and will, therefore be included under this section. There were 79 statements about vision and hearing screening.

Results for vision screening were included in eligibility minutes for 54% of the students. Within this group 70% passed the screening. Two students failed the screening and one exhibited strabismus resulting in a recommendation for full evaluation. Four students had concerns expressed in the areas of muscle balance, questionable screening results, need for recheck in one year and child's glasses were broken and unavailable for the screening activity. Five statements described the child's screening results with no indication of whether that performance constituted passing or failing. One report had a descriptive statement regarding the prescription for glasses the previous year.

Results for hearing screening were included in eligibility minutes for 43% of the students. Within this group 89% passed screening. Three children were reported as having "suspect" hearing on one side indicating a
recheck was necessary and one child failed the screening.

There was considerable overlap in these reports. Where vision screening results were reported, hearing screening results were also reported. Six children screened for hearing were not on the vision screening list and 11 children screened for vision were not on the hearing list.

An area examined by the study was attendance of professional staff at eligibility meetings. Results of this information suggests that the most prominent staff member positions represented at eligibility meetings were special education teachers, the school psychologist, the visiting teacher, the child's teacher, the special education administrator and the Chapter I teacher. Information about the special education administrator's attendance was contaminated due to the dual role of this position in the school district where it is combined with the position of school psychologist. The figure reported represents those meetings where the special education administrator attended in the role of administrator. Two special education teachers attended 33% of the meetings and three special education teachers were in attendance for 9% of the meetings. Attempts to verify the participation of parents at these meetings were unsuccessful. The participation of staff members is presented in Table 14.
Table 13
Participation of Staff Members in Eligibility Meetings

<table>
<thead>
<tr>
<th>Position</th>
<th>Percentage Attended</th>
</tr>
</thead>
<tbody>
<tr>
<td>Special Education teacher</td>
<td>97%</td>
</tr>
<tr>
<td>School Psychologist</td>
<td>95%</td>
</tr>
<tr>
<td>Visiting Teacher</td>
<td>90%</td>
</tr>
<tr>
<td>Child's Teacher</td>
<td>79%</td>
</tr>
<tr>
<td>Special Education Administrator</td>
<td>78%</td>
</tr>
<tr>
<td>Chapter I teacher</td>
<td>50%</td>
</tr>
<tr>
<td>Speech Pathologist</td>
<td>38%</td>
</tr>
<tr>
<td>Guidance Counselor</td>
<td>35%</td>
</tr>
<tr>
<td>School Nurse</td>
<td>29%</td>
</tr>
<tr>
<td>Principal</td>
<td>26%</td>
</tr>
<tr>
<td>General Supervisor</td>
<td>16%</td>
</tr>
<tr>
<td>Assistant Principal</td>
<td>1%</td>
</tr>
</tbody>
</table>
Examination was made of the recommended levels of services at eligibility meetings and also the actual special education and related services provided to the child. For the 1984/85 school year a recommended level of service was not included. The level of service provided was 72% resource, 22% self-contained and one child not placed. The 1985/86 school year resulted in 65% of the students recommended for resource, 22% recommended for self-contained, one student recommended for support services, one student recommended for residential services and one student not placed. Recommended related services were four students in the area of counseling. One student was referred for a speech/language evaluation. Two students were not placed on a level consistent with the recommended level of service due to parental refusal of services. During the 1986/87 school year resource services were recommended for 55% of the students, 40% for self-contained. One student was recommended for further evaluation before level of service was recommended. Related services recommended were counseling (55%) and speech/language (15%). One child recommended for self-contained was placed in resource. Only 36% of the children recommended for counseling services received them. During the 1987/88 school year 76% of the students were recommended for resource services, 24% recommended
for self-contained. One child recommended for resource was placed in a religious school by the parents. Related services recommended were 14% in the area of counseling and 24% in the area of speech/language. Thirty-three percent of the students referred for counseling received services and all children recommended for speech/language services received them.

The discriminant analysis revealed that procedures based on equal probabilities (.50) and probabilities based on the actual percentages of handicapped children for the state (LD = .867, ED = .132) resulted in identical statistical results. The loadings or correlations between the top three predictor variable and the canonical discriminant function when using a direct entry method were: (a) behavior, 0.96313, (b) reading, -0.58694 and (c) parent educational level, -0.20892. An examination of univariate F statistics imply that the LD and ED group differ significantly on three predictor variables. behavior (F = 90.76, Wilk's = 0.44576) and reading (F = 33.71, Wilk's = 0.68412) were significant at the .0000 level. Parent education level (F = 4.270, Wilk's = 0.94473) was significant at the .0423 level. The top two predictor variables and the canonical discriminant function when using a stepwise entry method were (a) behavior, 0.97863 and (b) income, -0.19435. An
examination of univariate F statistics imply that the LD and ED groups differ significantly on two predictor variables. Behavior (F = 90.76, Wilk's = 0.4457) and income (F = 46.73, Wilk's = 0.4351) were significant at the .0000 level.

The response of the staff committee members to these findings was important because the committee included these student's special education teachers. In the area of learning disabilities discussion focused on the discrepancy issues, test interpretation, language development and the classroom observations.

Discussion for EMR children in the school district focused on the school district practice of serving EMR students in LD classrooms and their need for more drill to pick up basic academic skills. The use of the visiting teacher as an appropriate source for collecting formal assessment of children's adaptive behavior was discussed based on the past inclusion of this as an informal section of the social history report.

Response to information revealed about ED children included an interest in investigating the possibility of implementing a Head Start program in the school district to meet the needs of disadvantaged children. The facts related to socioeconomic background were discussed in relation to how these children entered school. The belief
was expressed that these families exhibited more stress and that their children had delays in language and lack of exposure to readiness skills needed for school success. Teachers reported that many of the children had never used a pair of scissors, had books with pictures and that learning to participate in groups of children with much higher skills appeared to be frustrating for them. Also, parent involvement was difficult. It appeared from all comments that the ED child's need for services and the classroom need for a learning environment conducive to learning for other children outweighed the issues related to accurate ED identification and exclusion of children from ED services on the basis of social maladjustment.

In the area of testing, teachers expressed their desire to understand IQ tests better in terms of what the child had to do to be successful. In response to the findings about visual-motor functioning, the staff believe that all children had difficulties with these kinds of tasks. It was suggested that the psychologist spend more time on explaining how the scores obtained should be interpreted before presenting the results of a particular child at an eligibility meeting.
CHAPTER V
FINDINGS, CONCLUSIONS, DISCUSSION AND IMPLICATIONS

FINDINGS

Characteristics of the Handicapped Children

There were 82 children included in the study with 54 identified as learning disabled, seven identified as educable mentally retarded and 21 identified as emotionally disturbed. ED children were identified at twice the rate of other districts of similar size and also the state average, while LD and EMR identification was similar to other districts and the state averages. There was an overrepresentation of males in the LD and ED groups with the reverse true in the EMR group. The numbers of black children identified as handicapped was higher than that reflected in the community with the most notable overrepresentation of blacks occurring in the ED category. Demographic findings indicate that approximately 50% of the children came from low socioeconomic background while this characteristic was reflected in only 20% of the total school population. Most handicapped children lived in the two most populated areas of the county. The majority of the children were tested at ages 7, 8 and 9 years of age with EMR children tested primarily at age 6. Sixty-three percent of the children had been retained once. The average IQ for LD
children was 97, EMR was 67 and ED was 93. The most frequently reported medical problem for all groups was ear infections.

Results of the study indicate that the majority of learning disabled students in the school district are males, are white and have a socioeconomic background of medium-to-high income level with parents' educational levels at the 12th grade or above. Most learning disabled children lived in the two most populated areas of the county. The most frequent reason for referral was reading. However, written language concerns accompanied 24% of these reading referrals. The behavior problems reported for LD children described off-task behaviors, high activity levels and emotional sensitivity about their learning difficulties. The following pre-referral interventions were reported for LD students and are in rank order:

1. None
2. Retention
3. Chapter 1 services
4. Individual instruction from the teacher
5. Individual help with assignments
6. Speech/language services

Fifty-nine percent of the LD children had been retained once with 13% retained twice or more. The majority of
children in this classification were tested at age 7, 8 or nine as opposed to the EMR children who were tested at younger ages. The grade levels where LD children were primarily tested were 1st, 2nd and 3rd grades. The average IQ for this group was 97, although documentation was found for students in all IQ ranges except the mentally deficient range. The major medical problems reported for LD children were chronic ear infections, pneumonia and bronchitis.

The majority of children identified as EMR are females, are whites and are primarily children with a socioeconomic background of low-income level and parents' educational level below 12th grade. Six of the seven students resided within one of the two most populated areas of the county. The reason for referral without exception was reading, although request for evaluation in all areas was found for the majority of these referrals. Behavioral problems reported for EMR children included limited social skills and limited language abilities. Pre-referral interventions for these children were reported with too low frequency for generalization. Only one student had never been retained. Most EMR children were tested at age 6 or 7. The grade level where all but one child were tested was 1st grade. The average IQ for this group was 67, however the majority of the children's individual IQ
ranges exceeded the individually determined ranges for significantly subaverage classification. The majority of the EMR children were not assessed in the area of adaptive behavior. When adaptive behavior was measured, no indication was made about whether the test was normatively based or criterion based or whether the child's deficits in adaptive behavior were manifested during the developmental period. The only medical concern expressed was in the area of ear infections where more than half of the students were reported to have chronic conditions.

The students classified as ED are primarily males, are whites, and are from a socioeconomic background of low-income level and parents' educational level below 12th grade. Most students live within the two most populated areas of the county. The most frequently stated reason for referral is behavior with few student referrals indicating a specific academic concern. Behavioral problems reported by ED children's teachers were extensive describing non-compliant and aggressive behaviors. Pre-referral interventions for ED students were consistently attempted with a majority of these reported as behavioral programs. Seeking counseling and consultation assistance was another frequently reported strategy. A significant percentage of the ED students had been retained once. The age level tested for ED students spanned a greater range
than either LD or EMR children with 67% tested at ages 6, 7, 8 and 9. The grade levels where most ED children were tested were 1st, 2nd and 3rd grade as was indicated for LD students. The average IQ for ED students was 93. The IQ statements were primarily in the low average, low average to average and average to high average range with no students falling in higher ranges. The primary medical problems for ED children were ear infections, heart murmurs, hearing loss and somatic complaints.

How Well the Characteristics Met the Definitions

The match between the characteristics of learning disabled students and the state and federal definitions was not well established. Little reference was specifically made that LD children had a disorder in one or more of the basic psychological processes involved in understanding and in using language. Use of the terms deficits in processing, perception, memory, visual-motor, attention and conceptualization occurred for 41% of the students. These terms were found primarily in the sections of the eligibility minutes reporting psychological and educational information.

Thirteen percent of the students were identified on the basis of a language disorder.

Examination of the test protocols, psychological reports and eligibility minutes revealed that presentation
of tests scores to the eligibility committees employed a variety of formats such as reporting of grade equivalents, percentiles, standard scores and descriptive approaches. Similarly, these reports used the terms academic achievement and academic performance interchangeably. At times they were used to indicate the child's performance on a standardized test and at other times they were used to describe the child's ability to succeed in the classroom.

There were five different approaches for determination of the ability-achievement discrepancy. There was the traditional concept of discrepancy between the child's IQ score and academic achievement score on a standardized achievement test. The second approach was to identify the child on the basis of a discrepancy between IQ score and the child's expected grade level. The third approach was to identify the child on the basis of a discrepancy between his Verbal IQ and Performance IQ scores. A fourth approach was to identify the student on the basis of a discrepancy between academic scores on reading and math. The fifth approach was to identify the child as having a discrepancy between the score obtained on an achievement test and the expected age score for the test. The methods for determining a discrepancy between ability and achievement did not apply a regression formula. The
results of the regression formula used in the study to statistically determine the discrepancy of the children identified suggest only one fourth of the students met the criteria for exhibiting a "severe" discrepancy. The teams exhibited agreement half of the time with regard to referring to a discrepancy as "significant" and having it fall in a significant range statistically and calling a discrepancy "severe" and having it fall in a severe range statistically. Sixty-one percent of the students had a discrepancy achievement area reported reflecting basically the same achievement areas of the state and federal LD definitions.

Use of the terms brain injury, minimal brain dysfunction, dyslexia or developmental aphasia was not found.

The eligibility committee minutes did not address the section of the LD definition about whether the child is not achieving at a rate commensurate with his/her age and ability levels in one or more of the areas listed when provided with learning experiences appropriate for the individual's age and ability levels. However, this rationale was consistently used for the LD addendum item #4 but there was no documentation regarding how that statement was determined. A related term "adversely affects educational performance" was applied in 17% of the
students' minutes. However, this term is formerly part of the ED definition.

Classroom observations were not consistently conducted for LD identification. Information was found in the classroom observation sections that did not reflect a report of an observation conducted in the regular classroom. The staff conducting observations do so without knowledge of why the child was referred.

An exclusionary discussion of problems which are primarily the result of visual, hearing or motor handicaps was found in only one case. No instances of consideration related to the exclusionary clauses of mental retardation or emotional disturbance were found in the eligibility minutes. The exclusionary clause for environmental, cultural or economic disadvantage was addressed with environmental factors the most frequently addressed item. Little reference to cultural disadvantage was found. The only specific discussion focused on how culturally different values influenced the child. It was not possible to determine how many culturally different children were considered for eligibility. Eleven percent of the low-income families were recognized by the committee as having financial limitations.

The requirement for additional team members for LD identification was met in most cases by the school
district. A significant finding was that the requirement for the team to include the child's teacher or a regular classroom teacher qualified to teach a child of his or her age was not specified in the State regulations but is a federal requirement. The study did not include any children of less than school age. The school district included the child's teacher at eligibility 83% of the time. Examination of meetings held without the child's regular teachers revealed 67% were at the K - 3 grade level with the remaining 33% at the secondary level. Inclusion of a person qualified to conduct diagnostic evaluations occurred 95% of the time when that person is interpreted to be a school psychologist and 97% of the time when that person is considered to be a special education teacher.

The characteristics of children identified as EMR did not match the state and federal definition with regard to consistent application of the requirement for significantly subaverage general intellectual functioning or for the requirement that this subaverage intellectual functioning exist concurrently with deficits in adaptive behavior manifested during the developmental period. The best match to the definition was that these children's IQ ranged into the level associated with significantly subaverage general intellectual functioning.
The students identified as ED met the definition well with regard to exhibiting a condition in one or more of the required areas listed in the definition. However, less than half of the decisions considered the intensity and duration requirement. The primary focus of the teams when this dimension was considered was the "to a marked degree" criterion as opposed to the condition existing "over a long period of time". Evidence that the emotional disturbance was adversely affecting the child's educational performance was the most infrequently addressed area. Examination of reading scores to determine if the students' emotional difficulties were affecting their educational performance indicated that a majority (62%) of the students scored at or above their grade level. No students were identified on the basis of schizophrenia. No discussion or use of the term socially maladjusted was found in the minutes for ED children. One third of the students had been referred to the local mental health clinic at the time of referral.

Factors Associated with Identification Practices

The eligibility committee minutes revealed that educational data comprised the majority of the information reported and focused on description of the child's academic skills, current status in school, behavior, emotional indicators and reason for referral.
Psychological information was referenced with the second highest rate of frequency in the minutes. Information about psychological functioning of the child included strengths and weaknesses, statement of IQ, visual-motor ability, behavior observed during assessment, personality functioning, the child's adjustment, self-concept and behavior.

Social history information was the next most frequently referenced information including parent and family characteristics, emotional/behavioral and personality descriptors, the child's guardianship, school related issues, developmental history, parent's employment, parent's marital status, pre-natal and birth factors, the child's interests and the parent's educational level.

Speech and language evaluations focused on performance indicators as opposed to test scores, current therapy, behavior and recommendations.

Medical information reported in eligibility minutes suggests the top three problems are ear infections, birth complications and urinalysis findings. More than half the students had their vision and hearing information included in the eligibility report.

Classroom observations focused on academic skills, appropriate classroom behavior, ability to stay on task, interaction with peers, indication of the setting where
the child was observed, out of seat behavior, the person conducting interview, and the child's attention seeking behavior.

In the area of assessment there were limited numbers of assessment instruments used. School psychologists used the WISC-R predominantly as an IQ measure accompanied by the regular inclusion of three personality measures and consistent measurement of visual-motor ability using two tests. Educational tests administered comprised a broader selection reflecting the use of ten tests routinely. A pattern was observed for the 1984/85 school year where a significant number of children were administered the Woodcock Reading Mastery Test and the KeyMath Diagnostic Arithmetic Test.

Attendance of staff at meetings suggest the most frequent composition of the team is a special education teacher, school psychologist, visiting teacher, the child's teacher and the special education administrator. Increased involvement of building principals was observed for the 1987/88 school year.

There was good consistency between the recommended levels of services and the services actually provided. The least frequently provided related services was counseling.

The discriminant analysis suggests that identification
can be predicted with 89% accuracy using behavior (reason for referral) and income.

The predominant factors that emerged for the identification of mildly handicapped children in the school district are rank ordered as follows:

1. Educational performance
2. Statement of the child's IQ
3. Visual-motor skill level of the child
4. Child's guardianship
5. The child's developmental history
6. The child's behavior

Conclusions

Characteristics of the Handicapped Children

The characteristics of handicapped children appear to be distinguishable between the handicapping conditions and reflect three different groups of children. There is a disproportionate number of black children in the special education programs. Children with low socioeconomic background are also over represented in the ED and EMR groups as opposed to the LD group.

Within the LD group there are four levels of discrepancy found with 50% of the students exhibiting significant to severe discrepancies between their ability and achievement. EMR children are distinctly different than the LD or ED group in terms of their IQ scores. ED
children exhibit significantly higher rates of non-compliant and aggressive behavior than other handicapped children and have little discrepancy between their ability and achievement in reading.

The findings that the majority of children are tested at young ages while in first, second and third grades indicates that early identification is occurring in the school district.

The lack of pre-referral intervention for the LD group and the lack of a consistent approach for LD identification appears to be contributing to the higher rates of identification in that area (66% of total sample).

**How Well the Characteristics Meet the Definitions**

How well the characteristics identified for the children match the state and federal definitions is deficient in every area. In the area of learning disabilities wide variations are observed with the use of such terms as discrepancy, a disorder in one of the basic psychological processes and educational performance and/or academic achievement.

Particular bias is evident for placement of EMR children on the basis of IQ scores alone.

ED identification appears to be based more on those characteristics associated with socially maladjusted
Factors Associated with Identification Practices

The school district appears to be gathering the required evaluation components for comprehensive assessment of handicapped children. However, there are deficiencies with regard to specific requirements within each component area that contribute to inconsistent decision making. The difficulties identified are consistent with those areas identified as problematic in the literature.

Eligibility meetings are properly composed.

The reasons behavior (as reason for referral) and low income when combined can predict identification as emotionally disturbed with 89% accuracy.

Overall, the responses of the committee members to findings of the study were good. They were interested in the professional issues and expressed the desire to use the information obtained through the study for improving the decision making practices of the school district.

Discussion

Characteristics of the Handicapped Children

The indicators that most handicapped children live in the most populated areas may be contaminated by the fact that many residents use these two areas for postal services. Due to the rural nature of the community it is
possible that many residents maintain a mailing address at these two main post offices in the county.

The identification of ED students at twice the rate of other districts of similar size and the state average may be the result of not following the definitions outlined in state and federal definitions. It may also be that the application of more lenient criteria result in identification of a group of children traditionally believed to be underidentified and underserved (Grosenick & Huntze, 1980; Kauffman, 1980). However, it was not possible to distinguish between the behavior problems reported for ED students and the definition found in the literature review for socially maladjusted (Walker & Holland, 1979). Discussion of the term socially maladjusted was not found in the minutes. It may be that more instances of this type of distinction would be found by examining records of students who were not identified as ED.

How Well the Characteristics Met the Definitions

The determination of an ability-achievement discrepancy for LD students was problematic in that the IQ score was compared to a variety of different formats for achievement test performance. In addition, four other approaches were found for determining a discrepancy. It may be that the application of an agreed upon approach with the
understanding that no single procedure can be applied in all cases will result in less numbers of children identified or may result in different types of children identified. The exclusionary clause for economic disadvantage was addressed with low frequency for LD students with 11% of the low-income families recognized by the committee as having financial limitations. It is not clear what criteria committees used to determine disadvantage. It is evident that they did not consistently report disadvantaged children.

Factors Associated with the Identification Practices

The unusual home and family situations of the handicapped children were not distinguishable for a particular classification but rather were significant only in terms of variables expected to impact all children socially and emotionally. A more in-depth approach for investigating differences between home factors appears to be warranted to properly investigate this variable.

The primary reason for referral in the area of reading for the LD group combined with no pre-referral intervention attempted for most of these students raises concerns over the appropriateness of the reading instruction options for students in the school district and the availability of remedial and support services. Pre-referral intervention is particularly lacking in the
area of learning disabled students who are referred for reading and written language concerns adding support to the hypothesis that the reading instructional options for "at risk" children in the school district need to be increased. The rates of retention for mildly handicapped children are high reflecting perhaps the significant nature of their educational difficulties.

The medical problems of handicapped children were overwhelmingly in the area of chronic ear infections which raises questions of validity. It may be that the interviewing staff prompted information about ear infections from the parent as opposed to this condition existing so prominently in the handicapped population. Also it is difficult to estimate the importance of this finding in isolation of information about the prevalence of this problem in the non-handicapped population. One of the most frequently reported weakness from psychological assessments was in the area of auditory memory. There may be a relationship between this finding and the high frequency of ear infections.

The behavior problems reported by teachers about mildly handicapped children suggests that most handicapped children have adjustment difficulties in school related to their handicap although the LD group had the fewest ratio of behavioral indicators.
Information reported in eligibility committee minutes about assessment components revealed that more attention is given to academic performance indicators than psychological or social history data. It does seem that particular pieces of the psychological and social history have considerable importance. In the area of psychological information the importance of the child's IQ score and visual-motor functioning is notable. The practice of reporting IQ scores in a range based on the child's age was consistently applied. The focus on visual-motor functioning is quite pervasive throughout all areas of content analysis. It was not clear what criteria were used to determine a significant visual-motor delay for any particular child's performance. It is not clear whether the staff regard a finding of delay in visual-motor performance to constitute a learning disability or if they regard it as satisfying the LD definition term of a disorder in one or more of the basic psychological processes. It was not clear what role visual-motor functioning was believed to play in the learning process particularly with regard to reading.

With regard to social history the child's guardianship and developmental history were most often reported. Yet, the findings in these areas were not significant. Most children lived with their parents and had no delays in
their developmental history. Developmental history was based on parent report. It may be that in fact the children do have delays in their developmental history that their parents are unable to recall correctly. More statements were made overall but not per child in the areas of parent and family characteristics as well as the child's emotional/behavioral and personality functioning supporting the overall emphasis on behavior observed throughout the study. Information related to these areas about children who succeed in school may have implications for understanding how this information relates to the learning environment for handicapped children.

It was difficult to determine if an educational statement referred to classroom performance or test scores. This is an important distinction since many factors other than a handicapping condition can contribute to school failure.

The use of different formats requires high levels of expertise for committee members with regard to interpretive skills and may explain the lack of consistent decision making about determination of ability-achievement discrepancies.

A significant number of children were identified as having math disabilities through the assessment process when problems in this area were not reported at the time
of referral (only two math referrals documented). It appears that this practice was initiated during the 1984/85 school year. There may be a staff belief that children suspected of being handicapped should be assessed in all possible areas.

Behavior emerges as an important factor due to its inclusion in every aspect of each component. It may be that the focus on behavior is a realistic part of assessment activities where descriptive behavioral information is considered to be the most objective.

The response of the staff committee members to these findings was important because the committee recognized many of the issues raised by the study as important suggesting a good climate for improvement. In the area of learning disabilities discussion focused on the discrepancy issues, test interpretation, language development and the classroom observations. Discussion for EMR children in the school district focused on the school district practice of serving EMR students in LD classrooms and their need for more drill to pick up basic academic skills.

Implications

Characteristics of the Handicapped Children

The predictors identified in the discriminant analysis suggest that the reason for referral behavior and low
income are strong predictors of ED. Yet, these characteristics were the least mentioned in the component area of the social history. The over-representation of disadvantaged children within the special education sample indicates a need for exploration of methods, techniques and program options for disadvantaged children.

Continued LD assessment and identification on the basis of the characteristics identified through this study is likely to result in placement of children in LD programs due to lack of remedial and support services for children with learning problems in regular education as opposed to identification of truly handicapped children. This type of service delivery is costly and may detract from the quality of service provision to handicapped children.

Improved ED assessments including better documentation of intensity and duration requirements and consideration of whether the emotional difficulty is adversely affecting the child's educational performance may result in lessening the high rate of identification. A high identification rate in this area can be the result of an ineffective disciplinary program, lack of parent involvement or lack of remedial and support options for at risk learners particularly in the areas of counseling.

How Well the Characteristics Met the Definitions

It does appear that in-service is needed to present
current views in the areas of definitional issues, the role of pre-referral intervention in assisting with identification, the concept of discrepancy, interpretation of test scores, documentation of learning rates, how to maintain anecdotal records, consideration of exclusionary clauses and adaptive behavior.

Factors Associated with the Identification Practices

The high rate of referrals for reading combined with high rates of retentions and lack of pre-referral intervention for the LD group raises concerns about the appropriateness of the current reading program and the availability of remedial and support services for children who do not succeed in the existing program. An increased pre-referral intervention focus is needed in all areas.

In the area of psychological evaluation a broader array of assessment techniques is warranted. Investigating the role of visual-motor in relationship to learning disabilities and reading development may be helpful for better application of this information. Local norms would help with interpretation of test performance indicators for disadvantage children.

Interpretation of medical information was complicated by poor record keeping. A reliance on examinations by the physician hired by the school district was evident. A broader implementation of this requirement is permissable
under federal regulations and should be explored by the school district with appropriate state personnel.

Implications for the School District

The placement of handicapped children needs to adhere more stringently to the definitions of handicapping conditions and guidelines for placement. Those children considered for identification on the basis of learning disabilities need particular attention to accurate measurement of the ability-achievement discrepancy and documentation that they are not achieving commensurate with their age and ability when provided with educational opportunities appropriate for their age and ability. Children considered for EMR identification need measurement of their adaptive behavior. Children considered for ED identification need documentation of the intensity and duration requirement.

The need for individualized instruction for children experiencing reading difficulties is apparent. In addition, the results of this study suggest that disadvantaged children are "at risk" with regard to achieving success within the current reading program options. Therefore, other possible options should be explored for children with reading problems and those children with reading problems who are disadvantaged.
Summary

The approach implemented through the study was successful for answering the research questions. The information was applicable to development of recommendations for improvement of identification practices. Similar research is needed in other small school districts to confirm the significance of the factors identified through this research effort.
REFERENCES


Education for All Handicapped Children Act of 1975, 20
Education for All Handicapped Children Act of 1975, 20
U.S.C. 1401(1), (15) (300.541).
Education for All Handicapped Children Act of 1975, 20
Education for All Handicapped Children Act of 1975, 20
Education for All Handicapped Children Act of 1975, 20
U.S.C. 1411 note.

in the identification of gifted students. Paper
presented at the annual international convention of
the Council for Exceptional Children, New York, NY.

Glaser, B.G., & Strauss, A.L. (1967). The discovery of
grounded theory. Chicago: Aldine.


classification in mental retardation. Washington,

Harris, A.J. (1970). How to increase your reading

Hammill, D.D., Leigh, J.E., McNutt, G., & Larsen, S.C.


Pergamon Press.


## APPENDIX A

### Student Data Form

<table>
<thead>
<tr>
<th>Sex</th>
<th>1 = Male</th>
<th>2 = Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>Race</td>
<td>1 = Black</td>
<td>2 = White</td>
</tr>
</tbody>
</table>

#### Reason for Referral:
- 1 = Reading
- 2 = Math
- 3 = Written Language
- 4 = Behavior
- 5 = Other:

#### Was there a referral for mental health services at the time of referral?
- 1 = Yes
- 2 = No

#### Interventions attempted prior to referral:

#### Grade level child was tested (circle exact grade):
- 1 = Primary
- 2 = Elementary
- 3 = High

<table>
<thead>
<tr>
<th>Grade</th>
<th>K 1 2 3</th>
<th>4 5 6 7</th>
<th>8 9 10 11 12</th>
</tr>
</thead>
</table>

#### Number of grade levels repeated at the time of referral?
- 0 = none
- 1 = one
- 2 = two

#### Which grade level(s)?

#### Child's IQ

#### IQ Tests Administered:

- 1 = WISC-R
- 2 = Stanford-Binet Intelligence Test, Form L-M
- 3 = Stanford-Binet Intelligence Test - Revised
- 4 = Kaufman Assessment Battery for Children-K-ABC
- 5 = Woodcock-Johnson Cognitive Ability Test
- 6 = McCarthy Scales of Intelligence
- 7 = WPPSI
- 8 = Other:
IQ Test Scores:

<table>
<thead>
<tr>
<th>Test</th>
<th>IQ Score</th>
<th>Percentile</th>
<th>Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Adaptive Behavior Measure: Test: ____________________________

Normative base: 1 = criterion  2 = norm referenced

Visual-Motor Test:

1 = Bender Visual-Motor Gestalt Test
2 = Dev. Test of Visual-Motor Integration (VMI)

Visual-Motor Test Scores:

<table>
<thead>
<tr>
<th>Test</th>
<th>Standard Score</th>
<th>% ile</th>
<th>Age Equiv.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Behavioral/Psychology:

1 = Sentence Completion Inventory
2 = Kinetic Family Drawings
3 = Kinetic School Drawings
4 = Draw a Person (Human Figure Drawings)
5 = Children's Personality Questionnaire
6 = Piers-Harris Children's Self-Concept Scale
7 = Burk's Behavior Rating Scales
8 = Quay-Peterson Behavior Problem Checklist
9 = Mykelbust Rating Scale
10 = Woodcock-Johnson Scales of Independent Behavior
11 = Vineland Adaptive Behavior Scale
12 = Other: ____________________________

Behavior Problems:

__________________________________________________________________________
Achievement Tests Administered:

1 = Woodcock-Johnson Achievement Tests
2 = Peabody Individualized Achievement Test
3 = Wide Range Achievement Test
4 = Wide Range Achievement Test - Revised
5 = Kaufman Tests of Educational Achievement
6 = Woodcock Reading Mastery Tests
7 = Gates-McGinitie Reading Tests
8 = Spache Diagnostic Reading Scales (1981-Ed.)
9 = KeyMath Achievement Test
10 = Tests of Written Language
11 = Brigance Tests of Basic Skills
12 = Boehm Tests of Basic Concepts
13 = Clinical Evaluation of Language Functions
14 = Other: __________________________

Achievement Test Scores:

<table>
<thead>
<tr>
<th>Reading Test</th>
<th>Std Score</th>
<th>Percentile</th>
<th>Grade Equiv.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Spelling/Written Language Test

<table>
<thead>
<tr>
<th>Test</th>
<th>Std Score</th>
<th>Percentile</th>
<th>Grade Equiv.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Arithmetic Test

<table>
<thead>
<tr>
<th>Test</th>
<th>Std Score</th>
<th>Percentile</th>
<th>Grade Equiv.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Other Test | Std Score | Percentile | Grade Equiv.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Significant Medical History (include injuries, neurological exams, sensory deficits, medications, any reported characteristic (i.e. heart murmur, etc.):

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Family Income: 0 = Free/red. lunch 1 = med-high

Parent's educational level: (highest parent level) ___

Residence: 1 = Stanardsville 2 = Ruckersville
3 = Dyke 4 = Mission Home
5 = Quinque 6 = Other: ______

Unusual living or family situation:

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Composition of the Eligibility Team:

___ Social Worker ___ Psychologist
___ Special Education Teacher ___ Chapter I
___ Regular Classroom Teacher ___ Dir. of Sp. Ed.
___ School Nurse ___ Principal
___ Guidance Counselor
___ Other: ____________________

___ Handicapping Condition 1 = LD 2 = EMR 3 = ED
### Recommended Level of Services

<table>
<thead>
<tr>
<th>Service Type</th>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Special Education</td>
<td>1</td>
<td>support services</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>self-contained</td>
</tr>
<tr>
<td></td>
<td>5</td>
<td>hospital</td>
</tr>
<tr>
<td>Related Services</td>
<td>1</td>
<td>counseling</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>speech/ling</td>
</tr>
<tr>
<td></td>
<td>5</td>
<td>auditological</td>
</tr>
<tr>
<td></td>
<td>7</td>
<td>PT</td>
</tr>
<tr>
<td></td>
<td>9</td>
<td>none</td>
</tr>
</tbody>
</table>

1 = support services, 2 = resource education, 3 = self-contained, 4 = residential, 5 = hospital, 6 = Other: ____

### IEP Services Provided

<table>
<thead>
<tr>
<th>Service Type</th>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Special Education</td>
<td>1</td>
<td>support services</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>self-contained</td>
</tr>
<tr>
<td></td>
<td>5</td>
<td>hospital</td>
</tr>
<tr>
<td>Related Services</td>
<td>1</td>
<td>counseling</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>speech/ling</td>
</tr>
<tr>
<td></td>
<td>5</td>
<td>auditological</td>
</tr>
<tr>
<td></td>
<td>7</td>
<td>PT</td>
</tr>
<tr>
<td></td>
<td>9</td>
<td>none</td>
</tr>
</tbody>
</table>

1 = support services, 2 = resource education, 3 = self-contained, 4 = residential, 5 = hospital, 6 = Other: ____

<table>
<thead>
<tr>
<th>Service Type</th>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Related Services</td>
<td>1</td>
<td>counseling</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>speech/ling</td>
</tr>
<tr>
<td></td>
<td>5</td>
<td>auditological</td>
</tr>
<tr>
<td></td>
<td>7</td>
<td>PT</td>
</tr>
<tr>
<td></td>
<td>9</td>
<td>none</td>
</tr>
</tbody>
</table>

1 = counseling, 2 = adapted P.E., 3 = sp. transp., 4 = vision, 5 = OT, 6 = Other: ____
APPENDIX B

Statistics for Numbers of Children Served

<table>
<thead>
<tr>
<th>County School District</th>
<th>Total School Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>School District 1 (SD - 1)</td>
<td>1,525</td>
</tr>
<tr>
<td>School District 2 (SD - 2)</td>
<td>1,550</td>
</tr>
<tr>
<td>School District 3 (SD - 3)</td>
<td>1,615</td>
</tr>
<tr>
<td>School District 4 (SD - 4)</td>
<td>1,646</td>
</tr>
<tr>
<td>School District 5 (SD - 5)</td>
<td>1,759</td>
</tr>
<tr>
<td>School District 6 (SD - 6)</td>
<td>1,759</td>
</tr>
<tr>
<td>School District 7 (SD - 7)</td>
<td>1,770</td>
</tr>
<tr>
<td>School District in Study (SD - S)</td>
<td>1,678</td>
</tr>
</tbody>
</table>
APPENDIX B, cont.

Statistics for Numbers of Children Served

<table>
<thead>
<tr>
<th></th>
<th>LD</th>
<th></th>
<th>EMR</th>
<th></th>
<th>ED</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>#</td>
<td>%T</td>
<td>%H</td>
<td>#</td>
<td>%T</td>
<td>%H</td>
</tr>
<tr>
<td>SD - 1</td>
<td>78</td>
<td>5</td>
<td>35</td>
<td>40</td>
<td>3</td>
<td>18</td>
</tr>
<tr>
<td>SD - 2</td>
<td>75</td>
<td>5</td>
<td>35</td>
<td>64</td>
<td>4</td>
<td>30</td>
</tr>
<tr>
<td>SD - 3</td>
<td>90</td>
<td>6</td>
<td>52</td>
<td>18</td>
<td>1</td>
<td>11</td>
</tr>
<tr>
<td>SD - 4</td>
<td>33</td>
<td>2</td>
<td>26</td>
<td>24</td>
<td>2</td>
<td>19</td>
</tr>
<tr>
<td>SD - 5</td>
<td>69</td>
<td>4</td>
<td>39</td>
<td>38</td>
<td>2</td>
<td>22</td>
</tr>
<tr>
<td>SD - 6</td>
<td>30</td>
<td>2</td>
<td>16</td>
<td>63</td>
<td>4</td>
<td>33</td>
</tr>
<tr>
<td>SD - 7</td>
<td>109</td>
<td>6</td>
<td>43</td>
<td>21</td>
<td>1</td>
<td>8</td>
</tr>
<tr>
<td>SD - 8</td>
<td>95</td>
<td>6</td>
<td>44</td>
<td>22</td>
<td>1</td>
<td>10</td>
</tr>
<tr>
<td>STATE</td>
<td>46,153</td>
<td>5</td>
<td>45</td>
<td>13,906</td>
<td>1</td>
<td>14</td>
</tr>
</tbody>
</table>

# = number of children identified

%T = percentage handicapped from the total school enrollment

%H = percentage handicapped from the number of all handicaps
## APPENDIC C

LD Discrepancy Table

Discrepancy Reported in Eligibility Minutes

<table>
<thead>
<tr>
<th>Discrepancy Points</th>
<th>No Discrepancy</th>
<th>Mild Discrepancy</th>
<th>Significant Discrepancy</th>
<th>Severe Discrepancy</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-10</td>
<td>4</td>
<td>12</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>11-15</td>
<td>3</td>
<td>13</td>
<td>13</td>
<td>13</td>
</tr>
<tr>
<td>16-23</td>
<td>2</td>
<td>15</td>
<td>19</td>
<td>17</td>
</tr>
<tr>
<td>23+</td>
<td>0</td>
<td>16</td>
<td>21</td>
<td>24</td>
</tr>
</tbody>
</table>
APPENDIX D

Addendum to Eligibility Committee

Summary of Deliberations for Learning Disabled Students

Name of Student: ____________________________________________

Last          First          Middle

1. The above named student was determined to have a specific learning disability. Basis for making the determination:

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

2. Describe the relevant behavior noted during the observation and the relationship of that behavior to the student's academic functioning:

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

3. Describe any educationally relevant medical findings:

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

4. Does the information indicate that there is a severe discrepancy between ability and achievement which is not correctable without special education and/or related services? If yes, describe:

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

5. What are the effects of any environmental, cultural, or economic disadvantage as determined by the team?

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

6. Provide a summary statement reflecting members' conclusions:

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
The ___ page vita has been removed from the scanned document
The 5 page vita has been removed from the scanned document
The 5 page vita has been removed from the scanned document
The 5 page vita has been removed from the scanned document
The 5 page vita has been removed from the scanned document.