A FIELD STUDY OF THE SPECIAL EDUCATION PROCESS OF LEARNING DISABLED STUDENTS

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OF LEARNING DISABLED STUDENTS

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CHAPTER I

THE RESEARCH PROBLEM

Introduction

During the past 20 years many changes in instruction, in curriculum and in organization of schools have been introduced. The most important and lasting curriculum movement according to Otto (1970) has been the focus upon providing for individual differences among pupils.

It is only within the past decade that most educators have come to regard as a distinctive population those children who seem to have disabilities in learning within the regular classroom, even though they possess average or better than average intelligence. This is a change from a clinical approach which many times labeled a child with a minimal brain damage tag or a dyslexia category but did nothing to correct or attempt to correct the learning problems that these children had. The learning disabled children seem to have increasingly become the responsibility of the school.

As a number of students have difficulty in learning within the regular school environment, it is encouraging that more educators are developing programs to assist the learning process of learning disabled students and to identify early those children who may have learning problems. The cause of a learning disability is not important for an educator; rather, the question becomes what can be done to adapt the learning process to the child instead of adapting the child to the

learning process that reaches most of the students. Three basic procedures have been developed within educational settings to assist learning disabled students: the itinerant teacher, the resource room, and the self-contained classroom (Wiederholt, 1972). Each of these is dependent upon an educational diagnosis of a child's learning disability or combination of learning disabilities.

Oakland (1971) has said that, basically, the assessment of children with learning disabilities has been one of two approaches. He called the first a "Diagnostic-Etiological" (or medical-etiological) approach which arrives at an LD diagnosis after determining the cause, and the emphasis is upon the child's developmental and medical history. Usually, a special emphasis is placed upon neurophysiological and neuroanatomical disorders. The second approach he listed was "Diagnostic-Remedial" which he said is the most frequently used in the schools. This involves a diagnosis with the intent of planning effective educational remediation, usually de-emphasizing the neurological-etiological orientation. This approach focuses on perceptual, associational and expressive abilities (Bateman, 1967).

A view held by many educators is best expressed by Lovitt (1971). He felt that too much time is spent in trying to delineate the LD population and not enough time in actual diagnosis through a behavioral assessment of individual performances and then subsequent treatment. His statement was:

> A review of the literature on learning disabilities strongly suggests that there is no need for another psychological or medical definition of that population whose achievement does not coincide with its assumed potential. Already there has been as much time expended in attempts to delineate this learning disabilities population as has been spent in its actual diagnosis and treatment (p 181).

Capobionco (1971) feels that educators should give their attention to symptomatology rather than etiology. The importance of the teaching process in aiding LD students is inherent in his comment:

> In the final analysis, the worth of the program will rest upon the adequacy with which specific methods tend to alleviate identifiable learning impairments without respect to causation (p. 144).

It is at this point that the LD teacher/LD pupil interaction process based upon recommendations assumes so much importance. The recommendations or the educational prescription for a specific learning disability for a particular child comes from the previous diagnostic testing by a qualified examiner. After the diagnosis of a specific learning disability or learning disabilities, specific remedial measures are given to the special learning disability teacher to assist in meeting the LD student's individual educational needs.

With any type of special educational program educators have difficulty in meeting each child's specific needs, even when the child is placed into a special class. Even though he may be in an educational setting with his peers who have learning disabilities, the extent of individual differences continues to plague the teachers. As Quay (1971) puts it:

> It has long been recognized that current programs for exceptional children have at least two basic weaknesses. First, current grouping practices force the educator to deal with children who, while they may be somewhat homogeneous in certain intellectual, physical and behavioral characteristics, are far from homogeneous in regard to abilities or disabilities crucial to classroom learning.
>
> At the same time, special education programs are rarely designed specifically to improve the academic competence of the child by the application of an instructional technology aimed at improving those aspects of the learning process in which the child may suffer a disability (p. 166).

Regardless of the LD program method used (itinerant teacher, resource room or special, self-contained classroom), the teacher emerges as the most crucial element. The LD teacher may follow all of the recommendations, may ignore all of the recommendations or may use the recommendations as a springboard of departure for implementing different techniques within the teaching process. While there seems to be an abundance of literature and research concerning the definition of learning disabilities, the diagnosing of learning disabilities and the methodology of utilizing specific techniques (such as the Frostig method of visual-motor training), there is little material focused upon the Learning Disabilities Teacher/Learning Disabilities Pupil (LDT/LDP) interaction process described from the average LD teacher's workaday experience.

After an unusual amount of research directed at defining and identifying LD students, the focus of LD research seems to have moved to the other end of a continum -- the evaluation of LD programs. A neglected area of research is that area on the continum between the education diagnosing and the final stage of program evaluation, and that area is the LDT/LDP interaction process based on prescriptions. Thus, the connecting element on this continum, the most crucial element it would appear, is being neglected -- the LDT/LDP interaction. The writer felt that a systems model would best depict this area needing description.

The systems model used in this study (see Figure I) is typical of the model for an LD self-contained classroom procedure in most of the school districts in north-central Oklahoma which have self-contained classrooms for elementary LD students. The main sequence of this systems

model; i.e., the referral from a regular classroom for educational diagnosis, testing, conference, placement into the special classroom and the re-evaluation for the return to the regular classroom, is described in Koppitz's (1971) longitudinal descriptive study. The systems model diagrammed in Figure I is typical of many school districts' LD pupil process involving self-contained classrooms. This systems model provides the means for pinpointing descriptive research and traces the progression of an LD pupil in a self-contained classroom for LD students.

Statement of the Problem

From the majority of articles and studies reviewed, a problem seemed to emerge: There was not an adequate description of the LDT/LDP interaction process in the self-contained classroom in relation to prescriptive recommendations derived from diagnostic testing. Thus, a system of description for analyzing this interaction was needed. While there was general agreement that effective teaching for an LD student was dependent upon an adequate educational diagnosis and the resultant recommendations, there was not an adequate description of the special education process of learning disabled students in a self-contained classroom; i.e., the LDT/LDP interaction process.

Purpose of This Study

The purpose of this study was to provide a system of describing the LDT/LDP interaction process used in an LD self-contained classroom in a regular school setting. A systems model describing this interaction process of an LD student (Figure I) and a case study method of description was used to seek answers to the key questions listed in the following

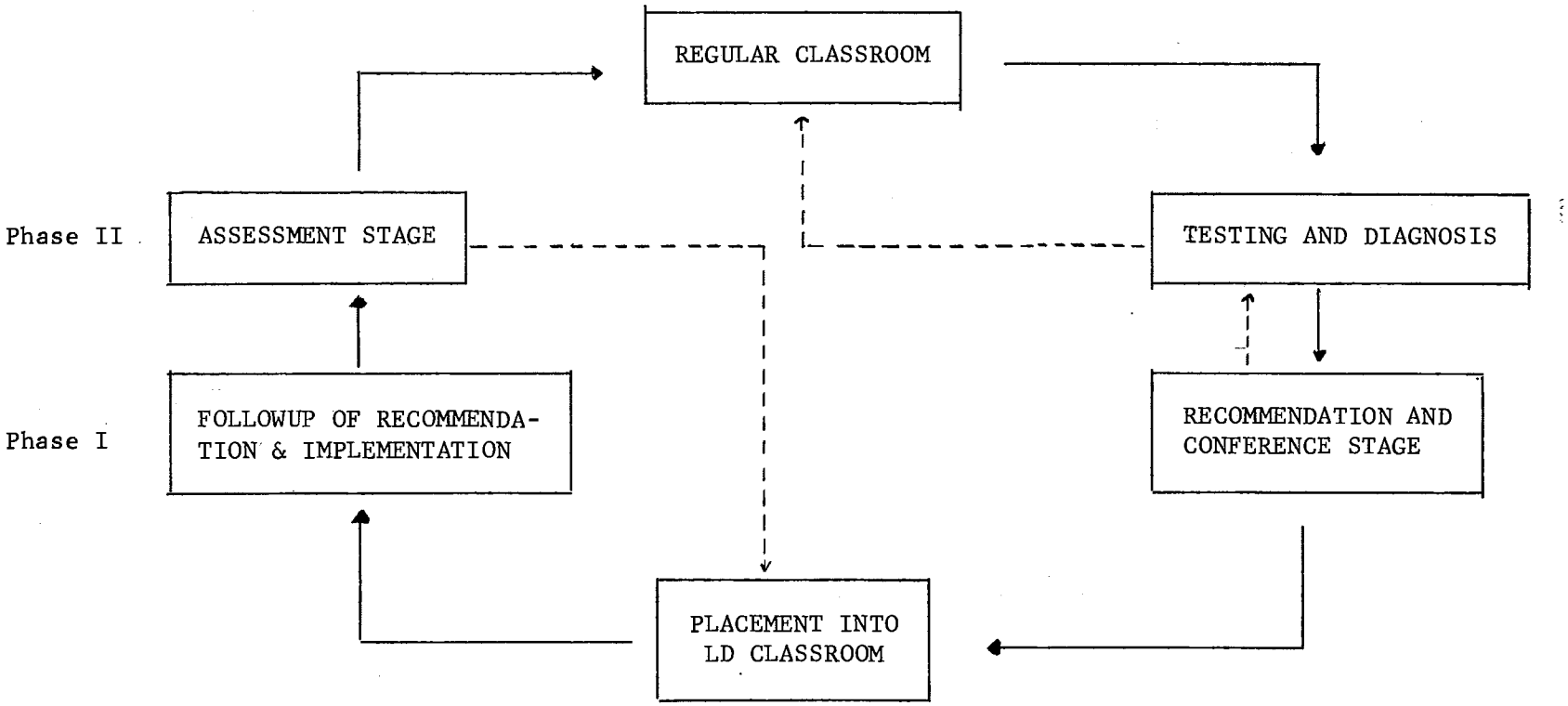

Figure 1. Systems Model for an LD Student - 1973-74

The above systems model of an LD teaching process is fashioned after Koppitz's (1971) description.

section. These key questions developed the framework of the study. The implementation of the LD recommendations into the LDT/LDP interaction process and a description of the summative assessment of LD pupils and the role of the self-concept formed the foundations of the present study as reported in Chapter III.

The purpose of Phase I of the study was to examine the LDT/LDP interaction process through a case study approach. The purpose of Phase II of the study was to describe the summative assessment procedure for LD pupils' potential return to the regular classroom. The final purpose was a description of the decision-making process in this assessment and of the possible influence of the LD student's self-concept upon the decision regarding his return to the regular classroom.

Descriptive Research Questions

The following questions provided the framework and the emphasis of the present study:

1. What are the specific activities employed by LD teachers in a self-contained classroom to implement LD prescriptions?

2. What are the indicators used to evaluate students who have been in LD self-contained classrooms for the current year, and what are the decisions made from these indicators, and how are these decisions made?

3. What are the self-concept attributes of students who have had summative decisions made about them?

Definition of Terms

A working definition of terms was needed. The definitions given below were used within the study. As there was widespread disagreement

over what constitutes a learning disability, the writer has included a number of specific definitions in Appendix A. In this study the definition regarding children diagnosed as having learning disabilities was from the definition listed by the Special Education Section of the Oklahoma State Department of Education. Other states and other studies may have a different definition.

Learning Disabled (LD)

Learning disabled (LD) children are defined as:

> . . . those children with normal or potentially normal intelligence who because of some neuro-psychological factor are noted to have learning disabilities of a perceptual, conceptual or integrative nature. Children with major sensory and motor deficits, such as the blind, the deaf, the cerebral palsied, the mentally retarded or children whose learning deficit clearly is of emotional origin without concomitant neuro-psychological factors, are excluded from this category . . . (Oklahoma Special Education Section, 1973, p. 79).

Learning Disabilities Class

A learning disabilities class is a special class for LD students which is under the supervision of the Oklahoma State Department of Education in regard to curriculum and certification of teachers as well as meeting state requirements for minimum class size and an adequate evaluation procedure for admittance into LD classes. In this study there were four LD classes which met for one-half day. The students were in regular classrooms the other half day.

Learning Disabilities Test

A learning disabilities test is an instrument agreed upon by authorities in the field as capable of having some merit to measure

learning disabilities with student cooperation and with a competent examiner. An example of such a test would be the Frostig Developmental Test of Visual Perception.

Formative Assessment

Formative assessment referred to that educational evaluation that was carried out by the LD teacher within the self-contained classroom. The purpose of the formative assessment was the formulating of new tasks for an LD student based upon successively completing previous tasks with a certain degree of competency. The formative assessment aided in giving direction to the interaction process; and this assessment may be a formal measurement, such as an achievement test or an informal teacher observation.

Summative Assessment

Summative assessment referred to the evaluation made when consideration was being given to returning an LD pupil to the regular classroom for full-time placement. This involved the summarizing of all of the formative assessment findings, examining the results of the Metropolitan Achievement Tests which are given annually, any other measurement-type instrument, such as reading tests, and observations regarding the pupil's progress by his regular school teachers. All kinds of elements entered into this assessment, such as the parents' wishes, the LD pupil's behavior unrelated to educational tasks, and the home school teacher's opinions for a full-time placement. A number of people were involved in this summative assessment besides the LD teacher: the special education coordinator, the elementary supervisor, the mental health center

educational consultant, the building principals, parents, and all the teachers involved.

Self-Concept

The term self-concept was used by the writer to be that idea, image or picture held by a person about himself regarding who he is, what he can do, and his value as indicated by others' reactions to him. The test used in this study to measure the self-concept was the Piers-Harris Children's Self-Concept Scale.

Phase I

Phase I referred to the portion of the study describing the LD teacher/LD pupil interaction process. This involved the development of case studies for eleven LD students who recently entered the self-contained classrooms described in the study. These eleven students formed Group I, and each had a case study developed which included these parts: (1) a social history, (2) an educational history, (3) the educational diagnostic testing, (4) the learning disability diagnosis, and (5) the description of the Phase I process which included two sections: (a) the LDT/LDP (learning disabilities teacher/learning disabilities pupil) interaction process and (b) the description of the formative assessments made. Parts 1 through 4 gave the educational background to better understand Part 5, the Phase I process which was the major focus of this paper. Part 5 was the ongoing process of this study.

Phase II

Phase II was the second part of the study which describes the procedure in the summative assessment and the resources utilized in the decision-making process involving an LD student's potential return to the regular classroom. This was an entirely different part of the study; and summative assessments were drawn from Group II, 24 LD students who had been in the self-contained classroom for at least one year's period. Group II students have no connection with the Group I students except for sharing the self-contained classroom. Each of the 24 students of Group II had a self-concept test administered earlier, but the test was scored and the results described only after a summative assessment was held for that student. The summative assessments that evolved for the LD students were described in this phase of the study.

Justification for the Study

The area of learning disabilities is a relatively new development within the overall educational framework of most public school systems. Until the decade of the 1960's there was no educationally satisfactory method of explaining why certain students could not seem to learn within the regular classroom, although they apparently possessed the potential to do so. The previous clinical methodology seemed to stop with a cause-and-effect approach. Once the diagnosis was made, no effort or any instructional methods were given to teachers. Also, it was noted that some students seemed to become behavior problems within the classroom because of their failure to have academic success.

It was at this point that educators saw three major areas of concern emerging from the developing knowledge of the problem of learning

disabilities: (1) many LD tests were insufficient in diagnosing LD populations, (2) an adequate description of the LD teaching process was lacking, and (3) there was conflicting research regarding the value of special LD programs. What research there is in these areas conflicts for the most part or is comprised of inadequate studies. There is conflicting research in these areas because of the inter-relatedness of the problems and because of the large number of variables existing within a public school system.

Koppitz (1971) has said that many of the published studies in learning disorders focus on learning disorders as such or upon specific methods or techniques rather than upon the children who have them (Cruickshank and Johnson, 1958; Early, 1969; Ebersole, et al., 1968; Haring and Phillips, 1962; Hellmuth, 1966a, 1966b; Johnson and Myklebust, 1967; Kirk, 1962; Mallison, 1968; Strauss and Lehtinin, 1947; and others). Many of these studies were done in clinical settings or in special schools. An adequate description of the interaction process of LD teachers with LD pupils in self-contained LD classrooms in a regular school setting had not been written. It was almost as if the before and after had been examined, but the <u>between</u> had been forgotten.

A number of educators and writers such as Rice (1970) feel that there is a need for further research in learning disabilities in such areas as teaching strategies and educational planning. Others echo this and feel that a more adequate description of the teaching process or, as it is termed in this paper, the learning disabilities teacher/learning disabilities pupil interaction process is needed. A descriptive method of study was chosen for this paper, as there is difficulty controlling

all of the variables in a study conducted within a school. Koppitz (1971) notes the difficulty in conducting research within schools when she said:

> This is not a report on a carefully designed and executed research project; rather it is an analysis of actual school records, test protocols, and teachers' reports that were collected and used in the process of conducting the special class programs. By necessity, some of the research methods employed are not as precise nor are the data used as complete as might be wished or as would be expected from a laboratory experiment (p. 3).

Her descriptive study was of a five-year followup study of 177 students.

This writer chose a descriptive study as the preferred means of conducting this investigation. As Hallahan (1972) points out:

> Since the school or classroom does not lend itself well to the strict controls that can be enforced in the laboratory, it is probable that some sources of error are almost inherent in educational experiments. The limitations of time, money and the structure of the educational system are formidable barriers to perfectly controlled research. For example, the existing school schedule and structure often make it necessary to violate the random assignment of subjects to experimental and control groups . . . Differential teaching abilities and how to measure them also present difficulties (p. 190).

Thus, a descriptive study precedes an experimental study. The value of a descriptive study lies in its refining of relevant questions which can later be submitted to experimental research methods. Most of the studies reviewed were experimental studies which examined the <u>beginning</u> of the LDT/LDP interaction process or which evaluated techniques or LD programs which were at the <u>end</u> of the process. An adequate description of the interaction process of LD students in a self-contained classroom can be obtained through a systems analysis of the process.

Limitations of the Study

The major limitation of this descriptive study was that it was not possible to account for or to assume any cause and effect relationships

among the variables being examined. Another limitation was that the reader cannot generalize the LDT/LDP interaction process used in the self-contained classrooms described in this study. The present study focused on only the self-contained classroom method of LD programming. Finally, the writer was limited to eleven LD students for case study analysis for Phase I, as the size of the program and the stability of the LD population of the elementary students used in this study dictated the numbers available.

Assumptions of the Study

The assumptions of the study are presented below:

1. It was assumed that there would be a negligible Hawthorne effect from the writer's presence in the LD self-contained classrooms. It was necessary for the writer to be physically present to observe the LDT/LDP interaction process. It was assumed that the Hawthorne effect was negligible for these two reasons: (a) the writer had previously visited the classrooms, and the teachers and students were used to his presence and (b) the teachers were not told of the direction of the study but rather assumed that the observations were of the new students. The students were not aware they were in a study.

2. It was assumed that the tests given were free of the Hawthorne effect, as the tests were all given by the LD teachers to the students; and many of the tests (except the self-concept test) were given during the course of the regular school year as part of the testing program.

CHAPTER II

REVIEW OF THE RELATED LITERATURE

Introduction

This chapter presents a review of the related literature that is pertinent to the area of learning disabilities. The related literature is divided into three areas: (1) the learning disability pupil's self-concept, (2) evaluations of learning disability programs, and (3) the learning disabilities teaching process. A short summary follows each area, and a chapter summary concludes the chapter.

Wiederholt (1974) noted three problems surfacing from the developing field of learning disabilities in his review of the current field of learning disabilities. The first problem is a "territorial rights" issue coming from the overlapping interests and sharing of responsibilities of other educational disciplines such as speech pathologists and reading specialists. The second problem noted by Wiederholt is the lack of empirical research regarding the efficacy of assessment devices and instructional programs currently utilized with the population of pupils identified for educational service.

The third problem is related to the two preceding problems in that it is concerned with the definition of the learning disabled student. Current learning disability definitions are not relevant nor accepted by the educational community according to Wiederholt (1974). In general

the educational community wants an operational definition which is useful. "Labels and definitions should be, but currently are not, educationally relevant in programming instruction" (Hammill and Wiederholt, 1973).

There seems to be a fourth problem that is related to the three noted by Wiederholt. There is insufficient descriptive research of the interaction between learning disabilities teachers and learning disabilities pupils. The interaction is the teaching process which, in the case of the LD pupil, evolves from the diagnostic testing and subsequent recommendations for prescriptive LD teaching. This study concerns itself with the need to describe the learning disability teaching process as it is taking place in the school.

From the review of the related literature, several elements seem to emerge. First of all, most of the studies are of an experimental nature or of a comparative nature. Few of the studies are of a descriptive type. Secondly, the interaction between an LD teacher and an LD pupil is given notice only if a particular method is being evaluated, such as the use of the Frostig teaching method compared to another teaching method. It appears that a careful description of the teaching process between the LD teacher and the LD pupil, and the influence of diagnostic evaluation prescriptions on that process, would be a useful contribution. Position papers and theories on <u>how</u> this interaction process should take place has been the main emphasis in the literature.

A third element that emerges concerns itself with the lack of research on the performance indicators used by LD teachers in the assessment stages in the LDT/LDP interaction process. Little has been written regarding formative and summative assessments in this area. Articles have depicted the need for assessments and evaluations in the LD teaching

process; however, the specific influences of formative and summative evaluation procedures on the process have not been delineated.

A fourth element that emerges is that there is little description of the role of the self-concept of LD pupils being considered for a possible return to the regular classroom from a self-contained LD classroom. In this paper the consideration for possible return is contained in the summative assessment proceedings. Likewise, the relationship of the LD pupil's self-concept in the decision-making process of the summative assessment is not adequately described.

The final and fifth element that emerges is that the term "learning disabilities" is not defined by various investigators to describe the same populations, and thus, findings cannot be generalized in many of the studies. Not only are the investigators confused over definitions, but they are also confused over the identification of LD pupils (such as being able to separate LD pupils from emotionally disturbed pupils); and there are no threads of consistent research. Likewise, many writers are now caught up in a brewing controversy over the various LD programs.

These five elements together formulate the direction and the framework of this study. This descriptive study lends itself to answering the three descriptive research questions given at the end of this chapter. This chapter is organized about three sections: (1) related research in the LD pupil's self-concept, (2) review of related research in LD programs, and (3) review of the related research in the LD teaching process. Each section has a short summary and a chapter summary concludes this chapter.

Related Research in the LD Pupil's Self-Concept[1]

This brief review of the related literature of the self-concept points out the interesting problem that little attention is given to the role of the self-concept in the decision-making process regarding the instructional activities of LD pupils. Specifically, there is not an adequate description of the relationship of the self-concept of an LD pupil in the decision-making process contained in the summative assessment. This developmental review of the related research of the LD pupil's self-concept looks at the following areas: (1) the relationship of the self-concept and learning, (2) the relationship of the self-concept and the emotionally disturbed pupil, and (3) the relationship of the self-concept and the learning disabilities pupil. This review of related research for the self-concept shows a number of considerations for this paper, as the student's learning and his self-concept seem to have an important relationship.

Self-Concept and Learning

The importance of the self-concept and its subsequent influence on behavior, motivation and academic achievement is recognized by numerous psychologists and educators. Among them are Combs, Avila and Purkey (1971) who stated that "the most important single factor affecting behavior is the self-concept" (p. 39). Concurring in the importance of the self-concept on behavior and learning are a number of other writers

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[1]The writer adheres to the definition of self-concept given on page 10. The distinction between self-esteem and self-concept is not made by the writers and researchers in many of the articles in this chapter.

(Coopersmith, 1959; Dinkmeyer, 1968; Hamachek, 1965; Meeks, 1968; and Morse, 1964).

Eldridge, Barcikowski and Witmer (1973) feel that a positive self-concept is essential to satisfactory progress in school. They said:

> Children need educational experiences designed to facilitate their development in understanding of self and others. The child who harbors feelings of inadequacy often functions ineffectively. The child who must cope alone without some understanding of his emotions (anxiety, fear, anger, hatred, and hostility) or who has poor social relations with his peer group usually does not progress satisfactorily in school (p. 256).

This is similar to the position that Dinkmeyer (1971) holds. He developed a program which gave planned experiences to building self-concept, calling it DUSO (Developing Understanding of Self and Others). He made this comment, "Only as the child understands himself, his needs, his purposes and his goals is he free to become involved and committed to the educational process" (Dinkmeyer, 1971, p. 67).

Evidence has existed for some that children with problems in achieving academically usually have a low self-regard. Kerensky (1966), Campbell (1967), Hughes (1967), Padelford (1970), and Miller (1970) have all felt that there was a relationship between a low self-concept and academic achievement at the fourth, fifth and sixth grade levels. The correlation was greatest in the fourth grade, decreasing as the grades progressed upward; i.e., poor academic achievement seems to be positively correlated with low self-esteem in the elementary grades.

The evidence is conflicting for the primary grades regarding the correlation between poor academic achievement and low self-esteem. A general relationship between poor achievement and low self-esteem was suggested from the studies of kindergarten children by Wattenberg and Clifford (1964), Giuliani (1967), and Ozenhosky (1967, 1970).

Conflicting results have come from other writers in their studies of the two variables in research done in the primary grades. Finding a positive relationship between poor academic achievement and low self-esteem were researchers McClendon (1967), Palardy (1969), and Berretta (1970). Others suggested that there was no relationship between the self-concept and reading achievement at this age level; or if such a relationship existed, it was extremely complex. Wass (1968), Ruhley (1970) and Williams (1973) found no correlation between the relationship of the self-concept and reading achievement of first grade children.

Several writers have found a significant relationship between success in reading and having good self-esteem. Stevens (1971) found that remedial readers; i.e., students with reading problems who were put into a remedial class, were not well accepted by their peers and other classmates. In a study of black children Frerichs (1971) found that self-esteem scores were related to grade point average and reading success. This study was done with 78 sixth graders. Interestingly, self-esteem was not found to be significantly related to high or low intelligence. The age of school entry is not as important in the academic, personal and social development of children as many educators believe. Beattie (1970) found some slight superiority for older entrants in grades one, two and three but found that by the end of grade three the younger entrants had caught up.

Maslow (1962) suggested that when a child is forced to protect his self-concept he does so at the expense of neglecting his higher, more complex needs, such as learning. Some literature seems to support this idea. For example, Coopersmith (1959) and Fink (1962) found a positive relationship between self-esteem and academic achievement. Williams and

Cole (1968) found significant correlations between the concept of school, emotional adjustment, mental ability and reading and mathematical achievement and the self-concept held by each child.

One of the leading psychoanalysts, Pearson (1952), has made significant contributions to the understanding of the learning process, basing his ideas on his knowledge of the development of the ego and its various functions. Pearson (1952) states that:

> Various factors which hinder the ego in its ability to learn may occur as a result of influence on the ego from the external world, as the result of influences on the ego which emanate from the superego or the instructional life, or as a result of a disorder in the ego itself (pp. 175-176).

Michal-Smith and Morgenstern (1965) maintain that Pearson (1954) advocates the main psychoanalytic theory that:

> Learning requires the free mobilization of energies which are not tied up with any intense feelings, interests, drives, etc., but are at the free disposal of the ego to be utilized in thinking and dealing with whatever task is at hand" (p. 176).

The view or attitude that a person holds of himself is an important factor in determining his behavior and thus his personality development (Rogers, 1951; and Moustakas, 1956); and as learning implies behavioral change, the attitude held of himself will affect his efficiency in learning.

Individuals with low self-esteem indicate feelings of inadequacy and unworthiness (Wylie, 1961), seeing themselves as incapable of dealing with everyday life. They lack the ability to handle anxiety (Rogers and Dymond, 1954); and as Coopersmith (1967) reports, they usually report feelings of shame, guilt or depression, often concluding that their actual achievements are of little significance.

In a study conducted by Miller (1958) evidence was found that if a child is retarded in reading in the sixth grade, he will demonstrate

serious problems in social as well as academic adjustment in the eighth grade. Michal-Smith and Morgenstern (1965) feel that ego psychology development is hampered by learning difficulties, as maturation is delayed. They said, "Exponents of ego psychology place the burden of learning difficulty on the ego" (p. 175).

Altmann and Firnesz (1973) state that "an individual having low self-esteem and inadequate self-evaluation skills may benefit by modeling the behavior and decision-making process of an effective, assured, and competent individual" (p. 277). In a special class of learning disabled students, this statement, plus Rosenberg's (1965) statement, takes on new significance. Rosenberg (1965) said:

> The main therapeutic question is what kinds of stimuli, influences, or experiences, under what kinds of conditions, acting upon what kinds of people produce optimal change in self-esteem (p. 284).

Self-Concept and Emotionally Disturbed Pupils

A number of contributions towards understanding the LD self-concept has come from studies of emotionally disturbed pupils' self-concepts. In a longitudinal study of 333 children in grades four, five, and six who were emotionally disturbed, Stennet (1966) found that about five to ten percent of the children enrolled in elementary schools could be identified as having adjustment difficulties of sufficient severity to warrant professional attention. A significant number of those so disturbed were not likely to resolve their adjustment problems without help. It was also found that the emotionally disturbed youngster tended to lag progressively behind his peers in academic achievement as he progressed through school. A high correlation was found between the emotional handicap and an academic disability growing progressively more serious.

Spivack and Swift (1966) in a study of 500 elementary children, half of whom were in emotionally disturbed classes and half were from regular classes, found a number of factors which separated the two groups. Besides disrespectful defiance, two other clusters for the emotionally disturbed group were "poorly self-controlled behavior" and another which related to inabilities to learn and attend and to self-initiate a course of action.

Stone and Vinton (1964) in a study to determine if emotionally disturbed children would manifest educational disabilities found the arithmetic computation and word recognition portions of the Wide Range Achievement Test (WRAT) were lower than the expected level, for both MA and CA. The authors cautioned against inferring causal relationships between emotional problems and learning disability from their study.

Self-Concept and Learning Disability Pupils

Michal-Smith and Morgenstern (1965) recognized the emotional problems of learning disabilities children, saying:

> Numerous studies and surveys have indeed pointed out that academic difficulties are frequently the initial presenting problem in the caseload of child guidance centers, moreover learning difficulties often presage the subsequent emergence of other psychological problems (p. 171).

Another problem of the self-concept in learning disabled children centers around the developing controversy regarding the practice of labeling involved in diagnostic evaluations and around even the value of specialized methods of instruction that carry with them the LD label. Barr and McDowell (1972) questioned the assignment of individual children to diagnostic categories as the assumption that all members of the group have a significant number of characteristics that can differentiate

them from all others. They said that both the emotionally disturbed child and the child who has a learning disability have similar behaviors and that a differential diagnosis between these two types of children is extremely difficult. In talking of LD children and emotionally disturbed children, they said:

> They may have a poor self-image and typically have a pattern of failure in both the home and the school. The characteristics commonly associated with learning disabled children alone are primarily of a perceptual-motor and intellectual nature, while those associated with emotionally disturbed children are of an affective nature (p. 60).

Cratty (1970) mentions that research has shown that success in games involving peer acceptance and value may contribute to a positive self-concept, which in turn may encourage increased success in the intellectual tasks which face the child. In other words, a healthy or a developing self-concept increases the possibility of academic success or achievement.

Another factor to be considered is the label of learning disability; as the opinion of Hughes, Kauffman and Wallace (1973) is that labels have a stigma with negative effects. They go on to say:

> Moreover, it has long been the view of some that self-contained special classes have had more detrimental than positive effects on the overall performance of children, especially as it pertains to academic progress (p. 225).

Dunsing (1973) presents for consideration the idea that the teacher for special learning disabilities classes is expected to do too much. Not only must the teacher be skilled in various instructional methods, but she must assist with the emotional and social needs of her pupils. He said:

> Also, since LD children present more than their share of emotional problems (in addition to any organically-induced hyperactivity), she must be prepared to deal with a wide range of behaviors . . . (p. 453).

Dunsing (1973) also brings up the point that children with low test scores and thus poor achievement might have more basic areas of life adjustment problems which would be just as important as certain academic skills.

Most of the authorities agree that LD students, as do most of the educationally disadvantaged pupils, lack an adequate self-concept. However, the studies seem to only measure LD students' self-concepts, compare the self-concepts of one group of students (LD) with another group (EMH), or correlate the low self-concept to the low academic success. Some studies indicated an improvement in the LD pupils' self-concepts after placement in a special class. A neglected area of research is the relationship of the self-concept and resultant return to the regular classroom. There does not seem to be an adequate description of the role of the LD pupil's self-concept in the decision-making process of the summative evaluation.

Towne and Joiner (1968) feel that the special learning disabilities class has important implications as a social setting for self-redefinition. They said:

> Most of the literature regarding what goes on in special classes for children with learning disabilities discusses specific remedial techniques without acknowledging that these techniques are applied in social settings and that their effectiveness is influenced by social processes. To highlight these influences Brookover's (1959) social psychological theory of learning is sketched here and related to classroom practices with learning disabled. Four hypotheses form the substance of Brookover's conception of school learning.
>
> 1. Persons learn to behave in ways that each considers appropriate to himself . . .
>
> 2. Appropriateness of behavior is defined by each person through the internalization of the expectations of significant others . . .

3. The functional limits of one's ability to learn are determined by his self-conception or self-image as acquired in social interaction . . .

4. The individual learns what he believes significant others expect him to learn in the classroom and other situations (pp. 218-219).

It seems that Towne and Joiner imply that not only do learning disabilities classes facilitate changes in the self-concept of the individual student, but that his learning is determined by his self-concept. Thus, the effectiveness of any learning disabilities program appears to be influenced by how much the students' self-concepts are enhanced; and they feel this enhancement can be done in an LD class.

Wasserman, Asch and Snyder (1972) said that a child with learning disabilities many times has emotional problems as a result, sometimes seeing himself as unable to learn. They state:

> Caught in a web of confusion about his ability and acceptance by others, the child may emerge with a damamged self-image which compounds the problem. Moreover, it should be recognized that with continued failure, children become increasingly alienated from specific subject skill competency, and the curriculum itself loses its relatedness to the child (p. 15).

Weiss and her group (1971) in an investigation of hyperactive LD children stated that a clinical psychiatric evaluation of 65 hyperactive children revealed that the majority had a low self-image which often seemed to be related with unusual apprehension about personal and academic failure. Minde and others (1971) in discussing the research on clinical investigations of the self-concept of hyperactive children stated:

> On the other hand, the clinicians on the team have repeatedly noted how multiple failures have tended to undermine individual children's ambition and caused a profound sense of failure and lack of motivation -- facts hardly conducive to learning (p. 217).

A pilot program by Cohen and Berger (1966) dealt with fifteen retarded reading second graders who received a training program in visual perceptual skills. In the program Cohen and Berger (1966) said the post Draw-a-Person drawings showed visible improvement in spatial positioning and balance. Another area in which post-testing of the DAP showed gains was in the self-concept. Cohen and Berger (1966) said:

> There is also a consistent trend in the post-drawings series indicative of a more solid and affirmative sense of self. The post-drawings were larger, showed a firmer stance, and were noticeably less rigid, more relaxed and more movement oriented. They displayed more projection of self into space (arms extended) than pre-drawings. This technique of measurement, improvised to provide some index of growth in body schema, seems to show promise as an assessment device for future programs of this kind (p. 116).

Cohen (1969) said that "the ability to observe and quantify visual perceptual development in children outstrips our abilities to influence this process" (p. 11). The program by Cohen and Berger (1966) might indicate an improvement of the self-concept when training in visual perception skills is given. However, some questions arise as to the validity and reliability of the DAP test in measuring the self-concept.

Summary

The problem pointed out in reviewing the related literature about the LD pupil's self-concept is that nothing is discussed about the role of the self-concept of an LD pupil who may be returning to the regular classroom. The relationship of the LD pupil's self-concept in the overall decision-making process of the summative assessment, as utilized in this study, does not appear to be described. Most of the studies seem to be of a correlational nature or of an experimental nature; i.e., the studies correlate a low self-concept with LD class placement, or poor academic

success, or else the self-concept is measured after an intervening variable has been administered.

In short, the self-concept has been looked at before an LD pupil enters a special class or receives special instruction, studied while the pupil is in a remediation program, or has compared the LD pupil's self-concepts with other educationally disadvantaged students and with emotionally disturbed pupils. Little research appears to have been conducted regarding the LD self-concept when leaving a special classroom, or does there appear to be any research depicting the relationship that the LD pupil's self-concept has in a decision-making process (summative assessment). There is not an adequate description of this relationship of the LD pupil's self-concept.

Review of Related Research in LD Programs

From this review of the related research in learning disabilities programs, it appears that the field is so new that researchers have problems in delineating specific inquiries in an area where so much controversy over definitions, methods, etc., exists (Maietta, 1969). Conflicting statistics, controversy over identification of LD pupils, and lack of control over the many variables in a school setting has made the research conflicting and confusing. Even correlational studies do not agree for the most part; and to add to all of this, a controversy over whether learning disabled students should be separated or remain in regular classes is currently brewing. A further problem noted is that later researchers would quote earlier researchers whose work might have been a position paper or whose research was questionable or whose work could not be generalized outside of institutional settings.

Research in the field of learning disabilities is further hampered by the "eclecticism" characteristic noted by Weiderholt (1974). He said that this present day eclecticism can be noted by the utilization of the remedial or developmental materials and assessment means "borrowed" from the other disciplines of special and regular education. Weiderholt (1974) said that this eclecticism can be seen in the textbooks and articles (Johnson and Mykelbust, 1967; Myers and Hammill, 1969 and 1974; Lerner, 1971; Frostig and Maslow, 1973; Senf, 1973; etc.) for teachers to use with LD pupils, as these include a variety of activities for developing, increasing or improving motor skills and written and spoken language.

There are a number of books which give objectives of the learning disabilities programs, principles of learning disabilities instruction, and reviews of various methods and techniques (Johnson and Myklebust, 1967; Hewett, 1968; Cohen, 1969; Hammell and Bartel, 1971; Kroth, 1971; McCarthy and McCarthy, 1969; Waugh and Bush, 1971; Colarusso and Green, 1973; Monroe, 1966; McLeod, 1966; Early, 1969; Van Osdol and Shane, 1972; Cruickshank and Johnson, 1967; Barbe, 1963; Frierson and Barbe, 1967; Vallett, 1969). Therefore, this area of the review of related literature of LD program evaluations will contain only a few of the many investigations in the field of learning disabilities.

Most of the earlier efforts in research on learning disabilities has been in depicting positions, theories, definitions or clinical write-ups involving a case study. The evaluation of particular programs has been attempted only recently. Bateman (1966) said that most of the work prior to 1966 on the remediation of learning problems had been in the form of case studies. At that time she cited only a few studies representative

of the small group of systematic, controlled studies of groups of children on remediation of learning disorders. However, after the review of Bateman (1966) a complete textbook by Johnson and Myklebust (1967) presented a theory of learning disabilities as well as opening a number of research questions. Most of the other books of readings (Cruickshank, 1966; Frierson and Barbe, 1967; Hellmuth, 1966; Money, 1966; and Myklebust, 1967) were "compilations showing substantially more position papers than research reports" (Kass, 1969, p. 72).

Even though most writers disagree as to which remedial program is best, all seem to agree that a diagnosis of the difficulties in learning is essential to the remedial program that is initiated. As Bateman (1966) states it:

> A basic assumption which underlies most thinking in remedial planning is that there is a discoverable relationship between an individual child's symptoms or disruptions in learning and the method of teaching by which he learns most readily. While there has been disagreement concerning whether remedial techneques should be chosen to avoid or to utilize the deficiencies noted in learning channels, almost all have tacitly agreed that diagnosis and remediation ought to be related, either directly (teach to the strengths) or inversely (teach to the weaknesses). Unfortunately, there is as yet no direct evidence to support the efficacy of such a 'matching procedure' (p. 114).

From this development to finally evaluating LD programs the hazards to researchers were numerous. Defining the population, selecting the population, initiating treatment and trying to control all of the variables created so many problems for researchers that many took "pot shots" at only pieces of the program evaluation as completed within schools or else did research work within institutions.

One of the earlier writers, Rabinovitch (1959), recognized the wide scope within the field of learning disabilities and focused his review only on those learning disabilities which hindered the acquisition of

academic knowledge. He stated that there is "no validity in postulating a discrete diagnostic entity of learning disability" (Bateman, 1966, p. 97). Rabinovitch chose to focus his review primarily on reading retardation, estimating that more than 10 percent of American children read so inadequately that their adjustment is impaired. He also found that boys outnumber girls about ten to one in primary reading retardation, and that the reading disability was the most frequently reported disability.

Cruickshank and others (1961), in a somewhat questionable study of special teaching methods on school achievement, perceptual status, and other factors, found some statistically significant differences in perceptual gains for the experimental group which received special training; however, these gains were lost the second year when all students were regrouped. Cohn (1964) in talking of Cruickshank's (1961) study said nearly all of the subjects were socially isolated.

Though special teaching procedures (Cruickshank and others, 1961; Gallagher, 1960) result in academic gains, many of these gains appear to be dependent upon continued remedial support.

> Tutoring to remedy special learning disabilities does not appear to follow the medical 'restoration to normalcy' model, but rather requires a 'continued' support model (Bateman, 1966, p. 112).

Perceptual training appears to give significant improvement in performance on the Bender-Gestalt, Wide Range Achivement Test (spelling and reading) and the Metropolitan Reading Achievement Test and others, such as the marble board test (Silver, Hagin, and Hersh, 1965). This study was with 20 boys from eight to eleven years who had WISC IQ's above 85 and who had reading disabilities.

Koppitz (1964) reported a significant relationship between performance on visual-motor coordination tasks and academic achievement in elementary chilren. Research conducted by Keogh and Smith (1967) and by Brenner et al. (1967) revealed significant correlation between the Bender-Gestalt Test performance upon entry into first grade and later school achievement in the primary grades and also later in the sixth grade.

From investigations conducted by Chansky and Taylor (1964), Rosen (1965), and Spieth (1967) indications developed that visual training materials could have positive effects on the reading achievement levels of selected children. However, other studies (Archiszewski, 1969; Gallagher, 1960; and Jacobs, 1968) found no specific relationships of any consequence.

In the 1960's interest grew in implementing programs which were based upon learning disabilities traced to a perceptual handicap. It was because of this interest that a number of remedial programs designed to compensate for this deficit developed (Barsh, 1966; Frostig and Horne, 1964; Kephart, 1965; Radler and Kephart, 1960; Silver, Hagin and Hersh, 1967; and Valett, 1969).

Zach and Kaufman (1972) said that some studies (Allen and Dickman, 1966; Alley, Snider and Spence, 1968; Painter, 1966; and Talkington, 1968) that did show gains in achievement due to perceptual training programs had either limited numbers of subjects, no controls, or poor controls.

There was an earlier awareness of the desirability of more effective and more diversified research regarding the effectiveness of certain methods of remediation. As Maietta (1969) said:

> Despite the persistent contentions of Delacato (1966) and his colleagues about the merits of patterning to neurological organization, of Frostig (1964) about the value of her training program for visual-perception problems, of Johnson and Myklebust (1967) that auditory-perceptual deficits are not appreciable responsive to phonetic approaches to teaching reading, of Cruickshank (1961) that specific physical arrangements and structures facilitate learning of the brain-injured, and of Kirk (1961) about the importance of carefully programmed and sequenced materials and learning environments, the efficiency of these and other theories, hypotheses, and methodologies are in need of rigorous evaluation and research. This is not to say that they are not useful or critically needed by children with special learning disabilities (p. 32).

The role of maturational lag also plagued researchers. Bateman (1966) said that Bender felt that maturational lags tend to be self-correcting while LD children cannot mature out of it. Bender (1958) felt that there existed a number of definitive differences between the slow maturer, the child schizophrenic, and the true LD child. This is somewhat in contrast to earlier researchers and later investigators who felt differentiation between these groups was extremely difficult.

Cratty (1970) indicated that in the last several years pretest and post-test data relative to the "influence of remediation programs upon selected attributes of neurologically handicapped children have been gathered" (p. 26). He also said that further studies presently being conducted are examining the correlation of data elicited from reading tests and other academic measurements with various motor skills and program training areas, as well as with the results of neurological examinations.

Buckland and Balow (1973) in a study designed to determine the effect of visual-perception training (using Frostig worksheets) on perceptual readiness and word recognition skills of low readiness first grade children found no significant gains. Cohen (1970) found that special training programs do not seem to improve achievement any better

than good teaching. Zach and Kaufman (1972) caution educators against hastily designating children as perceptually handicapped, saying:

> That some children have percpetual problems which handicap their school achievement, there is little doubt. How these children are identified, how their problem is defined, and how they are trained to become successful learners, however, is still unclear (p. 40).

Behrens (1963) studied 40 children classified as dyslexic, spastics, dysgraphics and some who were primarily discalculic in order to determine the psychological and behavioral changes following a period of remediation. He found that the greatest improvement was in verbal learning while social maturity did not show the expected results.

John and Myklebust (1965) found in their study the following gains in achievement and in social quotients:

> In a study of more homogeneous population, comprised of 60 dyslexics, we found the social quotient to be 86.1. The mean intelligence quotient was 101.3, the mean oral reading quotient, 77.6, and the reading vocabulary quotient, 80.3. Of these 60 children, 16 were evaluated again after one year of remedial education. The average gain in reading vocabulary was 1.9 grades and in spelling, 1.3 grades. The social quotient rose from 83.1 to 88.2 (Johnson and Myklebust, 1967, pp. 310-311).

Many researchers believe that there is a good correlation between successful achievement in reading and word knowledge correlated with good perceptual-motor skills as revealed by tests. Some examples of those who adhere to the unity and interdependence of the mind and body are Piaget (1952), Ayres (1968), Olson (1959), Kephart (1960), and Gesell (1940). Bengston (1966) and Skubic and Anderson (1970) found significant relationships between success in reading and high scores on perceptual-motor tasks. Higher intelligence was also a factor in Skubic and Anderson's experiment. Earlier, Ismail, Kephart, and Cowell (1963) had found that motor aptitude test items could predict intelligence

scores on the Otis IQ and success on the Stanford Achievment Tests more accurately with high achievers than with medium achievers.

A basic reason why little research, relatively speaking, and why this research is for the most part conflicting in evaluations of the effectiveness of the special education or learning disabilities classes evolves from the group process itself. As Quay (1968) points out:

> First, current grouping practices force the educator to deal with children, who, while they may be somewhat homogeneous in certain intellectual, physical, and behavioral characteristics, are far from homogeneous in regard to abilities or disabilities crucial to classroom learning (p. 329).

Quay goes on to say that special education programs are not designed to improve the academic competence of the LD child by application of an instructional technology aimed at improving the learning process of the child who suffers from a learning disability. This is done better with other LD programs rather than the special education programs.

Apparently, the LD field is so new in the educational framework that researchers find themselves lost in the maze of unanswered questions, with these unanswered questions discouraging inquiry into specific fields. Some of the problems are pointed out by Maietta (1969) who said:

> Much systematic observation and evidence are needed to reveal whether or not the structure should be isolated or in small-group learning environments; tutorial versus special class arrangements; initial sequencing of interventions and materials from general and gross levels to specific and highly minute levels as the child's learning patterns approach normal expectancy levels; whether the body teaches the mind (Kephart, 1961) or whether the mind teaches the body or learns independently; whether perception can be learned and can be taught as a separate and distinct entity from concept formation and congitive development (p. 33).

Conflicting statistics regarding the precentage of LD children in classes have not helped educators either, as educators are having trouble defining the LD population. As McCarthy (1968) says, one of the four

problems facing educators today is about the statistics of LD pupils; if the incidence of severe LD problems is as high as most believe, then the problem cannot be solved with special class placement.

Just as researchers began to look at evaluations of LD programs, a trend of thinking began that criticized special class placement. A number of writers were critical of special class placement. One of the first was Johnson (1967) who felt that placement of all learning disabilities children into special classes is not the answer. She said that most communities should have at least two types of programs: segregated classes for the most severely disabled (those who cannot profit from a regular classroom environment) and a regular program that includes almost all of the activities for those learning disabled students who participate in a regular classroom. She also felt that learning disabilities programs are extremely necessary to meet the needs of the LD population.

McCarthy (1968) found that special class placement for learning disabilities students was not as effective as had been thought earlier. She said that in her study she matched two groups of children, those in the resource room program and those in the itinerant program. The itinerant children did as well or better on all measures when compared to those in the resource room. She suggested keeping the LD child as much a part of the regular school as was possible.

Many writers agree that some LD students need special classes in order to receive extra help that cannot be adequately given in a regular classroom. However, there is no agreement among educators regarding the positive or negative effects of placing LD students into special classes. (Chistoplos and Renz, 1969; Harvey, 1969; Miller and Schoenfelder, 1969;

Towne and Joiner, 1968). Ross (1971) adds another dimension to the problem when he said:

> It would appear that one of the major reasons for this lack of progress is the conceptual confusion which plagues this particular area of inquiry. Whether one wants to engage in research on learning difficulties or desires to treat children with this handicap one must first come to grips with the basic question of definition and criteria (p. 251).

Lilly (1970) suggests that special education programs for the mildly handicapped (excluding the trainable mentally retarded, severely emotionally disturbed, multiply handicapped, and obvious deviant students enrolled in normal schools) be discontinued. Lilly (1970) pointed out the conflicting studies have most of the weight of evidence learning toward regular class placement for all special education students except for the most severely impaired.

Two other points seem relevant for consideration of special LD programs. One is the apparent benefits of associating with students other than those who have LD problems. The other is that the LD umbrella tries to cover too large a variety of LD problems within a single class (Hammill and Bartel, 1971).

Hammill and Bartell (1971) feel that the special class or the special school is thought to be an administrative panacea for exceptional children. They feel that additional research is needed to see if sound educational benefits offset the negative effects of segregated classes.

On the other hand, Frank (1973) feels that there are not enough special classes and that more special learning disabilities classes are needed. He said that about 12 years ago, when learning disabilities was just beginning, the guesstimates indicated only two to five per cent of our children had learning problems. About six years ago, the estimates

rose to about fifteen per cent having a specific learning disability with an additional five to ten per cent having multiple learning problems. In stating that additional financial aid is needed to initiate new and additional classes for LD children, he states these estimates of the numbers of LD children currently within our schools to be from 35 to 40 per cent. About half have learning problems, while others may have problems which interfere with their learning.

Kirk (1969) was concerned that there was not more research in regard to the methods and materials for teaching children with learning disabilities. He was particularly concerned about the training that the LD teachers received, as he said:

> Many teachers are learning about one method, or one set of materials, and are using these with all children labeled 'learning disabilities,' without too much reference to whether the method or materials apply to a particular child (p. 23).

Even though there was some current research on learning disabilities being initiated, McCarthy (1968) said that the emphasis was on the etiology of the learning disabilities and even that disagreed. This lack of research impeded any sound educational LD program to be implemented in the schools.

Most of the previous research done regarding special classes was not confined to LD classes, but other writers felt that the evidence in other special education classes would be applied to LD classes as well. Mann and Phillips (1967) have said:

> Much of any improvement that we see in special education may be due to novelty effects, enthusiasm, teacher expectancies (Rosenthal and Jacobson, 1966) and a vast variety of other motivational variables. The well known therapeutic fallacy of medicine applies with a vengeance in special education.
>
> At a time when special education has not been found to be special in its successes (Johnson, 1962), and when specific

> programs have been demonstrated in the past to be less successful than general ones (Sparks and Blackman, 1965), claims of therapeutic success through fractional approaches should be accepted with caution (p. 321).

Dunsing (1973) feels that the learning disabilities programs are especially vunerable to conclusions drawn in the name of research. Something to consider he felt important was over-generalization. He said:

> Much of the early work with LD children was conducted by master clinicians or teachers whose primary interest was in helping children. They spent their time refining their procedures and eventually wrote books, but spent little time gathering evidence on effectiveness of their techniques (p. 454).

He also felt that evaluation is an agonizing and painstaking process, but one nevertheless essential to the growth of body of knowledge.

Summary

A review of the related research in LD programs seems to point out a number of problems. There seems to be a number of articles and books that are only position papers, there seems to be confusion and controversy over the identification and definition of learning disabled students, and there is a brewing controversy over the area of specialized classes for LD students. As the field of learning disabilities is so new, the research problems that would plague any new educational field faces aspiring researchers. One major problem seems to be controlling the variables that exist in a school setting once agreement upon definitions of the variables is gained.

Of relevance to this study, the problems seem to be three in nature. First of all, most of the LD studies relative to the LD teaching process are of a comparative nature or of an experimental nature. Usually the comparison is between specific techniques, or between groups (such as LD

and EMH); and the research is not directed at the teaching process itself. Second, the confusion over definitions and identification of the population makes much of the research unclear or misleading. Also, much of the research has been done in special settings or institutional settings; and there can be little or no generalizations.

Third, and most important for this study, there seems to be little description of the actual process involving the interaction taking place between an LD pupil and an LD teacher in a separate LD classroom. In any remedial class constant evaluation of a pupil's progress is needed. The research studies neglect this important part of the ongoing teaching process. In other words, the performance indicators used by LD teachers in a self-contained class for LD pupil assessment of either a formative or a summative nature are not adequately described. Also, the specific activities that LD teachers use to implement LD prescriptions in a special class many times are neglected in the research. There are a number of books and theories as to what should be done but little description of what actually is done in the LDT/LDP interaction process in a self-contained classroom.

Related Research in the LD Teaching Process

The general confusion, conflicting research and neglected areas of LD investigation in this review of the related research makes a review a difficult process. The interaction process between an LD teacher and an LD pupil seems to be neglected, as well as the various types of assessments made during the progression of the school year. The systems method of examining the teaching process for LD pupils is largely neglected.

There seems to be few connecting threads of consistency and of direction other than further research is needed of the LD teacher's role in the interaction process with LD pupils. The experimental studies are limited to the certain variables which the researchers feel need to be investigated. The few descriptive studies are not related nor do they develop any systematic manner of describing the variables being examined.

In this area of related literature of the LD teaching process, several interdependent topics are presented. This portion of the chapter is divided into three areas: (1) teacher variables in the learning process, (2) recommendations and diagnostic teaching, and (3) the role of assessments in learning disability teaching. A short summary follows this section.

Teacher Variables in the Learning Process

Most of the components of the teacher variable that have been studied include descriptive characteristics such as age, sex, and years of experience; teacher personality traits; leadership role; or teaching style (McKeen, Hops, and Walker, 1972). Usually the definition of the "teaching style" has been one of a descriptive or philosophical nature or characterizations of teacher behavior; e.g., reflective . . . teaching style (Hunt and Joyce, 1967), democratic teaching style (Lewin, Lippitt, and White, 1939). Although a great number of observations systems have come from this approach (Flanders, 1970), the "highly tailored observational systems have made general inferences difficult across independent investigations" (McKeen, Hops, and Walker, 1972, p. 2).

A number of studies are of a comparison teacing method such as of the open plan school and the self-contained classroom model (York County

Board of Education, 1970) or of an effect upon some variable, such as peer interaction related to teaching style (McKeen, Hops, and Walker, 1972). Many times there can be little generalization because the research was done in school settings where control was difficult.

Sandifer (1972) found that the number of hours of education for teachers was significant in classes which showed greater gain in student achievement in an investigation of the teacher traits associated with student gain. Students who were above medians of their groups seemed to be influenced in gains by the age and number of years of experience of the teacher. However, the investigator warns that chance alone could account for the results of this study.

There is some literature available on the effect of various reinforcers on classroom orientation (Patterson, Jones, Whittier, and Wright, 1965; and Quay, Werry, McQueen, and Sprague, 1966) while Scott (1966) suggested that organization behavior can be influenced by engineering the stimulus display. Scales, methods for observing the classroom interaction, and theories for evaluating teacher effectiveness have been developed by a number of writers (Emmer, 1973; McKeen, Hops, and Walker, 1972; York County Board of Education, 1970).

Cohen (1970) rather accurately suggests that there seems to be confusion in discerning the differences between teaching and learning upon the part of some people. Gray (1971) is somewhat harsher on teachers in his discussion of the teaching process. He said:

> Children who fill our remedial reading classes have failed to learn to read, but they have had plenty of teaching. Teaching that does not result in learning in nonfunctional and is a waste. The teacher who says, 'I taught him but he failed to learn,' did not teach, and therefore is a failure as a teacher (p. 73).

Schuler (1972) raises the interesting theory (in his philosophical analysis of teaching and learning) of learning taking place when one values what is learned and if the teacher values what is taught. Learning then takes place, according to Schuler, because the material has value to the learner and has been presented by a teacher who likewise values it.

Along with this there are a number of studies that stress the importance of the teacher in development of the educationally disadvantaged child's self-concept (Hamacheck, 1969; Katz, 1964; Blume, 1968; and Trowbridge, 1970). Some studies (Brookover and Thomas, 1964; Davidson and Lang, 1960; and Soares and Soares, 1970) showed a significant relationship between the disadvantaged children's perceptions of themselves and the children's perceptions of the teachers' feelings about them.

Some studies showed agreement between the teacher's perception of the child and the child's perception of himself (Howard, 1968; Keller, 1963; and Long and Henderson, 1968) while others (Burke, 1968; Soares and Soares, 1970; Williams, 1968; and Zirkel and Green, 1971) revealed differences between the measured self-concept of disadvantaged students and their teachers' perceptions of their self-concept.

Walberg (1969) felt that environmental assessments were necessary in order to improve the accuracy of predicting learning and for environmental manipulation to bring about the best conditions for learning. The influence of Lewin's (1936) belief that behavior is the result of two interdependent variables (person and environment) can be seen in Brunswik's (1957) suggestion that all aspects of the "geographic-historic-physical environment" is relevant to learning and in Randhawa and Fu's

(1973) contention that the classroom environment variables is a neglected area of research.

Edwards (1972) tried unsuccessfully to see if affective areas were effected by placement in Individually Guided Education (IGE) procedures in selected elementary schools. In general, the environment of the IGE schools seemed to foster more favorable attitudes toward school and peers, although inconclusive. The teacher attitude toward this type of education and the students' self-concept was not conclusive.

McKeen, Hops, and Walker (1972) said that many of the evaluation studies of classroom learning outcomes are currently investigating the triangular interface of teacher, student and instructional materials. However, more emphasis now is being given to consider the teacher variable separate, rather than a part of the curriculum effect, either randomized or uniform (Rosenshine, 1970; Beller, 1971).

Recommendations and Diagnostic Teaching

Cohen (1973) in looking at the literature on individualized instruction said that there were six dimensions of individualization which seems to be the most important, non-overlapping and operational. They were: (1) the grouping patterns in the classroom, (2) pacing, (3) diversity of materials in use, (4) extent of student communication with adults and other students, (5) teacher bases for decision-making, and (6) student participation in the decision-making. He used four three-minute observations of students during a two-week period.

A recent study by Colarusso and Green (1973) involving more than 40,000 students is an effort to educationally group students with resulting strategies for teaching based on principles of child development.

This involves a general set of guidelines for approaching elementary children on an individual basis stressing emotional and developmental factors as well as academic ones. Specific behavioral strategies to facilitate the teacher/pupil interaction are given. This study seems to be representative of the growing interest in individualizing the teacher/pupil interaction process involved in teaching.

Crooks (1971) in a study of Educable Mentally Handicapped (EMH) pupils found that professionally prepared objectives and lesson plans for teachers significantly aided the pupil's achievement. Special preparation of prescriptive teaching techniques given to selected teachers aided in gains on the Illinois Test of Psycholinguistic Abilities (Cline, 1971). Prescriptive matching teaching material to selected diagnostic descriptors for EMH children resulted in some gains, though not of any significance (Dorfman, 1973).

Morgan (1972) found that providing an extensive background of relevant information by a diagnostic team of experts to teachers seems to be helpful in organizing a more successful reading program for students who have been screened and thought to be potentially poor learners in reading.

The need for prescriptive teaching or for individualized programs for the learning disabled based upon an educational diagnosis has been pointed out by a number of writers, some of whom are Cline (1971), Peter (1965), and Dorfman (1973). Some writers, however, caution against complete reliance on deficit methods to establish the entire remedial program. Some of the writers who urge caution using deficits are Salvia and Clark (1973), Roberts (1969), and Nivette (1968).

Oakland (1971) has said that the criticisms of diagnostic practices have been leveled at the evaluations and recommendations which lead from the appraisal. Most of the criticisms come from teachers. Oakland said:

> Teachers expect the results of the appraisal to be (a) credible, (b) understandable, and (c) translatable into realistic remedial practices. Teachers usually believe that the written and oral reports from the examiner represent a valid estimation of the child's disabilities. While the credibility of the assessment is an important base from which to proceed, communication between the teachers and the psychological examiner tends to deteriorate on the latter two points (pp. 151-152).

Thus, the recommendations that evolve from the diagnostic procedure assume a tremendous importance in the LD area. The diagnostic procedure defines the learning disability which usually is so severe that special assistance is needed. If it is a special class (self-contained), the ultimate purpose is to facilitate the return to the regular classroom. As Christoplos and Renz (1969) state, "Before an exceptional child is segregated from the regular classroom, those behaviors which he must master for re-entry into it need to be identified and, if possible, programmed into his education" (p. 376). They go on to say that the goal of special class placement is to return the child to the regular classroom.

Although Wetzel (1971) was talking of behavior change and treatment, his comments quoted below are relevant to recommendations evolving from the diagnostic testing of LD students:

> Here, perhaps, is the weakest element in contemporary practice: we by and large do not know what to tell people to do. We lack both data and theoretical principles on which to base clearcut recommendations to parents, teachers, siblings, peers, spouses, employers, and clients. There has developed, in fact, in many therapeutic and consulting procedures, a strong prohibition against giving direct advice concerning action and management (p. 21).

There seems to be some indication that many LD recommendations which are to evolve from the diagnostic testing suffer from the same weaknesses as those mentioned above, or else the recommendations are so general that their effectiveness is lost.

Johnson and Myklebust (1967) said "for effective learning, the teaching must be in terms of the variables that typify a given child or group of children" (p. 55). Of the teaching process, Johnson and Myklebust (1967) state:

> They have a need for a special type of teaching because they achieve by idiosyncratic processes. How these children are taught makes the difference between learning and not learning. They have normal potential so they learn successfully when taught according to their peculiarities (p. 56).

An interesting point brought up by Oakland (1971) relates to the efforts of the diagnostician to justify his efforts and successes by pointing to the numbers of children who have improved (significantly) after receiving the proper remediation based upon his diagnosis. Oakland (1971) says that the "improvement of a disability may be more the result of increased attention directed towards the child (i.e., Hawthorne effect) than the result of educationally relevant remediation" (p. 151).

Thus left unclear are questions regarding whether or not the teacher follows the recommendations, and if she does, whether the remediation suggestions assist in the improvement or whether spontaneous remission occurs. This is an area that needs description and analysis.

Edwards (1969) reports a study of ten LD pupils "precisely taught" in a regular classroom. He feels that the teacher should have a flexible method to precisely define pupil behavior with direct, continuous records and should have continuous and supportative contact with the home. Peter (1965) said that the essence of prescriptive teaching is "the

environment is manipulated to allow reinforcing consequences to become attached to the learning that is desired" (p. 11). Peter also feels that only an interdisciplinary approach with all educational and supportative personnel is suitable for the educationally disabled child.

Nash and Pfeffer (1967) in a guide to a special class program for children with learning disabilities felt that observations of an LD student's behavior were essential for developing any approach to remedy the disability. They used eight anecdotal cases. Roberds (1968) used seven LD students for a year's study, utilizing school records.

Other investigators of the importance of the teacher's role in LD classes are Sloane (1972) who found that additional supportative behavior on the part of the LD teacher resulted in significant gains in motor behavior while some gain in learning tasks occurred (not significant) while Sussman (1972) found that the relationship between teacher attitude and the perception of classroom climate and self-acceptance of children with learning and adjustment problems were important. Sussman (1972) found that a teacher with positive attitudes resulted in greater goal progression, less friction, and increased interpersonal relations.

There appears to be little research devoted specifically to the teacher/pupil interaction, and even less research dealing with the LD teacher/LD pupil interaction in a self-contained classroom. The brevity and the variability of the recent studies of LD pupils written in a descriptive manner can be illustrated by the few studies given here. O'Connell (1971) described the instructional objectives as related to the dynamics of the teaching-learning situation, utilizing teachers as observers of their own "emergent objectives."

Role of Assessments in Teaching

A number of the writers and investigators seem to imply the position best described by Dunsing (1973) who stated:

> There are no treatment panaceas for LD children. Indeed, an LD teacher may have considerable difficulty defining whom she is teaching, what she should teach, why and how she should teach it, and when she should stop or change her procedures. Stated more formally, she needs to know something (a) of the nature and extent of the child's learning problems; (b) of the priorities to be established in programming for his education needs; (c) of the rationale and strategy behind her procedures; (d) of the educational methods, techniques, and materials available; and finally, (e) of ongoing clinical evaluation methods which allow for a systematic and continuing appraisal of the child's progress and a "best fit" to his individual needs (p. 453).

Dunsing (1973) goes on to say that the LD teacher faces the almost impossible task of having to constantly make important education decisions that other teachers do not have to make in two areas: (1) what educational priorities and how to accomplish her teaching tasks, and (2) how to handle the "emotional problems" that so many LD children seem to have.

There seems to be at least one additional problem that an LD teacher faces that other teachers do not. That problem is the assessment of an LD pupil relative to deciding if the pupil should return to the regular classroom or should terminate specialized instruction (summative assessment). As Dunn (1967) states the importance of designing sequential step-by-step programs to move the child from where he is to where he needs to go, it would seem to follow that if the LD pupil has entered a special class, the last step would be if and how he is to leave the special class.

A major problem evolving out of prescriptive teaching or LD teaching based on recommendations is that behavioral outcomes are not given in many cases, nor are definite means and methods given to assist the teacher (be it a regular classroom teacher or LD teacher) in achieving some final educational goal. Likewise, little notice is given to the assessment procedures of LD pupils (both formative and summative) needed to be implemented by the LD teacher. As Giroux (1973) puts it:

> The problem facing an educational decision maker is one of having to choose among alternative courses of action which have not been qualified and, in most instances, have not been sufficiently defined or identified. The problem is usually characterized by the definition of goals and processes in terms which fail to communicate the specific information needed to discriminate between alternatives (p. 1).

Bushell (1973) has devised a system for continuously evaluating the ongoing progress of each child involved in a behavior analysis program. Carbonari (1973) found a relationship between the instructional mode, the teacher needs, and the student's personality.

Shavelson (1973) feels that the basic teaching skill held by a teacher is decision-making. The teacher has a choice of alternative acts, and the choice may depend upon the teacher's subjective estimation of a student's understanding of the material and the usefulness of various alternatives in increasing the student's understanding.

The necessity of informal methods of assessment (formative assessment) by the LD teacher in meeting the LD pupil's changed educational needs is pointed out by a number of writers such as Smith (1969), Haltom (1970), and Kemp (1971). The purpose and procedures of this informal assessment are similar or are the same as that presented by the formative assessment phase of this study as outlined in Chapter III. However, Smith (1969), Haltom (1970), and Kemp (1971) all caution that

formal assessment methods are periodically needed and that there are disadvantages as well as advantages for the informal assessment procedure.

Involvement of the teacher in the assessment procedures and the use of a variety of informal assessment measures prior to formal diagnostic procedures are important steps to assisting the LD child (Jones, 1971). Caution against the misuse of ambiguous, hypothetical constructs such as "readiness" and "immaturity" is urged by Tyler (1964), Baer (1966) and Allen (1972). Allen (1972) also suggests that the child's progress be measured against himself, not "against some nebulous peer group that exists only in statistical compilation" (p. 123).

Webster and Eichelberger (1972) said that recently there has been emphasis in education on the development of comprehensive evaluation models for education. Although talking about entire school systems, their comments hold merit in a systematic evaluation of the LDT/LDP interaction process in a self-contained classroom. Webster and Eichelberger (1972) have said that once an "instructional program has been adopted for implementation system-wide, process evaluation provides an important tool for the maintenance of the on-going system" (p. 94).

Peter (1965) had four phases in his prescriptive teaching circuit. The first phase was the referral of the child from the regular classroom for diagnostic testing. Phase two is the reporting of the recommendations for modification of instruction or any other aspects through translating the test results into educational and behavioral goals. The third phase is the implementation of the prescription into school programs through appropriate modification of teaching methods, class placement, and educational goals.

The fourth and final phase is the follow-up. In Peter's circuit, this is the feedback mechanism. The child's behavior is observed to determine the outcomes of the educational modification based on the prescriptions given. If the desired results are occurring, then the prescriptions are continued; but if the results are unsatisfactory, then further diagnosis and retracing through the process is done. This is on a rather formal assessment procedure, although somewhat similar to the formative assessments that are made in this study. Giroux (1973) said of the decision-making process that it centers on several assumptions: (1) on identified need given high priority, (2) the objective has been chosen to fulfill that need, and (3) a level of performance or an expectancy level has been set by the decision maker.

Scagliotta (1969) felt there was a need for at least a monthly anecodotal record to be kept, with a biannual report. He felt that students should have a daily individualized planbook prepared by teachers stipulating lesson title, results, and comments suggested for further help. He also felt individual parent conferences were essential for learning disabled students and that some means by assessment should be kept.

Kemp (1971) feels that the specialists make certain demands and the remedial teacher follows. In her article she discusses criteria for when a child is ready to return to the ordinary class from a remedial class. However, this was not a research study, but rather a discussion article of what one community did with students who were behind their peers in achievement.

As have others, Giroux (1973) feels that a summative evaluation is necessary. He has said:

> The summative evaluation would be a major source of information for the program renewal phase of a program and act as a source of baseline data with which to compare formative evaluation results. Summative evaluation would provide data in terms of cost/utility of a program and process . . . Assessment would be directed toward measurement of a process' contribution to students in attaining the level of performance specified in an objective (achievement and attitudes) (p. 7).

Giroux feels that the major portion of the summative evaluation would be information and the data from the formative evaluations which should be conducted regularly.

In keeping with the need for both formative and summative assessments, McClune (1970) felt the classroom teacher has a key role in making really important decisions affecting the day-to-day learning opportunities for students in classrooms. Instructional planning was an important element in the teaching. He pointed out that the descriptive theory of teacher lesson-planning, as available in the literature, differed significantly with the data he obtained from the study he conducted.

Summary

In this review of the related literature of the LD teaching process, a number of different but interdependent topics important to understanding the LDT/LDP interaction process and the performance indicators necessary for assessments (formative and summative) are presented. As the area is not adequately researched, many of the articles did not directly deal with LD populations but rather had implications for LD populations. Few studies dealt with descriptive investigations. Few studies dealt with the assessment procedures (either formative or summative) necessary for LD pupils or described the decision-making process involved regarding a possible return to the regular classroom.

The importance of recommendations for prescriptive teaching, the importance of the teacher variable, and the need of continuous and systematic assessments are pointed out in this review. Other elements such as the environment and the purpose of the LD teaching program are also discussed. Perhaps the words of McCarthy and McCarthy (1969) best describe the current field of research in learning disabilities:

> If there is one word which characterizes the research that bears on learning disabilities, it is "inconclusive." There is sufficient evidence to the claims of theorists to lure the researcher into the laboratory, but rarely does his research either unequivocally support or rule out the claim he investigates (p. 104).

Chapter Summary

This review of the related literature was organized about three sections: (1) related research in the LD pupil's self-concept, (2) review of related research in LD programs, and (3) review of the related research in the LD teaching process. Each section had a short summary. This chapter summary will be used to point out the problems that combined sections seem to indicate.

The review of the related literature seems to point out several problems of a general nature. First of all, most of the studies are of an experimental nature (looking for a cause and effect relationship of specific variables) or of a comparative nature, ignoring a number of other variables in need of description. Few studies were of the descriptive nature. Secondly, the specific activities employed by LD teachers in a self-contained classroom are not treated in a descriptive manner but are either ignored, specified precisely, such as the Frostig method compared to some other method, or else are slighted in the study with emphasis on treatment or criteria variables.

In other words, the interaction process between an LD teacher and an LD pupil in a self-contained classroom has been largely ignored. Finally, the term "learning disabilities" is not understood to mean the same population by various writers; and the misuse of the term as well as a global interpretation of the term "learning disabled" misleads researchers in their investigations.

As the area is new for researchers, the problems of definitions, identification of populations, poorly planned comparisons, and real controversy regarding efficiency of special class placements and instruction have steered many researchers away from investigating needed related areas for learning disabilities. For example, neglected areas of research seem to be the relationship of the self-concept of an LD student returning to the regular classroom, or at least being considered for return to the regular classroom. This summative assessment for placement in the regular classroom involves a number of factors that warrent description of these factors' role in the decision-making process involved in concluding a summative assessment for an LD student. The relationship of the LD pupil's self-concept in the decision-making process involved in a summative assessment is similarly neglected.

Likewise, there is little research of any nature regarding the LD teacher's formative assessment whereby the educational direction of the LD pupil is altered or allowed to continue, based upon some informal or formal means of assessment. In other words, there is needed research of a descriptive nature related to the performance indicators used by LD teachers in the LDT/LDP interaction process and concerning the decisions based upon these indicators.

The review of the related literature has led to the following specific questions which provide the framework and the emphasis of this study:

1. What are the specific activities employed by the LD teachers in a self-contained classroom to implement LD prescriptions?

2. What are the indicators used to evaluate students who have been in LD self-contained classrooms for the current year, what are the decisions made from these indicators, and how are these decisions made?

3. What are the self-concept attributes of students who have had summative decisions made about them?

The following chapter describes the procedure, the case study approach used with eleven students in an LD self-contained classroom, and the instruments used for gathering the information that was needed to develop this study.

CHAPTER III

METHOD AND PROCEDURE

Introduction

The major objective of this study is to provide a system to describe the LDT/LDP interaction process in a self-contained classroom. The study is guided by the questions posed in Chapter I: (1) what are the specific activities employed by LD teachers in a self-contained classroom to implement LD prescriptions, (2) what are the indicators used to evaluate students who have been in LD self-contained classrooms for the current year, what are the decisions made from these indicators, and how are these decisions made, and (3) what are the self-concept attributes of students who have had summative decisions made about them? The purpose of this chapter is to describe the background of the subjects used in the study, the instruments used for the summative assessments, the procedures used for gathering information, and the methods used in analyzing the collection of information.

Background of the Subjects

The subjects used in this study came from a public school system, elementary level, in a middle-sized community in north central Oklahoma. All of the subjects had been diagnosed by a qualified examiner as having some type of learning disability. All of the students who had been placed in the self-contained learning disability classes had been

evaluated by staff members of a community mental health center. For those LD students who had a complete evaluation, the evaluation consisted of testing in the areas of achievement, perception and intelligence. The developmental history was obtained by a qualified social worker, and a neurological evaluation was given by a medical doctor or by a psychiatrist. If there was some evidence of a hearing or speech disorder, the student was then evaluated by a qualified speech pathologist or audiologist. If there were significant indications of an emotional overlay which may have been impairing a child's functioning, he was evaluated by a clinical psychologist.

After the preliminary evaluation was completed, a staffing conference was held by members of the evaluative team. This team was composed of an educational specialist, a social worker, a psychologist, a speech and hearing pathologist and a psychiatrist. The LD recommendations came from this staffing conference. Following this staffing conference, an interpretation conference was always held for the parents and teacher. If the child was seen as having learning disabilities, the parents were informed; and they then decided if they wanted their child to enter the special class.

In the present study the community has four LD self-contained classes which met for one-half of the school day. The other half of the school day for these LD students was spent at their neighborhood elementary school where most were in classes such as art, music, science and physical education. All of the students, 35 in number, met the requirements of the Oklahoma State Department of Education's regulations regarding eligibility. All state requirements for LD programs were met regarding class size, teacher certification, and curriculum.

In this study two groups were used: Group I and Group II. Two groups were necessary in order to describe Phase I and Phase II. Group I students were used in the Phase I portion of the study. Group I students were eleven in number and were all boys. Group I students were the recent entries into the self-contained classroom, all entering after Thanksgiving in November, 1973. The eleven Group I students were described by the case study method in Phase I. Phase I attempted to answer Descriptive Research Question 1.

The Group II students were used in the Phase II portion of the study. Group II students numbered 24, and it was from this pool of students that those students were described for the Phase II portion which tried to answer Descriptive Research Questions 2 and 3. Three of Group II students were girls. All of the Group II students had been in the self-contained classroom for at least one year and thus were eligible for summative assessments to be made. From this pool of 24 students, only six summative assessments were made involving Group II students.

Two groups were necessary, as the description of the LDT/LDP interaction process needed to be of recent entries into the LD self-contained classroom, while the summative assessment process had to be of students who had been in the program long enough to warrent assessment to see if they were ready to return to the regular classroom. Both Group I and Group II students ranged from the second grade to the sixth grade. Both LD teachers, Teacher X and Teacher Y, had students in both groups.

Instruments Used

Only two instruments were utilized in this study. The achievement test is used by the school system to measure achievement and is included, as the achievement test scores used in the cumulative school records list those scores. The self-concept test was included in the study to attempt to determine the self-concept of Group II students. This test is not used in the school system and was chosen by the writer for this study. The other tests mentioned in the case studies were given by the examiner(s) from the local community mental health center in educational diagnostic testing. These are widely used instruments used for intellectual and learning disability evaluation.

Metropolitan Achievement Tests (MAT)

The Metropolitan Achievement Tests are given in April of every year by the school system. The tests are given by the homeroom teacher, but the tests are scored by the test company. The study showed that the MAT was not given to most of the LD pupils, as the homeschool principal or teacher felt that the LD pupil could not do well on a paper and pencil type test. Others had a portion of the MAT given, and some were absent the two days the MAT was given. Some of the previously given MAT scores were in the school cumulative folders and were included in the case histories. The MAT scores did not appear to be used in either the formative or summative assessment processes.

The Metropolitan Achievement Tests (MAT) tend to test the traditional curriculum. The MAT were carefully constructed and standardized (Mehrens and Lehman, 1969) and correlate favorably with other elementary standardized achievement survey instruments.

Harcourt, Brace and World, Incorporated, published the revised edition in 1962. The MAT series consist of six batteries, ranging from Grades 1 through 12. Mehrens and Lehman (1969) feel that the MAT series can be considered a nonspeeded test, even though the various tests have timed subtests, varying from 85 minutes (Primary I) to 282 minutes (high school battery).

All the tests within a single grade are in a single booklet. The two primary levels have three forms, and the elementary and intermediate levels have four forms. Understanding and application of knowledge are measured to some degree, although the emphasis is upon measuring knowledge of specific factual information. The interpretation manual for the elementary levels is an excellent one which is easy to understand and contains helpful suggestions for teachers.

The reliabilities of MAT within a grade group range in the .80's and .90's. The validity claims of the MAT series are questionable. As Mehrens and Lehman (1969) put it:

> Content validity was obtained by a systematic analysis of tests, syllabi and published statements of educational objectives. The authors also claim validity on the basis of an increase in the proportion of students answering on items correctly in succeeding grade levels (pp. 162-163).

If a more detailed breakdown of information is desired, the Metropolitan has its total reading score broken into word knowledge, word analysis and reading. The total mathematics score can be broken into mathematics: computation, mathematics: concepts, and mathematics: problem solving. Scores can be received in national percentile ranks, grade equivalents or standard scores. The examiner felt that the standard score rank norms were more appropriate (Mehrens and Lehman, 1969) to use with this study.

The Metropolitan Achievement Tests receive a fine recommendation in The Seventh Mental Measurements Yearbook by Buros, and it is used extensively in research involving a pre-post test design. As Ross (1971) says:

> One method of increasing the objectivity of the evaluation of child's school achievement is to use quantitative measures based on standardized tests. Sperry and her associates (1958) use the Metropolitan Achievement Tests for this purpose. . . (p. 252).

Cohen (1969) agrees with the usefulness of the Metropolitan for research purposes. He stated:

> Many projects have used Metropolitans, Stanfords, Gates and Iowas for research and pre- and post-surveying in a number of projects with disadvantaged children, and these tests demonstrated their usefulness (p. 65).

Likewise, Norfleet (1969) utilized the MAT in a study of children with learning disabilities.

Piers-Harris Children's Self-Concept Scale

The Piers-Harris Scale was chosen, as it is flexible in allowing a more individualized description of a student's self-concept. The test was used to determine those self-concept attributes of LD students who have had summative decisions made about them. This test was used only with Group II students. The test was administered in March, 1974, to all of the Group II students, but the tests were not scored until after a summative assessment decision had been made. A further description of how this test was used is given in the Phase II section of this chapter.

According to the manual, a factor analysis of items shows that the Piers-Harris items cut across some of the original Jersild (1952) categories but reflect an emphasis on his last two groups: (1) "Just Me, Myself" and (2) "Personality, Character, Inner Resources, Emotional Tendencies." The Standard Error of Measurement is reported to be an

approximate six points. The manual recommends that individual changes in score of less than ten points be ignored.

The manual stresses that the scale is still in the experimental phase but is judged to have good internal consistency and an adequate temporal stability. Test-retest coefficients ranged from .71 to .77. Internal consistency using a variety of methods (Kuder-Richardson, Spearman-Brown, four-month test-retest, and two and four-month retest) appears to range from .71 to .93.

The items consist of a number of simple declarative statements; e.g., "I am a happy person," of which half are of a negative nature (e.g., "I behave badly at home"). To these 80 statements the student simply answers "yes" or "no" to indicate whether he believes that the statement applies to him. This scale should be used for students in the third grade and above and should be read for students in Grades 3 to 6. A factor analysis shows that six dimensions appear to be measured or identified: behavior, general and academic status, physical appearance and attributes, anxiety, popularity, and happiness and satisfaction.

Items are scored in the direction of high (assuming an adequate) self-concept. Norms are based upon some 1183 public school children in Grades 4 to 12. No consistent sex or grade differences were found, according to the authors; thus, the information is pooled, although separate grade means are presented. Percentile rankings and stanine scores are given.

The mean of the normative sample is reported as 51.84, with the standard deviation as being 13.87. The median is 53.43. The average scores usually fall between the 31st and the 70th percentile (or between raw scores of 46 to 60). Data from a variety of samples are

presented in the manual, as the authors caution that the normative sample is from one area, and other data indicates a slightly higher means.

Some of the items from the scale are given below.

1. My classmates make fun of me.

16. I have good ideas.

31. In school I am a dreamer.

61. When I try to make something, everything seems to go wrong.

76. I cry easily.

The Piers-Harris Children's Self-Concept Scale (The Way I Feel About Myself) is easily administered to a group and provides a reasonably valid measure of the difficult area of the self-concept according to reviews in The Seventh Mental Measurement's Yearbook by Buros. It has been used frequently since publication in 1969 by a number of researchers in measuring the self-concept (Lamar, 1965; Cox, 1966; Millen, 1966; Wing, 1966; Farls, 1967; Ashby, 1968; Hugo, 1969; and Sisenwein, 1970).

Procedures

In the procedures section there are two divisions or two phases. Phase I deals with eleven new LD students and is developed by a descriptive method utilizing individual case studies focusing upon the LDT/LDP interaction process. Phase II deals with 24 other LD students who have been in the LD program for at least a year. Phase II describes the summative assessment process, decisions made and examines the role of the self-concept for those students about whom a summative decision has been made as to whether or not to move the student to full-time regular classrooms. A description of the summative assessment process is made

for each student studied for a possible return to the regular classroom. An explanation of the two phases is given, dividing the procedures section into two parts that follow.

Phase I

Group I Description

Group I consisted of eleven boys who were in Grades 2 to 5 in their home schools, ranging in age from six years and nine months to eleven years and ten months. Their intelligence quotient ranged from 91 to 114. All of these students came into the self-contained LD classroom after November 1, 1973. These were the first LD students who entered the LD self-contained classroom during the 1973-74 school term. Thus, these eleven LD students were given as the only available new LD students for the Phase I portion. According to school records, only two students were of a minority race. The students came from eight elementary schools. The writer will complete a descriptive case study for each student as outlined in the following paragraphs.

Procedures for Phase I

A descriptive study was written for each of the eleven students who are identified by number. The case study contains five elements. The first four elements are: (1) social history, (2) educational history, (3) educational diagnostic testing, and (4) learning disability diagnosis and recommendations. This portion of the descriptive case study is of the past of the LD students; i.e., the information gained from various sources such as school records and previous tests and is of time periods prior to the initiation of the study. These four elements provide the

necessary background to develop and understand the fifth element, which is of the present study. The fifth element, the description of the Phase I process, is of the LDT/LDP interaction process which was observed during the proposed study. The first four elements of the case studies of the eleven new LD students describe the previous history while the fifth element describes the current ongoing process. Each of the Group I students have a case study developed which contains the five elements described below:

(1) Social History. The social history contains comments regarding the student's behavior and appearance, both at school and at home. The family background is gained from interviews with the parents, and this contains information about the student's developmental history and the family dynamics. Also included in this portion are descriptions of the peer and sibling relationships.

(2) Educational History. This contains a description of the student's previous school records, such as grades, comments about his work habits, previous school testing and the reason for the referral for diagnostic testing. This includes information received via interviews with his former teachers, teacher aides and principals.

(3) Educational Diagnostic Testing. This part is concerned with the results of the battery of tests given as a result of the referral. These tests include the Weschler Intelligence Scale for Children (WISC), the Bender-Gestalt and the Frostig Developmental Test of Visual Perception, the Draw-A-Person for all of the students. Some of the students had more extensive testing, and these tests are described as well. The tests' results are described and discussed in summary fashion, but a format (see Appendix B) is followed to list the scores.

(4) Learning Disability Diagnosis and Recommendations. This element contains a description of the learning disability or disabilities which have evolved from the diagnostic testing. From this diagnosis evolve the teaching recommendations which seek to assist the student in learning educational material that his disability had previously impaired. These recommendations are given as part of the school testing report that is given to the LD teacher in the self-contained classroom. All that is done in this portion is to list and describe the specific recommendations that evolve from the diagnostic testing.

(5) Description of Phase I Process. This element is the portion of the study that receives the main emphasis. This process describes essentially two areas: (a) the LDT/LDP interaction process and (b) the formative assessment. A short explanation of each follows:

(a) The LDT/LDP Interaction Process. This area focuses on describing the interaction process between LD teacher and LD pupil in a self-contained classroom. The function of the LD recommendations for each of the eleven students is described, and the interactions taking place between each LD student and the LD teacher is described. A more adequate explanation of the procedures used in the description of this element follows the explanation of the next area.

(b) The Formative Assessment. This area of Phase I concerns itself with describing the LD teacher's method of ongoing evaluation of the LD student's performance in the self-contained classroom. The teacher may give an informal evaluation (teacher-made test) or a formal evaluation (standardized achievement test). Other means of assessment that the LD teacher utilizes for formulating further LD teaching techniques or

initiating new methods to implement the LD recommendations will also be discussed.

A more complete description of how the case studies are developed and the methods used in gathering the information are given in the following pages. The advantages of using the case study method are also listed.

There are a number of advantages in using a case study method for examining this problem. The advantages are: (1) the case study method gives information as to why a case is initiated, (2) it allows a description of what the projected solutions to the case would be, (3) it tells how these projected solutions were acted upon, (4) the case study method is flexible in giving indications of any visible changes in the problem area, (5) it allows for describing either positive or negative side effects of the LD teaching process, (6) it allows the writer to describe any noticeable changes in peripheral areas (changes in academic performance or peer relationships at the home school), (7) the case study method allows the utilization of many sources of information to answer the questions, and finally, (8) the recording of data by the case study method allows for greater flexibility in summarizing. Allport (1961) said comparisons can be made with case studies while McLeod (1966) feels that a case study allows the development of a comprehensive framework which would be beneficial for this paper.

The rationale for the use of the case study method is best supported by McLeod (1966) who said:

> Case study procedures, as used in this study, makes it possible to synthesize many different types of data, including the effects of many elusive personal factors in drawing educational inferences (Barr, Davis, and Johnson, 1959, p. 35).

The case study method was used for Phase I of the systems model for the LD student in a self-contained classroom. (See Figure I.) Phase I contained the description of the interaction process in the implementation of the LD recommendations evolving from the educational diagnostic testing of the eleven Group I students. As there was some "formative" assessment (educational evaluation by the LD teacher of a student's progress), this was also included in the case study; but this "formative" assessment should not be confused with Phase II, the assessment stage. The "formative" assessment was of an individual LD student to assist further teaching.

The procedure for analyzing the formative assessments of the eleven pupils in Group I was initiated the last nine weeks of the study. This was to allow the writer to analyze more closely the LDT/LDP interaction process the first nine weeks. Essentially, the five-minute observations of the formative assessment centered around the actions of the teacher or aide and the actions of the pupil.

Under the actions of the teacher or aide, three behavior categories were used to indicate formative assessment within each observational period. A simple check mark in the proper column was made when the writer observed that particular behavior (see Figure 2). The following descriptions of the teacher and aide behaviors in formative assessment are given below and correspond to the following columns in Figure 2:

A. The LD teacher or aide modified instructions and directions concerning a learning task adapted to individual needs.

B. The LD teacher or aide gave feedback for what still must be learned for an individual pupil.

C. The LD teacher or aide gave affective response(s) to the individual student's progress.

In examining the actions of the LD pupil in response to the formative assessment efforts of the teacher or aide three behaviors were noted. These behaviors are an adaptation of the first three categories of the taxonomy of educational objectives of Krathwohl's affective domain (Bloom, Hastings & Madaus, 1971). Again, a simple check mark was made if during one of the five observational periods the LD pupil engaged in one of the following activities after a formative action by the teacher or aide. The following descriptions of the LD pupil behavior in formative assessment are given below and correspond to the following columns in Figure 2.

1. Attending - the LD pupil is evidencing a willingness to take on the task.
2. Responding - the LD pupil is persevering in the task.
3. The LD pupil shows enthusiasm for the task.

A frequency count was made of each of the formative assessment efforts for teachers and aides for each of the eleven pupils in Group I.

The form used to gather the information is presented in Figure 2. Observations of teachers, aide, and pupils were made by the writer in five-minute segments. Recorded observations represent formative assessment efforts by the teachers and aide and pupil reactions to those efforts.

	Teacher			Pupil		
	A	B	C	1	2	3
Observ.	Modified Instruction	Feedback	Affective	Attending	Responding	Enthusiasm
1	_____	_____	_____	_____	_____	_____
2	_____	_____	_____	_____	_____	_____
3	_____	_____	_____	_____	_____	_____
4	_____	_____	_____	_____	_____	_____
5	_____	_____	_____	_____	_____	_____

Figure 2. Observations of Formative Assessment

Five observational periods per week for each case were conducted during a nine-week period of the study. Therefore, 45 observation periods occurred for each case, which permitted a maximum of 45 formative assessment efforts to be observed and recorded.

The classroom observations of the teaching process (see Appendix C) in the LD self-contained classroom took place during the second semester. Time samples were taken from varied time elements (such as morning of the first day of the school week or the last day of the school week, or the afternoon of the first or last day of the week, and so on until all time elements had been sampled) in order to try to give as representative a description of the teaching process as would be feasible in the regular school setting. The following paragraphs describe this.

The LD teachers were not informed that the teaching process was under observation; hopefully they assumed that the observations were of the students, which they were, but the interaction and the teaching process were also described. The observations were five six-minute observations per pupil per week. The form used to record the observations is shown in Appendix C.

A description of the six-minute observational phase included these three elements: (1) the learning activity the student was engaged in doing (2) the LD teacher participation/non-participation, and (3) any change of behavior, such as the student leaving the learning activity or initiating a new learning activity. A brief sample of how such an observational phase might look like, containing the three elements, is given below:

(Case 1) (9:00 a.m. to 9:06 a.m.) (January 26, 1974)

> The student was using the overhead projector flashed onto the chalkboard. He used the lines on the chalkboard to trace the figures and letters flashed onto the board.
>
> The student was working on this activity alone.
>
> Near the end of the observation period the teacher approached the student, praised his work, and brought him a new overhead transparency to use. This also had letter to trace; but a variety of forms for each letter was given; so a visual discrimination element was added to the visual-motor, tactile exercise originally observed.

When a morning was chosen for the observational period, the first cases followed the time schedule sample given below:

Case Number					
1	9:00	9:30	9:40	9:54	10:24
2	9:06	9:18	9:48	10:00	10:12
3	9:12	9:24	9:36	10:06	10:18

This morning observation was rotated so that every morning was represented. The students were in the half-day self-contained classroom for the morning or the afternoon session.

This is a sample of the manner in which the rotational and varied time observational periods were used. For example, for the three students in the one LD teacher's morning class, this schedule was followed. The next week Case 2 entered the 9:00 time slot, Case 3 entered the 9:06 slot and Case 1 entered the 9:12 slot, with corresponding changes in the following time slots. It was felt that this random sampling was representative of the actual LDT/LDP interaction process.

The description of the crucial element of Phase I, the LDT/LDP interaction process, was included in the case study of each of the eleven students in Group I. This was done, as the writer felt that the interaction process for each LD student would be best understood by the inclusion of all the relevant elements in the educational setting.

It was from the Group I case studies that recurring themes were elicited. It was from the cohsistent data emerging from an analysis of the case studies that an educational picture seemed to develop of the LDT/LDP interaction process taking place in a self-contained classroom. It was from a complete analysis of the description that relevant questions were formulated.

Phase II

Group II Description

Group II students had 21 boys and three girls for a total of 24. Twenty of the 24 students were older, ranging in age from ten years to 13 years and four months. They also had a greater dispersion in IQ scores than Group I. The IQ ranged from 90 to 122 with one exception. Twenty of the students had IQ's ranging from 90 to 110. One student had an IQ of 84, one had an IQ of 122, and one had an IQ of 115, and one had an IQ of 114. This group of students was different from Group I students because they had been in the LD program for either a long period of time (as the program is in its third year, the older students who needed remediation were first placed into the program) or in initially placing students in this program, greater allowances for IQ variance were permitted.

All of these students had been in the LD self-contained classroom for at least part of the 1972-73 school year, being in the special class as of April, 1973. In their home schools these students were in Grades 2 to 6. Some of these students were evaluated before the spring semester ended for possible return to full-time regular classrooms.

Procedures for Phase II

Essentially, Phase II was a description of the summative assessment stage as shown in the systems model of LD students in a self-contained classroom (Figure 1). As mentioned earlier, only Group II students were involved; as only these students had been in the special class sufficiently long enough to be considered ready to return to

regular classrooms for full-time placement. This phase describes all of the elements that entered into the decision-making process regarding whether or not the pupil returned to the regular classroom.

In the Koppitz (1971) study she has a conference prior to a pupil's return involving his teachers and all relevant information, including assessments and progress notes. This phase is inclusive of a number of elements from the initiation of the summative assessment until conclusion and resulting decision. The main elements seem to be able to be grouped under three main headings: who, what, and how.

Who referred to the various people who were involved in the summative assessment. This included the home school teachers, the LD teacher, the special education coordinator, the educational consultant from the community mental health center, the elementary supervisor, the building principals, and parents. Indirectly involved was the pupil, as his desires and attitudes constituted an important element.

What referred to describing the various instruments, opinions, formative assessments, and observations that make up the bulk of material that was used to make decisions regarding a pupil's return to regular classroom. Input from the parents' wishes, the pupil's attitude, the opinions from the receiving principal and teachers, and other factors that enter into the decision-making processwere described as well.

The part played by the standardized achievement test (Metropolitan Achievement Tests) given annually by the school system was examined. This test is given in April of each school year and is placed in the cumulative folder kept on each student. What degree of importance and

the amount of reliance placed upon the MAT series was an important consideration. The form used in the formative assessment is shown in Appendix D.

The Piers-Harris Self-Concept Scale was administered to all of the 24 students in Group II This test was scored after a decision was reached regarding his educational placement. This was done to reduce any influence in the decision-making process that might develop if measured self-concept scores were known. The purpose was to determine the self-concept attributes of LD students who have had summative assessment decisions made about them in a description of the process.

How was concerned with the unfolding procedure of the summative assessment. The steps leading to the decision, the decision-making process, and how the decision was reached were included in this description. This was perhaps the most important part of Phase II, the description of how the decision was reached. Information regarding the implementation of a summative decision was also included, but in a brief fashion; as the termination of Phase II was the decision-making process of summative assessment.

Data Analysis Method

The information gained from the description of the processes in the study was grouped under two main headings: Phase I and Phase II. For example, under Phase I, information about the LDT/LDP interaction process was analyzed in terms of listing the specific activities that are engaged in by the teacher and pupil. The types, frequency and extent of the activities were discussed. Then, the activities for

each of the eleven pupils were analyzed in terms of whether or not the activities followed the recommendations evolving from the diagnostic evaluation.

The information gained from the description of the Phase II portion was grouped under three major areas. The first examined the indicators used in making decisions in the summative assessment description. The second area examined the decisions made from the indicators and an analysis of what seem to be the main influence in the decision-making process was made. The third area attempted to examine the self-concept attributes of those students about whom summative decisions had been made. In this, as in the collection of other groupings of information, analysis by inspection was made to try to determine what self-concept attributes are held by those LD students having summative assessment decisions made about them.

Essentially, the outline for the data analysis was under two main headings, Phase I and Phase II Each of these two main headings developed the main areas of description relevant to research questions that provided the framework of the study. In each of these areas, the procedure was an analysis by inspection of the similarities and differences of those pupils being described. From this data, then, relevant questions were formulated from the answers given to the three main questions which provided the framework of this study.

CHAPTER IV

RESULTS OF DESCRIPTIVE STUDY

Introduction

This study involved a description of the interaction process between LD pupils and LD teachers in a self-contained classroom. The results of the study are divided into two areas: Phase I and Phase II. Phase I contains eleven case studies of Group I students. The purpose of Phase I was to answer Descriptive Research Question 1: What are the specific activities employed by LD teachers in a self-contained classroom to implement LD prescriptions? Each case study contains a social history, an educational history, an educational diagnostic testing summary, the learning disability diagnosis and recommendations, and a description of the Phase I process which examines the LDT/LDP interaction process and the formative assessment process for that particular pupil.

Phase II in this chapter describes the results of the summative assessment process for those pupils involved in the summative assessment from Group II. The purpose of Phase II was to answer Descriptive Research Questions 2 and 3: What are the indicators used to evaluate students who have been in LD self-contained classrooms for the current year, what are the decisions made from these indicators, and how are these decisions made? What are the self-concept attributes of students who have had summative decisions made about them? The information from each of the summative assessments is grouped and summarized under three main headings:

who, what, and how. The role of the self-concept as observed follows the results of the summative assessments.

Description of Phase I and Phase II Processes

Phase I

Case Study 1

Social History. B. is a nine and one-half year old boy in the third grade. He is tall and slender for his age, and adults mistake him for a sixth-grader. He is an only child and, according to the mother, is indulged in everything that he wants by his grandfather. The father is a very large man who has a terrible temper, according to the mother, and who is inconsistent in his discipline. B. plays football and usually is a good player; however, the father berates the boy from the sidelines; and B. quit wrestling because of the pressure from the father to win. He does not smile much, dislikes school, and has trouble interacting with his peers.

At school in the Learning Center the LD teacher or the LD teacher's aide had to be with him in order for him to do any work. He seldom finished his work without constantly being reminded. His father told him that he is failing third grade, that he had talked to the teacher, and that B. was just dumb. B. liked to run the filmstrip projector, tape recorder, or Language Master; but he disliked any type of paper and pencil task. He appeared to be moody, sometimes showing a quick temper.

At home the mother said that B. has plenty of friends, although all of them are younger than he is. He likes to have his friends over in his yard to play, but the father comes home and scares his friends away.

There had been a two-month separation of the parents, and the mother said that she noticed a change for the better in B. B.'s father likes only sports, used to box some, and engages in wrestling with B. B. always loses. The mother said that she wanted a more complete medical examination done and that she was taking him this summer for a complete physical, including a brain scan. He wet his pants until three, according to the mother, because the grand father would change his pants and hide the wet ones from the mother. The grandfather was asked to leave the house by the mother last year after an argument. She said her husband is just like his father, over indulgent one moment and violently angry the next.

Currently, B. is on a home-based behavior modification plan. If he completed 75 per cent of his daily lessons, this was noted on a chart; and the chart was given each week to the mother. If he continued until school was out, he will receive a three-wheeled motor scooter. He agreed to this.

Educational History. B. has been unhappy in school, as he feels that a lot of the work is boring. He was recommended to repeat kindergarten, but the mother did not allow him to do so. He had mostly unsatisfactories his first year (first grade) and mostly satisfactories during the repeated first grade. He was retained the first-grade year. During the second grade he made all C's except for an A in writing and a B in physical education. He had problems in listening while others were talking, developing self-control, following directions, and working independently. His teachers commented that he appeared to be immature for his age. He had good attendance.

As his father is a pipefitter, B. has moved several times, twice coming back to the community to the same school. He has attended two

schools in this community. On the Metropolitan Readiness Test given in kindergarten he had a total percentile rank of eighteen, again with a low normal rating. At the age of eight years and two months he was given the Otis IQ Test and received an IQ score of 95. He was then referred for school testing the second semester of the second grade; the reason given was very low achievement with no response to remedial methods.

Educational Diagnostic Testing. B. was tested in December of 1972, referred by his second-grade teacher because of very low achievement. He was given the Wechsler Intelligence Scale for Children, the Draw-A-Person, the Bender-Gestalt, the Frostig Developmental Test of Visual Perception, and a sentence completion test. The examiner made several comments regarding B.'s test performance on the batteries of tests. A great deal of immaturity and impulsive behavior was noted. His performance on the Bender indicated lack of organization and immaturity. A formal evaluation was completed at the community mental health center by the mother in the fall of 1971, but she requested that the results be kept at the center and not given to the schools. At that time emotional problems, such as inferiority and signs of withdrawal, were noted by the psychiatrist. The speech and hearing department indicated that B. may be having auditory discrimination problems and that he needed some language therapy. Parental counseling was suggested, but the mother came only one time and later withdrew B. from the language therapy. At that time problems in visual motor integration and in perception of spatial relationships were noted.

The most recent testing (December, 1972) indicated problems in eye-hand coordination, perception of figure-ground relationships, and

perception of position in space. He seemingly was disorganized, easily distracted, and unable to concentrate on completing tasks. Strengths were in visual sequencing, abstract reasoning and relationships, and in reasoning and judgment. Weaknesses seemed to be in his retention of abstract ideas, in his arithmetic reasoning, and in his visual motor integration, mainly in the areas of motor control and immediate visual memory. On the WISC his overall IQ scores were with the lower range of average ability.

His chronological age was eight years and three months. He performed on the Frostig similar to those students of six years and three months on the eye-motor coordination, figure ground, and position in space. Form constancy and spatial relations seemed to be comparable to his chronological age norm. On the Bender he had five neurological indicators and a Koppitz visual-motor age of seven years to seven and one-half years. (See the test profile sheet that follows this case study for the exact scores.)

Learning Disability Diagnosis and Recommendations. B. was diagnosed as having perceptual problems in figure-ground and in position in space. Visual-motor integration problems and perception immaturity were noted in the school testing report.

A conference was held with the mother to discuss the results and to tell her that B. was eligible for the Learning Center. Further evaluation by staff members of the community mental health center was suggested but was not accepted. The mother did accept the recommendation for placement in the half-day LD self-contained classroom (Learning Center).

The following suggestions for recommendations are quoted from School Testing Report 1, December, 1972.[1]

1. The following suggestions are made to help B., specifically in the perception of figure-ground relationships and position in space:

   a. figure-ground perception - exercise such as asking B. to discriminate different objects in the room by pointing out objects in the room, by pointing out objects or categories of objects. Sorting exercises - B. should sort out objects together, according to size, color, and shape.

   b. shifting of attention - ask B. to pick up specific objects asked for from a box of many similar objects. The difference between the types of objects should gradually be reduced so they are more and more similar. This can also be used in paper and pencil exercises with pictures of many different objects.

   c. position in space - B. can be asked to complete partially drawn figures of the human body or assemble parts of the body from a cut-up cardboard picture. This will help him in the perception of space as related to his body. B. should learn the relationship of other objects to his body, climbing on a chair, under a table, in a box, or out of a circle. Spatial relationships can also be learned by reconstructing block patterns or drawings of block patterns made by the teacher.

2. Since B. has some feelings of inadequacy in school and is having some trouble in achievement of school tasks, expectancy levels may have to be adjusted. The teacher should provide tasks on which B. can achieve success. Any success in B.'s performance in school tasks should be rewarded.

B. entered the Learning Center on November 26, 1973. The Metropolitan Achievement Test was given in April. A parent conference was held with the mother by the writer on March 22, 1974. From this conference the writer learned that the mother had planned a full medical examination for the summer of 1974. The mother desired continued placement for B. in the Learning Center.

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[1]Specific information about the School Testing Reports 1 through 11 may be obtained from the writer.

Description of Phase I Process. The LDT/LDP interaction process was observed 75 times over the eighteen week period. B. was not absent any time from the Learning Center. Of the 75 observations some type of interaction was noted a total of 31 times. Of these, the LD teacher interacted with B. 22 times, and the teacher's aide interacted with him nine times. The per cent of time observed in LD teacher interaction was 29 per cent. This number of interactions is somewhat misleading; as many of these were brief interactions, such as instructions to get to work or to redo an assignment. The analysis of the formative assessments which follows this section points out an interesting question.

There were three additional LD teacher interactions, as there were three group activities. Two of the three came from a self-enhancement group process where the students were read a story, and questions were encouraged about the theme. The stories were about situations and the differences that exist among young people. The other group acitivty involved the LD teacher reading a story to the entire class.

Of the 75 observations the writer found the LD teacher following the recommendations from the educational diagnostic testing eleven times. Once B. was observed arranging blocks in an order prescribed from a picture; twice he was observed going through sorting exercises with beads and once observed involved with gross motor activities (working with bowling ball and pins). The above activities, in addition to four of the seven observations of visual-motor exercises from the Frostig program, were all conducted the first six weeks. Only three Frostig work-oriented observations were noted in the last twelve weeks. It appeared that the recommendations listed previously evolving from the testing were not followed after the first few weeks.

In B.'s case the pupil was largely ignored the last few weeks of school. The writer observed B. pulling the study carrel about him up next to a wall and shutting out everyone. He was usually ignored by the teacher if he was quiet. The other activities noted that B. usually did involved paper and pencil tasks. B. would work in workbooks in phonics, skill series (drawing conclusions from what one reads), read books silently or read orally, and answer questions orally. B. always had a number of spelling words to learn each week; and he was involved in a number of various activities, such as using sandpaper letters, magnetic letters, typewriter, some tracing of the words on an overhead projector, and using the chalkboard in order to learn the proper way of spelling the word.

He was given a weekly work sheet (see Appendix E) in which the assignments for each of the five days were given. B. was expected to come in, pick up his folder, and begin to work. Many of the LDT interactions with B. centered around checking his work or giving him a spelling test. The teacher's aide worked some with B. also, but B.'s negative attitude seemed to make him a learning outcast. It almost seemed that the LD teacher was using a group approach to an individual problem; i.e., everyone did the same activities, only at their own rate. The emphasis was on paper and pencil completion of work.

The formative assessment process was observed some nineteen times in the 45 observations conducted during the last nine weeks of the study. The teacher was involved in fourteen of the assessments. Twice as many feedback types of assessments were made as modification of instruction. Very little affective interaction was noted. For a number breakdown of the formative assessments, see Table I, Case 1.

B. evidenced no enthusiasm after any formative assessment, seldom responded, but did usually attend during a formative assessment. B. seemed to like individual attention. The LD teacher (noted as Teacher X in Table 1) seemed to have a good percentage (approximately 30 per cent) of time in formative assessment. However, most of these were feedback statements, such as "get busy," "complete your work," or "this is too sloppy to turn in." Little modification of instruction was done and little encouragement was given.

STUDENT Case 1 AGE 8-0 DATE 12-6-72 GRADE 3

WISC PROFILE OF LEARNING DISABILITY

	Picture Completion	12	
SPATIAL	Block Design	11	Mean 10.3
	Object Assembly	8	
	Comprehension	11	
CONCEPTUAL	Similarities	13	Mean 11.3
	Vocabulary	10	
	Coding	5	
SEQUENCING	Digit Span	9	Mean 9.3
	Picture Arrangement	14	
PERCEPTUAL ORGANIZATION	Block Design	11	Mean 9.5
	Object Assembly	8	
	Information	7	
VERBAL COMPREHENSION	Comprehension	11	Mean 10.25
	Similarities	13	
	Vocabulary	10	
FREEDOM FROM DISTRACTIBILITY	Arithmetic	7	Mean 8.0
	Digit Span	9	

Full Scale IQ 99 Verbal IQ 97 Performance IQ 100 MEAN SCALED SCORE 9.78

FROSTIG DEVELOPMENT TEST OF VISUAL PERCEPTION

(1) Eye-Motor Coordination 6-0

(2) Figure Ground 6-6

(3) Form Constancy 8-3

(4) Position in Space 6-3

(5) Spatial Relations 8-3

TOTAL - VISUAL MOTOR AGE Not noted or listed PQ=86 %=20% approx/age

BENDER-GESTALT

Neurological Indicators 5 Emotional Indicators ____ Koppitz V-M Age 7-7½

DRAW-A-PERSON TEST

Level of Functioning Immature for Age

OTHER TEST INFORMATION

Figure 3. Test Profile Sheet, Case 1

TABLE I

FREQUENCY OCCURRENCE OF FORMATIVE ASSESSMENT EFFORTS
IN 45 OBSERVATIONAL PERIODS

Case	Teacher	No. of Formative Assessments Efforts		Teacher or Aide Efforts						Pupil's Responses					
				Modification of Instruction		Feedback		Affective		Attending		Responding		Enthusiasm	
		T	A	*T	A	T	A	T	A	T	A	T	A	T	A
1	X	14	5	6	0	12	5	3	1	11	1	2	1	0	0
2	X	5	12	4	5	6	12	3	5	5	7	2	5	1	0
3	X	11	10	5	4	11	6	7	5	10	6	5	1	2	0
4	Y	13	3	5	1	12	4	8	2	13	3	13	3	7	2
5	X	12	6	6	1	8	5	4	4	10	5	7	1	3	0
6	Y	15	1	10	1	13	1	8	1	14	1	14	1	4	1
7	Y	10	4	4	1	9	4	6	2	10	4	10	3	7	0
8	Y	15	4	7	0	13	4	10	3	15	4	15	4	9	0
9	Y	18	3	9	1	16	3	11	2	17	3	16	1	6	0
10	X	13	6	10	1	11	6	6	4	13	6	12	5	3	1
11	Y	12	1	3	0	11	1	8	0	12	1	8	0	3	0

*T = Teacher
A = Aide

Case Study 2

Social History. M. is a second grader who is seven years old. He is a middle child, having an older brother and a younger sister. He is small and immature in his actions compared to his peers. He recently acquired glasses; but as he does not like to wear them, he frequently left the glasses at home. Both of his parents work; and his grandmother, a retired school teacher, sees that they attend school. M. does not like the Learning Center, as he has some trouble being teased by older students.

The mother said that she did not like the teacher at the Learning Center and that M. does not like her either. The mother also said that she had had difficulty in school but that her "other two children gave her no trouble in school, with either grades or misbehavior." She admitted that M. had many friends in the neighborhood and at school but that he did not seem to get along well with the older boys at the Learning Center.

The older brother teases M. somewhat, but the mother felt that in general both siblings related well to M. According to the mother, none of the siblings teased M. about going to the Learning Center. The father works long hours and does not have much time for the children. The grandmother (on the mother's side) lives a few blocks away and devotes much of her time to this family.

M. is currently on a home-based behavior modification plan to try to increase his attendance at the Learning Center and to increase the frequency of his wearing his glasses to the Learning Center. Both a daily reward and a weekly reward were used successfully with M. He attended the Learning Center nine days successively and brought his

glasses nine days successively after the implementation of this plan. He averaged both attending and bringing his glasses some three days a week.

Educational History. M. usually enjoys attending school and has been absent to his home school only four days from kindergarten to the current second grade. On the Metropolitan Readiness Test given in May of 1972 he had a percentile rank of 40. His cumulative folder which recorded his grades indicated a number of areas needing improvement in the first grade: reading, arithmetic, writing, spelling, and music. He received satisfactories in music and in language. He has gone to the same school for all three years, kindergarten through the second grade. He has frequently missed catching the bus to the Learning Center.

On the MAT given in April, 1973, M. had a total reading percentile rank of twenty and a total mathematics percentile rank of 36. Word knowledge seemed to be weak (percentile rank of sixteen) in comparison to his other subtest scores. The Otis-Lennon IQ Test, a group IQ test requiring reading, was given in April of 1974. M. was referred for testing in December, 1972, by his first-grade teacher.

Educational Diagnostic Testing. M. was referred for testing by his first-grade teacher for a number of reasons: a short attention span, writing of words and names backwards, and being unsure of letter sounds. He was given the WISC, the Frostig Developmental Test of Visual Perception, the Draw-A-Person, the Bender-Gestalt, and a sentence completion test. According to the examiner, during the testing M. appeared to be enthusiastic but restless. He was cheerful, somewhat impulsive, and displayed immature behavior. The examiner commented that M. seemed to talk excessively about home and school. He seemed to accept either

success or failure. He seemed to be distractable, disorganized, and inattentive, indicating a possible problem in figure-ground perception.

M. had a sixteen-point spread between his verbal and performance IQ's. This sometimes indicates a learning disability. His verbal IQ was 105, his performance IQ was 121, and his overall full scale IQ was 114. His strengths seemed to be in abstract reasoning, visual alertness, and in visual perception. He may have a language problem because of the large difference between the verbal and performance IQ's. His use of an adequate fund of information, his immediate visual memory, and his use of judgment and reasoning in social situations seemed to be weak in comparison to other subtest scores, although these three were in the average classification.

On the coding subtest M. reversed or substituted the directions of several of the symbols. On the Frostig M. was at the average or above average age for his group in all areas except figure-ground perception. He also seemed to have some problems in directionality on the spatial relations test. On the Bender his visual-motor age was from six and one-half years to seven years, and at the time of the testing M. was six years old.

The examiner noted immaturity on the part of M. during the administration of several of the tests. He said that results of the DAP and the sentence completion indicated a possible immaturity both emotionally and socially. Feelings of aggressiveness and inadequacy in inter-personal relationships were indicated. The examiner said this may be why M. acts indifferent to school and why he does not complete or try to complete given school tasks.

Overall, M. seemed to have above average ability with some deficit in language areas. His visual perception scores seemed to be average or better, but his immaturity seemed to appear in visual perception areas. He may have developed some defensive behaviors to cope with a poor self-concept.

Learning Disability Diagnosis and Recommendations. M. was diagnosed as having perceptual problems: figure-ground perception and subtle indications of problems in visual-motor perception, as well as possible immaturity in language development areas. This was given in the school testing report. It seemed as if more emphasis was given to the examples of school work and past school performance than to the test. The tests seemed to hint at a subtle learning disability.

A conference was held with the mother by the examiner. The examiner recommended a complete evaluation by the speech and hearing department in the community mental health center and suggested possible entry into the Learning Center for the half-day, self-contained LD classroom for 1973-74.

The following suggestions for recommendations are quoted from School Testing Report 2, December, 1972.

> 1. M.'s score on the tests indicates he has the ability to perform on school tasks. Because of indications of some language deficit and some immaturity, expectancy levels may have to be adjusted for M. If he is able to achieve success in school, this will help to build his feelings of adequacy and reinforce positive school work behaviors. The teacher has indicated several behaviors in which it seems that M. is not trying to do or attend to school tasks. Possible individual work with rewards for specific behaviors may be initiated. The counselor will work with the teacher if she desires to establish some specific behavioral goals with M. and reinforce schedules. M.'s cooperative and receptive attitude is a definite strength to consider and which will help in attempting to help him.

2. Because of subtle indications of problems in visual-motor perception, exercises may be helpful to M. and help determine what specific problems he has in this area. Since his coordination is not good in relation to forming of letters and since he produces messy work, some help in eye-hand coordination may be helpful.

a. Tracing exercises may be helpful. M. can be asked to trace over objects, letters, words or numbers written on the blackboard. He can also be asked to draw lines within parallel lines to serve as boundaries. Another exercise is to place dots on the board and have M. draw lines as straight as he can between the dots. Tracing a figure eight either on the board or on paper can be helpful visual motor exercises. It can also serve to help teach the concept of right, left, up and down directions.

With possible problems in figure-ground perception indicated by the tests, the following exercises may be helpful. M. can be asked to discriminate different objects in the room by pointing out objects or categories of objects. M. should also be asked to learn individual letters and point these letters out in different words. M. can be asked to do sorting exercises in which he would sort objects together according to size, color and shape. To help M. in shifting of attention, he can be asked to pick up specific objects asked for from a box of many similar objects. The differences between the type of objects should be gradually reduced so that they are more and more similar.

Other exercises which may be helpful in the visual perceptual areas are contained in a booklet which the principal has. The teacher may want to use this booklet, if further exercises are needed.

Description of Phase I Process. The LDT/LDP interaction process was hampered because M. was absent much of the last few weeks of school. Overall, his attendance was very poor. M. missed a total of fifteen observational periods out of a possible 70. M. said that he did not like his teacher, and he apparently would deliberately miss the bus that took him to the Learning Center. He finally received glasses but would not wear them. The LD teacher was instrumental in having the mother check his eyes. M. then would not wear his glasses to the Learning Center. When the LD teacher suggested that M. have breakfast before coming

to the morning class, the mother became very angry and wanted to withdraw M. from the Learning Center.

Perhaps because of trouble over missing the bus, not bringing his glasses, and difficulty with M.'s mother, the LD teacher (noted as Teacher X in Table I) began to ignore M. and left much of the instruction and interaction up to the teacher's aide. In the 55 observations the LD teacher was seen as having ten interactions, plus testing at the entry into the program, for a total of eleven interactions, while the aide had sixteen interactions.

Only eighteen times of the 55 observations were the LD recommendations being followed. Sorting exercises were done once, Frostig visual motor activities were done three times (although M. completed a number of Frostig sheets, he was observed working on these only three times), and an exercise in body image and laterality was done once. M. practiced on cursive writing and tracing exercises seven times and worked with clay twice. The rest of the activities that followed the LD recommendations were of paper-pencil nature such as filling in blanks with the proper letters after visually discriminating the proper object from exercises in a programmed reader.

The rest of the activities were of the same nature as noted in Case I; i.e., spelling exercises, phonics exercises in a workbook, and reading silently or orally. M. did receive a great deal of individualized help from the aide in working simple arithmetic. M. had difficulties in numbers, as he reversed his numbers frequently. Again, the emphasis seemed to be on paper-pencil tasks. M. had difficulty in working independently, as he was immature, and his motivation appeared to be low. As noted in Table I, M. did not receive much teaching assistance.

M. was observed receiving some type of formative assessment a total of seventeen times, five of which were from the teacher. As can be seen from looking at Table I, M. received little feedback and even less modification of instruction from the LD teacher. Even less in number were the affective interactions with the teacher. The teacher's aide seemed to work more with M. The startling information gained by analyzing the formative interactions with the LD teacher was that the LD teacher was making a formative assessment only fourteen per cent of the time during the nine weeks of this portion of the study.

It was not surprising that M. showed enthusiasm only once during the formative assessment observation periods. Also, M.'s attending and responding were also very low for both the LD teacher and the aide. However, the aide's instructions were attended to and responded to somewhat more than the LD teacher's. Again, most of the feedback, which had the highest number of occurrences, were of the nature of correcting work completed; i.e., the correcting of an assignment in order to get it 90 per cent correct.

STUDENT Case 2 AGE 6-0 DATE 12-7-72 GRADE 2

WISC PROFILE OF LEARNING DISABILITY

SPATIAL	Picture Completion	15	
	Block Design	14	Mean 14.3
	Object Assembly	14	
CONCEPTUAL	Comprehension	9	
	Similarities	14	Mean 11.7
	Vocabulary	12	
SEQUENCING	Coding	9	
	Digit Span	13	Mean 11.7
	Picture Arrangement	13	
PERCEPTUAL ORGANIZATION	Block Design	14	Mean 14.0
	Object Assembly	14	
VERBAL COMPREHENSION	Information	9	
	Comprehension	9	Mean 11.0
	Similarities	14	
FREEDOM FROM DISTRACTIBILITY	Vocabulary	12	
	Arithmetic	10	Mean 11.5
	Digit Span	13	

Full Scale IQ 114 Verbal IQ 105 Performance IQ 121 MEAN SCALED SCORE 12.4

FROSTIG DEVELOPMENTAL TEST OF VISUAL PERCEPTION

(1) Eye-Motor Coordination 7-9 (4) Position in Space 6-3

(2) Figure Ground 5-0 (5) Spatial Relations 6-0

(3) Form Constancy 7-6 TOTAL - VISUAL MOTOR AGE
PQ=105 %tile=63rd

BENDER-GESTALT

Neurological Indicators 6 Emotional Indicators Koppitz V-M Age 6½-7

DRAW-A-PERSON TEST

Level of Functioning Immature - Inadequate

OTHER TEST INFORMATION

Figure 4. Test Profile Sheet, Case 2

Case Study 3

Social History. J. is a second grader who repeated first grade. He is the oldest of four children, having a younger brother and two younger sisters. J. is a very active boy, according to the mother. In April, 1974, the mother became concerned about all of the negative reports received at home from both J.'s home school and the Learning Center. All of the reports mentioned J.'s hyperactivity, immaturity, and failure to complete his school work. The mother said that he had quit attending church and Sunday school.

The mother took J. to the local community mental health center; and after a complete evaluation of his neurological and emotional attributes, medication was prescribed by a psychiatrist. This seemed to help his attending to school tasks. He was tolerated by his classmates, more so at his home school than at the Learning Center. He seemed to enjoy distracting any type of group activity in the Learning Center classroom.

Educational History. It was noticed in kindergarten that J. seemed to be having difficulties in learning and in progressing at the same rate as other students of his chronological age. At the time it was thought that J. was very immature for his age. J. repeated the first grade and was referred for testing during the summer following his second year in the first grade. The WISC, Bender, Frostig, Draw-A-Person, and alphabet and sentence completion were administered in July of 1973 on a referral of unsatisfactory progress.

In his citizenship ratings J. seemed to have trouble with completing tasks, listening while others were talking, and in accepting responsibility. There were not many absences from school in any grade. There seemed

to be problems with his eyes (he skipped over words), and J. seemed to have difficulty in listening and in keeping up with group activities. He seemed to have difficulty in expressing himself adequately.

Educational Diagnostic Testing. J. was tested in July of 1973 on a referral from his first-grade teacher because of the problems noted above. The retention in the first grade did not seem to help him make any adequate progress with his academic subjects. A series of tests were given: WISC, Bender, Frostig, DAP, and alphabet and sentence completion. The examiner commented that J. was cooperative, relaxed, but had difficulty in comprehending the nature of certain tasks; and this led to his becoming frustrated and restless at times. It was noticed that he had difficulty in expressing himself, and oftentimes he would have to slow down and reorganize while explaining something.

His WISC scores indicated a low average range of ability. There seemed to be some problems in auditory memory, visual sequencing, and in visual perception. He tended to be impulsive, according to the examiner, and had a limited attention span and organizational problems. Visual motor perceptual tasks suggested problems in this area and in motor control. In writing the alphabet J. did not remember all the letters, was confused in the sequence, and reversed several of the letters. He appeared to be dependent upon his family; feelings of inadequacy seemed to exist; and he seemed to be immature in academic as well as in social areas. He had difficulty in understanding and in following directions and in having adequate arithmetic skills.

J. was referred for an evaluation by the community mental health center speech and hearing department. In August of 1973 J. was tested, and a very significant deficit in visual sequential memory skills was

found. On the Hejna Developmental Articulation Test J. exhibited an inconsistent substitution of the /s/ for voiceless /th/ sound in the medial position within words. No other apparent speech difficulty was noted. In general, it was noted that J. was not a verbal child but could express himself when he desired to do so. Speech, hearing, and language seemed to be within normal limits with the exception of his visual sequential memory skills. It was recommended that a combined auditory-visual approach be utilized whenever possible in working with J. in the classroom.

J.'s Koppitz score on the Bender was of an approximate five-year-old child, although his chronological age at the time was seven years and ten months. On the Frostig the position in space score was low, and some difficulty was seen in eye-motor coordination and in spatial relations. The WISC profile analysis revealed some problem with freedom from distractibility. (The test profile sheet that follows this case study gives the exact scores.)

Learning Disability Diagnosis and Recommendations. J. was diagnosed as having visual-perception problems, especially in visual-sequential memory. He appeared to have low tolerance for distractions, some impulsive behaviors, and some problems with visual-motor control and spatial relations. Thus, visual-motor perception appeared to be weak; and his numerical skills were weak. Although no medication was suggested from the conference of the educational team from the mental health center, J. was later put on medication (April, 1974) because of his hyperactivity in the Learning Center. He could not attend to arithmetic, was constantly out of his seat, and a medical examination indicated that his hyperactivity needed to be controlled. A conference was held with the mother

following the 1973 evaluations and the recommendation made that J. be allowed to attend the Learning Center for the fall term. The mother was agreeable.

The following suggestions for recommendations are quoted from School Testing Report 3, July, 1973:

> 1. As indicated by the teacher, J. has difficulty in attending for any length of time; and he is somewhat impulsive. I suggest that the attempts she has made in praising him for his efforts in class be continued. Working at his own levels in different academic areas and gaining success at these levels appears to be an adequate way of helping J. gain confidence in his abilities as well as help him progress at a rate appropriate for him. Possibly some behavioral management techniques of observing the length of time J. can adequately attend to work and then set up a goal for him to reach would help. Time periods for attention would be lengthened with success at shorter time periods. Possibly other independent work could be provided for J. at which he can work if he cannot attend to group work in the class (such as visual-perceptual exercises). This work should be decreased as he is better able to attend to regular classroom activities. In order to help J. to complete assignments they may have to be shortened at first and then progressively increased as he experiences success.
>
> 2. I would agree with the teacher about J.'s immaturity. He does appear to be lagging developmentally in several areas evaluated. One area appears to be in visual-motor perception. I am not sure of the significance of his eye movements but did notice several problems in perceptual areas. The following are a list of example exercises which may help him in this area:
>
> > a. Have J. learn isolated words, put these words in a different context, such as a sentence or paragraph, to see if he can perceive the words and meanings in this different context. Arrange words, numbers or letters in a sequence, present them to J., then remove them with J. required to reproduce the sequence. Provide sorting exercises with pictures or objects. This will help in visual discrimination, classification, and in manipulation. Draw block designs on paper or on the board with J. required to reproduce the designs with blocks. This will also help him on motor control and in perception of spatial relationships. Pegs on a pegboard will also help him in these areas. Provide puzzles for J. This will help develop perception of whole-part relationships and provide a fine motor exercise. Dot-to-dot patterns and mazes will help him in development of spatial relationships and in motor

control also. Tracing exercises will help fine motor control. If work is needed in gross motor coordination, possibly activities in gym or at recess, such as walking on balance beams, using the rope and other games, may be played.

3. In order to help J. in auditory memory and verbal expression the following exercises are suggested: For help in auditory memory and sequencing, present to J. a sequence of unrelated words, then have him repeat them in the same order. Have J. recall sequences of a story read to him. J. could teach a familiar concept to others in the class. Have him do this without using any visual props. (Tell how an activity is to be performed.) J. can be asked the meanings of words. This will help in his expressive ability. Use problem-solving sessions to help develop expressive abilities, organization of information and planning activities. This will also help to generate ideas that must be expressed verbally.

4. As noted earlier, J. should be considered for possible placement in the Learning Center.

Description of Phase I Process. J. is a very active student. He had a poor attention span until April, 1974, when a recheck by a neurologist indicated that he needed to be on medication. He scuffled frequently with his peers in the Learning Center, and frequently he got other students into trouble. He rarely completed any tasks, but he always wanted to go on to new assignments. He seemed to have great difficulty with arithmetic. One check made by the writer of his out-of-seat behavior indicated that the pupil was out of his seat seventeen times in ten minutes. This was before he was placed on medication. After he was on medication, his attending to and completing tasks improved greatly.

J. was observed 70 times, and the LDT/LDP interaction process occurred eighteen times. The aide interacted with J. sixteen times. As noted earlier, the recommendations evolving from the diagnostic testing were largely ignored during the latter portion of the study. Only fifteen of the observations of his activities indicated that the LD recommendations were being utilized. Several recommendations were never noted to

have been used. Frostig visual-motor exercises were used three times, connecting dots was used once, and a body image or laterality exercise was observed once.

The Language Master was used seven times to practice his spelling, and this followed a recommendation for his auditory problem in remembering and in the sequencing of material. Also, the tape recorder was used twice. Exercises in the programmed reader might qualify for some perception and visual-motor exercise, and this was used fourteen times. If this could be considered as a recommendation exercise, then J. would have a total of 29 activities which would evolve from the diagnostic testing. This would be about 41 per cent of the 70 observation periods spent in interactions. He had difficulty in working out arithmetic problems, and blocks were used once to try to help him with subtraction. The total number of observations and ratio are given in Table II.

The other activities that J. engaged in were spelling, phonics out of a workbook, arithmetic, silent and oral reading exercises. The same procedure of having a worksheet (Appendix E) which outlined the day's work was used. J. received some special help from the aide in his arithmetic work, and this accounts for the aide having sixteen interactions with J.

In the 45 observation periods where the formative assessment was studied closely, there were 21 interactions. The LD teacher had eleven formative assessments while the aide had ten. (See Table I for a number analysis.) Again, feedback procedures were twice as large as formative assessments designed to modify instruction (eleven to five). Likewise, J.'s attending was twice as high as his responding, the ratio being ten to five. He showed some type of enthusiasm for his tasks only two times.

There did seem to be more affective interactions during the course of the formative assessments on the part of the LD teacher. This seemed to pick up after he was on medication. The teacher seemed to feel that J. was hyperactive because medication was needed, and she seemed to be more tolerant of his behavior.

STUDENT Case 3 AGE 8-2 DATE 7-16-73 GRADE 2

WISC PROFILE OF LEARNING DISABILITY

SPATIAL	Picture Completion	8	
	Block Design	9	Mean 9.6
	Object Assembly	12	
	Comprehension	12	
CONCEPTUAL	Similarities	10	Mean 11.0
	Vocabulary	11	
	Coding	9	
SEQUENCING	Digit Span	8	Mean 8.0
	Picture Arrangement	7	
PERCEPTUAL ORGANIZATION	Block Design	9	Mean 10.5
	Object Assembly	12	
	Information	8	
VERBAL COMPREHENSION	Comprehension	12	Mean 10.3
	Similarities	10	
	Vocabulary	11	
FREEDOM FROM DISTRACTIBILITY	Arithmetic	6	Mean 7.0
	Digit Span	8	

Full Scale IQ 94 Verbal IQ 96 Performance IQ 93 MEAN SCALED SCORE 9.4

FROSTIG DEVELOPMENTAL TEST OF VISUAL PERCEPTION

(1) Eye-Motor Coordination 8 (4) Position in Space 7

(2) Figure Ground 11 (5) Spatial Relations 8

(3) Form Constancy 10 TOTAL - VISUAL MOTOR AGE

BENDER-GESTALT

Neurological Indicators Emotional Indicators Koppitz V-M Age 5-0

DRAW-A-PERSON TEST

Level of Functioning

OTHER TEST INFORMATION

Speech and hearing test completed.

Figure 5. Test Profile Sheet, Case 3

TABLE II

NUMBER SUMMARY OF INTERACTION PROCESS

Case	Teacher	Number of Observations	Number of Group Observations	Days Absent	Number of LDT Interactions	% of LDT Interactions	Number of Aide Interactions	Number of Observations Where Recommendations Followed
1	X	75	3	0	22	29	9	11
2	X	55	0	3	11	20	16	18
3	X	70	0	0	18	26	16	15
4	Y	75	3	1	27	36	5	14
5	X	60	0	3	20	33	9	12
6	Y	73	0	2	28	38	10	12
7	Y	65	0	4	21	32	10	9
8	Y	80	0	0	23	29	9	10
9	Y	80	3	0	29	36	6	18
10	X	70	3	1	22	31	11	28
11	Y	55	0	5	19	29	5	9

Case Study 4

Social History. T. is an only child of older parents. The mother said that T. was "born late in life," and she felt this may be part of the problem of understanding him. He is eleven years of age and is in the fifth grade. The mother said that he began having difficulty in the third grade, but no one suggested testing or suggested the community mental health center. He is popular with his peers. His teacher at his home school said that he was popular with his classmates. He is very friendly, hardworking on his school subjects, and seems to like and need praise. His physical health is good for the most part.

The father is an engineer with an oil company, and the mother runs a small business. The parents have high expectations for him. He has attended the community mental health clinic for about seven months, receiving additional remedial help in his school work and assistance in developing a more adequate self-concept. The parents were quite open in their praise of the Learning Center; as they said they have noticed a remarkable change in T.'s attitude, schoolwork, and behavior.

T. is a short, slightly chubby boy who is very verbal. He has the appearance of a younger person, and many of his actions are very immature. He gets along well with adults, being cooperative and seeking their approval. He has had some problems with his left ear, saying that "it hurts when he gets into cold water or if someone shouts at his left ear."

Educational History. T. was absent quite a bit in the second and in the fourth grades. This was due to some ear problems and resultant flu according to the mother. His grades began to slide after the first grade. His grades were B's in the first and second grades, C's in the

third grade, and C's and D's in the fourth. He kept a grade of B in art and in physical education during all of this time.

On the MAT Readiness Test given in the first grade T. had a percentile rank of 81. During the second grade, a decline developed: the September MAT showed a total reading percentile rank of 51, but the April MAT showed a percentile rank of 35. On the third grade MAT test given in April he had a total reading percentile rank of 32. A big decline was indicated during the fourth grade when the MAT showed a total reading percentile rank of 10. It was after this that he was referred for diagnostic testing.

On the Primary Mental Abilities Test given in the second grade T. had a computed IQ of 106. On the cumulative school folder several teachers had noted some immaturity in T.'s behavior. He seemed to have difficulty in following directions, developing self-control, and accepting responsibility.

Educational Diagnostic Testing. The first testing was done in June of 1973 by the speech and hearing department of the local community mental health center. His articulation was normal, and his language was satisfactory. His receptive language vocabulary (Peabody Picture Vocabulary Test) indicated a mental age of fourteen years, eleven months, which exceeded his chronological age of ten years, seven months. The ITPA showed some mild deficits in all visual tests as well as in auditory sequential memory.

T. passed a twenty decibel hearing screening except in his left ear. The results of the testing indicated that T. did have a mild auditory perceptual deficit, a mild auditory memory deficit, and a mild auditory sequencing deficit. Some deficits in auditory memory span were also

noted. The speech pathologist felt that some of the language-related problems may be having an effect on T.'s academic difficulties. Further testing of visual problems, intelligence testing, and achievement testing was suggested.

T. was tested for intelligence and achievement in July of 1973. The referral reasons given by his teacher were: "Child appears and acts immature. Poor achievement in writing, reading and arithmetic. Cannot retain spelling words or learn multiplication tables. A learning disability is being questioned." The examiner commented that T. asked that a number of questions be repeated, which may indicate a lack of perception or memory and/or acuity.

T. had a full scale IQ of 91, a verbal IQ of 99, and a performance IQ of 85 (WISC). A complete breakdown of scores follows this case study. He had a Koppitz visual motor age from the Bender-Gestalt of seven years; and the achievement scores from the WRAT showed his reading to be at the 3.0 grade level, spelling at the 2.7 grade level, and arithmetic at the 2.6 grade level. On the Frostig test figure-ground, spatial relations, and position in space were all significantly below his age level.

Learning Disability Diagnosis and Recommendations. The examiner felt that T. evidenced lags in development of visual-motor organization and spatial perception. There were a significant number of indicators of neurological involvement, a possible basis for the immaturity seen in perception-motor development, and some indication of an emotional overlay of dependency, feelings of lack of effort, and possible withdrawal or passive aggressiveness. There were also indications of lags in auditory memory and auditory sequencing and some problems with language.

The examiner recommended additional testing at the community mental health center and placement in the center's learning disabilities program for assistance throughout the summer and early fall with learning processes and development of T.'s self-concept. The recommendations quoted from School Testing Report 4 are as follows:

> 1. The present testing indicates T. is eligible to attend a class for children with learning disabilities, if available and so desired by the parents and school personnel.
>
> 2. Make sure expectations are placed on a level where he can achieve success.
>
> 3. Provide concrete materials and methods as much as possible in the teaching of concepts.
>
> 4. It may be helpful to provide tactile and kinesthetic methods in the teaching of spelling words, such as the use of clay tray in which he may trace his spelling words.
>
> 5. The use of a pegboard may be helpful in teaching multiplication facts. The child may place the pegs according to the fact being studied, such as filling the holes with two down and three across, making a total of six pegs for two times three. He should write each fact as he completes it.
>
> 6. It may be helpful to provide a liner to help guide his reading and writing. This might keep his aligning of arithmetic problems also.
>
> 7. It may be necessary to add concrete cues (such as visual demonstrations) to the giving of directions. It may also help to limit the number of directions given at once.
>
> 8. When necessary allow T. the time he needs to complete assignments, or cut the assignment to a length that he can complete within the time allowed.
>
> 9. In as many ways as possible help T. to feel that his efforts are recognized and worthwhile.
>
> 10. Emphasize T.'s successes, making sure he experiences more successes than failures or frustration with his efforts.
>
> 11. Help T. feel capable of being independent as much as possible. Perhaps assigning a classroom task that is important and needed and on which he can be responsible will help.
>
> 12. If progress is not seen, if changes occur, or if further questions arise, the teacher is asked to contact the consultant.

Description of Phase I Process. T. was observed 75 times and was absent from the observation periods only one day. However, he had a total of seventeen days absence after entering the Learning Center. T. was a pupil who made remarkable progress. His parents asked for a summative assessment to see if he could go back to the regular classroom after five months in the Learning Center. T. initiated the request. The decision was to let him complete the year in the Learning Center and go back to regular classes in the fall of 1974. (This summative assessment is included in the Phase II portion of this chapter.)

The LD teacher interacted with T. 27 times for 36 per cent of the 75 observations, while the teacher's aide interacted five times. (See Table II.) There were three additional teacher interactions, as there were some group activities such as the group session to try to develop the self-concept by better understanding children in trouble situations. A group discussion of this was given by an educational consultant from the local community mental health center.

Of the 75 observations the LD teacher followed the LD recommendations from the testing report fourteen times. The test report did not have very specific activities; but a suggestion for tactile utilization in spelling was followed nine times, use of concrete materials for math was used once, and the use of concrete cues (of a visual demonstration type) in giving directions was used twice. The use of a tape recorder in giving instructions was utilized twice.

The other activities that T. engaged in were largely from a weekly assignment sheet that contained working assignments in reading silently, reading orally, answering questions orally (use of Language Master or tape recorder, or teacher), phonic exercises from a workbook, spelling

practice, math exercises from either a workbook or from ditto sheets, and work in a workbook in the skill series ("getting the facts" from reading paragraphs and answering specific questions). T. was highly self-motivated, worked very industriously, and really did not seek a great deal of reinforcement.

Formative assessments made on T. numbered thirteen by the LD teacher in 40 observations, and the aide made three formative assessments. This took place the last nine weeks, and T. was absent one day. This rate may be somewhat lower than usual, as T. was involved in a summative assessment that formally assessed his potential and his ability. Also, as mentioned earlier, T. did not seek out help or seem to need affective responses.

There were twice as many teacher feedback behaviors as there were modification of instruction behaviors. Of interest was T.'s extremely high number of attending and responding behaviors. Also, his enthusiasm was higher than most of the other pupils. The number of affective responses was slightly higher than the others. This would appear to be an example of a highly self-motivated pupil who desired a lot of feedback; as out of a total of sixteen interactions, feedback was given in twelve. Table I gives a number breakdown of the formative assessments for Case 4.

STUDENT Case 4 AGE 10-8 DATE 7-17-73 GRADE 4

WISC PROFILE OF LEARNING DISABILITY

SPATIAL	Picture Completion	11	
	Block Design	6	Mean 8.3
	Object Assembly	8	
CONCEPTUAL	Comprehension	11	
	Similarities	10	Mean 10.7
	Vocabulary	11	
SEQUENCING	Coding	5	
	Digit Span	8	Mean 7.3
	Picture Arrangement	9	
PERCEPTUAL ORGANIZATION	Block Design	6	Mean 7.0
	Object Assembly	8	
VERBAL COMPREHENSION	Information	12	
	Comprehension	11	Mean 11.0
	Similarities	10	
FREEDOM FROM DISTRACTIBILITY	Vocabulary	11	
	Arithmetic	7	Mean 7.5
	Digit Span	8	

Full Scale IQ 91 Verbal IQ 99 Performance IQ 85 MEAN SCALED SCORE 8.6

FROSTIG DEVELOPMENTAL TEST OF VISUAL PERCEPTION

(1) Eye-Motor Coordination 10+ (4) Position in Space 6-3

(2) Figure Ground 7-6 (5) Spatial Relations 7-6

(3) Form Constancy 9-0 TOTAL - VISUAL MOTOR AGE _____

BENDER-GESTALT

Neurological Indicators 5 Emotional Indicators ____ Koppitz V-M Age 7

DRAW-A-PERSON TEST

Level of Functioning _____

OTHER TEST INFORMATION

WRAT Reading 3.0 Spelling 2.7 Arithmetic 2.6

Figure 6. Test Profile Sheet, Case 4

Case Study 5

Social History. S. is an only child. He came to this community two-thirds of the way through kindergarten. Currently in the third grade, S. has been undergoing therapy at the nearby community mental health center. His mother has divorced and remarried in the past year and a half. This necessitated a move to another elementary school. He is a slender youngster who others say is spoiled (neighbors and some teachers). He is not accepted by his peers, and he has had difficulty in getting along with them. He has been in a number of fights, and he loses his temper quickly. He also has problems relating to the adult figures in his school environment.

He was retained in the first grade, placed in special reading classes, but continued to have academic problems. Compounding this was his number of absences. He was absent 54½ days during the first grade and absent 36 days when he repeated first grade. He was absent 50 days during the second grade, and he has been absent frequently this school year. A number of teacher writeups to the parents were made for conduct and nonattendance. He has good features and always dresses well but has a tendency to tease and torment his peers.

Educational History. As mentioned above, the three things apparent in S.'s educational history are his poor grades, bad conduct, and high frequency of absences. On his cumulative record the previous teachers have noted frequent problems with development of self-control, listening while others are talking, following directions, accepting responsibility, and completing tasks. His grades were mostly D's, with some C's. He seemed to be better in science, art and physical education, having B's in those subjects. He was in special reading his second-grade year.

His kindergarten Metropolitan Readiness Test indicated a percentile rank of eight.

S. only took part of the April, 1972 MAT, but his percentile ranks were in the average to low average, approximately 24 to 44 percentile. However, for the April, 1973, MAT tests, his percentile rank in two items were one (word analysis) and two (word knowledge). His total reading percentile rank was eight. His strength seems to be in mathematics: computation, having a percentile rank of 52. Spelling was also low, being in the percentile rank of eight. It should be kept in mind that he repeated the first grade and should have had different scores than these.

Educational Diagnostic Testing. S. was tested in April of 1973 while in the second grade. The reason for referral was S.'s continual working below his grade level. Also it was noted that he was having difficulty with social interactions with his peers and specifically with his classmates. He was given the WISC, Bender, DAP, Frostig, and sentence completion. The examiner indicated that S. was quite friendly and cooperative during the testing. He displayed good effort in doing tasks and responded well to success, according to the examiner.

He would often start on tasks or on explanations, displaying good ability; but he would then appear to become confused after a period of time. The examiner commented that S. appeared to be very insecure about his academic and his social abilities. The examiner also felt that S. had many unfulfilled security and dependency needs. The examiner thought that S. may have developed ambivalent feelings toward people because of his experiences of failure in social interactions. He displayed many inappropriate behaviors in interacting with both peers and adults in the

school environment. There was some disorganization noted after beginning problem-oriented tasks.

On the WISC S. had a full scale IQ of 102 and a significant difference between the verbal IQ of 95 and the performance IQ of 110. His arithmetic score was significantly low as was his fund of information. The Frostig indicated that his motor-perceptual abilities appear to be adequate; and the errors on the Bender (three) indicated a visual-motor age of eight and one-half years, using the Koppitz scoring method. He seemed to be distractable, having difficulty in processing both auditory and visual information.

The examiner noted that S. started out in his tasks involving auditory and visual information processing fairly well. However, as he progressed he became disorganized. Some problems of a language nature seemed to be indicated by the subtest scores of the WISC and by his school performance. The examiner noted signs of an emotional overlay, a poor self-concept, and difficulty in interpersonal relationships.

S. was referred for additional evaluation and testing at the community mental health center. As the mother did not want this information released to the schools, the results of this testing are not available. However, it is known that S. is in therapy at the center. He was not put on medication, although another check was made in April of 1974. The mother was somewhat reluctant to continue the complete evaluation and was upset at the suggestion. However, she is now very cooperative; and S. is continuing his therapy through May 1, 1974, and then will be entered into a special LD program of motor-training and self-concept development in a group process for the summer of 1974.

Some problems of a conceptual nature and of a perceptual organization can be seen in the WISC profile of learning disabilities. Specific test scores are given at the end of this case study.

Learning Disability Diagnosis and Recommendations. S. was diagnosed as having some emotional overlay that was interferring with his academic performance. The learning disability appeared to be in the organization and the processing of auditory and visual information. There seemed to be a heightened sensitivity to distractions and a difficulty in adequate expression of a verbal nature. Perceptual organization appeared to be weak as did conceptual organization. However, these are not significant weaknesses.

The following recommendations are quoted from School Testing Report 5, April, 1973. (The mother did accept the recommendation for placing S. in the Learning Center.)

> 1. Since S. will be advanced to the third grade next year, appropriate expectancy levels should be set for him at that level. Possibly the present teacher can observe levels at which S. is able to achieve now in all areas of school. This will help guide the levels at which to set S. on next year. He needs to experience success at his work in order to build some feelings of security in school. Let S. take part in setting up academic as well as behavioral goals next year. Help him to learn to accept responsibility in school in the areas of academic work and interaction with his peers. Respond positively to S.'s attempts at displaying appropriate behaviors in these areas.
>
> It may be helpful if some adult at the school could establish a working relationship with S. S. could see this person several times a week in order to discuss his problems and successes at school. S. needs support from someone in order to understand that the academic as well as the social goals he has set for himself are not impossible to attain and that he does have the ability to accomplish them.
>
> 2. Some exercises in auditory and verbal areas may help S. in the processing of information and in the expressions of this information.

a. Give directions progressing from simple to more complex to S. in order to observe his abilities to receive this information and carry out the instructions. Simon says games may be used.

b. Ask S. to read a sentence, paragraph or story and then retell the contents of his story or answer specific questions about the story.

c. Attempt to build a concept of same and different by asking S. how two things are alike or how they are different. Begin with concrete likenesses and then move for more abstract answers.

d. Provide cause and effect questions for S., such as "What would happen if . . .?"

e. Provide problem-solving situations for S. to answer.

f. In order to help S. process information, reinforce auditory exercises with visual assist. For example, when reading a story provide pictures of that story or relating to that story.

Verbal expression exercises:

a. Tell well-known stories and gradually modify these stories so that the child can make up new stories. Give the child a topic and have him tell the class about this topic.

b. Have S. teach a familiar concept to others in the class. For example, have him describe verbally without any props or visual assist how an activity is to be performed.

c. Most of the activities used to develop the processes in auditory channels can be modified to include verbal expression responses. Have S. explain why things happen or why two or more objects are related. These types of exercises fall both into auditory reception and verbal expression categories.

3. It has been recommended that further evaluation be conducted in order to learn more about S.'s strengths and deficits. If such an evaluation is accepted, further suggestions may be discussed with S.'s teacher in the next school year.

4. In this preliminary evaluation and in reviewing S.'s progress at school, there were several signs of possible problems in integration of information, possible problems in auditory areas, and problems in language areas. If a further study supports these possibilities, S. many need special educational

methods to help him in academic areas. Therefore, he may be considered for placement in the Learning Center.

Description of Phase I Process. S. had quite a few absences from the Learning Center. He was absent 26 days after entering the Learning Center, and he was absent three days from observations. S. was observed 60 times and was seen to interact with the LD teacher 20 times and with the teacher's aide nine times. The per cent of times interacting with S. during observations by the LD teacher was 33 per cent of the time. Many of the interactions were of a feedback type, the purpose of which was to get S. to attend to his tasks.

During the 60 observations the activities that S. was doing that evolved from the educational diagnostic testing numbered fourteen. As with the others, there were more activities the first few months than there were the last few. Work on sameness and differences was observed being done four times; and going from simple to complex directions was observed being done nine times, utilizing a skill series workbook and a tape recorder. Observed once was having S. explain something to the class.

S. was out of his seat much of the time and many times was told to get to his seat and go to work. S. engaged in a variety of other learning activities. Like the others, S. had an assignment sheet in which was listed work in the following areas, usually in workbooks: spelling, math, skill series, phonics, and silent reading. Machines that he used were the Language Master, tape recorder, and filmstrip projector. He worked Frostig exercises for visual-motor control, body laterality exercises, and completed a number of tracing exercises and copying exercises from a readiness workbook.

S. was observed receiving some type of formative assessment during the last nine weeks from the LD teacher twelve times and from the teacher's aide six times. Feedback was a fourth higher than modification of instruction for the teacher, while the aide modified the instruction only once. Affective behaviors were low, both numbering four from the teacher and the aide.

S. seemed to attend well when receiving a formative assessment, as he attended fifteen times out of a total of eighteen assessments. His response was half of that, being eight. It appeared that he attended while he was receiving the attention but did not carry through with completing his work. His enthusiasm was low. He showed enthusiasm for the LD teacher's assessments three times but never did show any enthusiasm for the aide. For a complete numerical analysis of the formative assessments for S., see Table I, Case 5.

STUDENT Case 5 AGE 9-7 DATE 4-30-73 GRADE 3

WISC PROFILE OF LEARNING DISABILITY

SPATIAL	Picture Completion	10	
	Block Design	13	Mean 11.7
	Object Assembly	12	
CONCEPTUAL	Comprehension	10	
	Similarities	11	Mean 11.7
	Vocabulary	14	
SEQUENCING	Coding	11	
	Digit Span	8	Mean 10.0
	Picture Arrangement	11	
PERCEPTUAL ORGANIZATION	Block Design	13	Mean 12.5
	Object Assembly	12	
	Information	6	
VERBAL COMPREHENSION	Comprehension	10	Mean 10.3
	Similarities	11	
	Vocabulary	14	
FREEDOM FROM DISTRACTIBILITY	Arithmetic	5	Mean 6.5
	Digit Span	8	

Full Scale IQ 102 Verbal IQ 95 Performance IQ 110 MEAN SCALED SCORE 10.5

FROSTIG DEVELOPMENTAL TEST OF VISUAL PERCEPTION

(1) Eye-Motor Coordination 10+ (4) Position in Space 8-9

(2) Figure Ground 8-3 (5) Spatial Relations 8-3

(3) Form Constancy 9-0 TOTAL - VISUAL MOTOR AGE _____

BENDER-GESTALT

Neurological Indicators 3 Emotional Indicators ____ Koppitz V-M Age 8-8½

DRAW-A-PERSON TEST

Level of Functioning _____

OTHER TEST INFORMATION

Figure 7. Test Profile Sheet, Case 5

Case Study 6

Social History. R. is a nine years and three months old boy in the fourth grade. He is rather stocky and is well received by his peers. He is cooperative with his teachers and likes to have individual attention. He likes to draw and to doodle, and this sometimes got him into trouble with his LD teacher. He had difficulty in keeping his attention on any tasks for any length of time. He has a younger brother whom the mother is encouraging to dress like a girl. The mother wanted a girl, and the other brother is being treated somewhat like a girl. R.'s brother has worn lipstick to school, put polish on his fingernails, worn girl's necklaces, and carries a doll around the neighborhood. R. receives some kidding about his brother but displays no hostility toward his brother.

Educational History. R. has gone to the same elementary school all of his school life. He has mostly D's with B's in art and music. He was in special reading in the second and third grades. His absences were slightly more than average, on the whole being about fifteen days a school year. His previous teachers noted that R. had trouble with developing self-control, listening while others were talking, and following directions. This year's homeroom teacher remarked that many times R. seemed to act impulsively. Upon questioning, she said that he would begin one task and in the middle of it would change to another; or when talking about one subject, he would change entirely to an unrelated topic in midsentence.

An Otis IQ test given in the second grade showed an IQ of 96 for R. On the MAT Readiness Test given in kindergarten R. had a total percentile rank of 22.

On the Stanford Early School Achievement Test, Level II, given at the end of the first grade, R. ranged mostly in the 40 and 50 percentile ranks except for mathematics, which was 28 percentile rank. On the MAT test given in April of 1973 (when R. was in the third grade) he had reading scores in the 40 percentile rank; but mathematics was in the sixth percentile rank. A breakdown of the mathematics subtests showed the greatest weakness in mathematical concepts (fourth percentile rank) while spelling was in the fourteenth percentile rank and language was in the eighth percentile rank.

Educational Diagnosic Testing. R. was tested in November of 1972 on the recommendation of his third grade teacher. Tests given were the WISC, the Bender, the DAP, the Frostig, and the sentence completion. The examiner commented about the impulsive behavior and the great amount of frustration shown by R. with those tasks requiring persistence. He seemed to lack attention for any length of time. He was very cooperative and very verbal during the testing session. He gave up easily on those tasks in which he did not immediately succeed. R.'s comments indicated that he did not feel adequate in the school environment and that he had a poor self-concept.

The WISC indicated scores in the average classification. R. had a full scale IQ of 108, a verbal IQ of 113, and a performance IQ of 101. The examiner commented that R. like to daydream, perhaps compensating for his poor work in school. He does not like to compete in class, seldom finished his work, and does not like to follow directions. Areas on the WISC that were lowest were those subtests requiring concentration, sequencing or good motor control.

The Frostig indicated problem areas in visual perception. On the Bender R. was about a year behind his chronological age, but the errors were of a significant neurological indication. Figure-ground seemed to be the greatest problem in the visual-perception area. He was also somewhat weak in form constancy and in position in space. R.'s speech is not clear, and he is hard to understand at times. With the above test information and the school history of poor achievement, the examiner recommended further testing at the local community mental health center for speech evaluation and for psychological testing.

Learning Disability Diagnosis and Recommendations. R. was given a broad LD diagnosis of visual-motor perception impairment with the possibility of neurological impairment. Inadequate attention and poor persistence, poor school achievement, and a low self-concept will lead to continued school failure unless placed in the Learning Center. This recommendation for placement in the Learning Center for LD students was accepted by the mother.

The following suggestions for recommendations are quoted from School Testing Report 6, November, 1972.

> 1. R. should be considered for placement in the Learning Center if the further evaluation indicates the need for this placement.
>
> 2. The teacher has tried cutting assignments in half so R. would be able to complete tasks. In addition to this the level of the course work should be adjusted to a level where he can achieve. Understanding by the teacher that because of R.'s possible disabilities his performance will be erratic is important. Any task should be limited in time in order for R. to be better able to attend to the task. Reinforcement of behaviors he displays that show successful work or completion of tasks should be used. R.'s self-concept and his feeling of security or adequacy will be aided by success in his school work. Also, any class projects in which he is able to interact with peers and achieve at the same time will be beneficial to him.

3. Certain visual-motor perception exercises should be provided for R.

Suggestions:

a. Motor Control. Have R. trace lines or designs on the blackboard. Use paper-pencil exercises, such as drawing lines between two parallel lines (boundaries) which are straight or coutroued. Impulse control can also be aided by having him draw as slowly as he can then as fast as he can or getting up from sitting on the floor as fast/slow as he can.

b. Figure-Ground Perception. A problem in this area is characterized by a child who has difficulty in organizing stimuli and who has problems with his attention span. His attention tends to shift to any new stimulus, or he has trouble transferring his attention from one stimulus to another.

Exercises:

(1) R. can be asked to discriminate different categories of things in the room (round, wooden, red things, etc.).

(2) He can be asked to sort two or more objects by shape, color, or size or sort different objects from many. The difference between the objects should be gradually reduced so they are more and more similar.

c. Form Constancy. This area deals with the perception of objects when they change in size, shape or context. The emphasis in exercises should be in sorting or discriminating objects according to size, shape and context. Finding certain objects with different sizes or shapes in a picture which contains many objects is helpful.

d. Positions in Space. This area deals with the perception of the relationship of an object to the observer. This is perception of up, down, right, left, etc.

Exercise: Completing partially drawn figures of the human body or assembling the parts of the body from a cut up cardboard picture. R. should learn the relationship of other objects to his body: climb on a chair, under a table, in a box, out of a circle, etc. Relationships can be learned by reconstructing patterns of blocks made by the teacher.

There are many visual-motor perception exercises. The ones listed above are just a few suggestions. Please consult with your principal for more; he has a copy of several more suggestions for exercises.

Description of Phase I Process. R. was observed 73 times, as he was absent two of the observation days and left class ill one day while the observations were in progress. Of the 73 observations some type of LDT/LDP interaction was noted 38 times. The LD teacher interacted with R. 28 times for 38 per cent of the time observed. This is one of the higher cases for LDT/LDP interaction when looking at numbers of interactions without regard to type of interaction.

Of the 73 observations the LD teacher was following the recommendations twelve times. Observed once was R. finding objects by size, shape and form constancy and eleven times in tracing exercises between lines or drawing. Three of these exercises were from the Frostig worksheets, but the other eight were tracing letters and spelling words on the chalkboard through projecting the words on a chalkboard utilizing the overhead projector. These were mostly used during the early observation periods.

The discrimination exercises were not observed being followed nor were the sorting out exercises nor the position in space exercises utilizing R.'s own body. However, a number of other activities were observed.

Most of the work that R. did was of a paper and pencil nature, as has been mentioned earlier. He had certain assignments given him each week in mathematics, phonics, and spelling. He also read orally and silently, answered questions orally to either the teacher, aide, or tape recorder. There was some distraction problem, so R. spent much of his time in an individualized study carrel.

Some type of formative assessment involving R. was observed sixteen times, fifteen of which were with the LD teacher. With R. the number of observed modification of instruction techniques almost equaled the number

of feedback operations, the numbers being ten and thirteen, respectively. The affective behaviors observed of the LD teacher were slightly less than one-third of the combined numbers of modified instructions and feedback operations (see Table I).

R. seemed to attend and respond about half of the time to the formative assessment interactions with the LD teacher. His enthusiasm was low, the writer observing enthusiasm being evidenced only four times. Of interest in this case is the low level of interaction with the teacher's aide. This is the lowest level of interaction of any of the eleven cases that were used in this study. The teacher's aide was seen interacting with R. only one time.

STUDENT Case 6 AGE 9-3 DATE 11-1-72 GRADE 4

WISC PROFILE OF LEARNING DISABILITY

	Picture Completion	9	
SPATIAL	Block Design	11	Mean 10.3
	Object Assembly	11	
	Comprehension	13	
CONCEPTUAL	Similarities	15	Mean 13.3
	Vocabulary	12	
	Coding	9	
SEQUENCING	Digit Span	9	Mean 9.7
	Picture Arrangement	11	
PERCEPTUAL ORGANIZATION	Block Design	11	Mean 11.0
	Object Assembly	11	
	Information	11	
VERBAL COMPREHENSION	Comprehension	13	Mean 12.8
	Similarities	15	
	Vocabulary	12	
FREEDOM FROM DISTRACTIBILITY	Arithmetic	9	Mean 9.0
	Digit Span	9	

Full Scale IQ 108 Verbal IQ 113 Performance IQ 101 MEAN SCALED SCORE 11.2

FROSTIG DEVELOPMENTAL TEST OF VISUAL PERCEPTION

(1) Eye-Motor Coordination 9 (4) Position in Space 8

(2) Figure Ground 6 (5) Spatial Relations 10

(3) Form Constancy 8 TOTAL - VISUAL MOTOR AGE _____

BENDER-GESTALT

Neurological Indicators ____ Emotional Indicators ____ Koppitz V-M Age 7

DRAW-A-PERSON TEST

Level of Functioning _____

OTHER TEST INFORMATION

Figure 8. Test Profile Sheet, Case 6

Case Study 7

Social History. Br. is an Indian student about nine and one-half years old. His father is a blue collar worker; his mother is a clerical worker. Br. is an only child and has attended the same elementary school where he is now in the fourth grade. He has had a fairly large number of absences throughout his school history. He is well liked by his peers and is very cooperative with adults. He is quiet, proud of his Indian birth, and enthusiastic about challenges. He has some difficulty in adequately expressing himself.

Educational History. On the MAT Readiness Test given in kindergarten Br. had a percentile rank of 81. The Otis IQ test given in the second grade indicated an IQ of 94. Several significant changes took place from the MAT test given in the spring of his second grade year to the spring of his third grade year. For example, his mathematics: computation changed from a percentile rank of four in the second grade to a percentile rank of 62 in the third but a drop from a percentile rank of eleven on reading in the second grade to a percentile rank of one in the third. Most of the scores were below the first quartile.

As noted above, Br. was absent frequently. His grades were mostly D's except in science, library, music, and art. He was in remedial reading his third-grade year. He was cooperative in class, completing most of his assignments, had good self-control, and followed directions well. The Indian teacher's aide worked with him, and he seemed to maintain his enthusiasm for school. Br. rides a bus about five miles each morning. He lives in an Indian community and participates in the activities planned for these children.

Educational Diagnostic Testing. Br. was referred for diagnostic testing in March of 1973. The teacher referred him for testing because of poor achievement, no progress, and apparently little retention. The examiner gave Br. the WISC, the Bender, the DAP, and Frostig, and the sentence completion.

The examiner commented that Br. was cheerful and made a persistent effort throughout the entire testing period. He responded well to success and to compliments. He was restless sometimes, but he did not display any signs of hyperactivity. He had difficulty in expressing himself verbally, and he would pause moderately before answering questions. He gave the appearance, the examiner said, of struggling to say the right words in order to express the meaning that he wanted. A complete profile with exact scores follows this case study.

On the WISC Br. had a verbal IQ of 101, a performance IQ of 106, and a full scale IQ of 104. His subtest scores were average except for digit span, which may indicate a problem with immediate auditory memory. Also, according to the examiner, Br. referred to the coding symbols every time in that section of the test, which may indicate visual memory problems or perceptual problems. He did average or above average on most of the subtests. He was strong in the visual perception task requiring a reproduction of an abstract design.

Br. also did well on most of the visual-perception tasks provided on the Frostig. He did score low in the eye-motor coordination. He displayed some difficulty in using fine motor control in order to draw lines within boundaries. On the Bender-Gestalt Br. scored within the limits for his age group. However, he did display some behavior that may indicate a problem with vision or with perception. On the Frostig the

examiner said that Br. many times would lay his face on the table horizontally. The teacher also had reported that Br. said at times his eyes get blurry and he sometimes would cover one eye with his hand when copying from the board.

At the time of the testing Br. was working at a first-grade level in most of his subjects. Reading was at a pre-primer level. In arithmetic he was on addition and subtraction but has done nothing more abstract. Spelling was on a low level, and the teacher reported that there was little retention from day to day. Br. likes school but said that it was hard. There was no indication of any social or emotional problem. The examiner seemed to sense there was a learning problem based upon the teacher's observations and Br.'s record of performance. Also indicated was the unusual behavior of laying his head on the table to draw lines on the Frostig.

Learning Disability Diagnosis and Recommendations. The examiner did not give an actual LD diagnosis but said that there were indications of a visual perception problem and some problems with visual motor control. Br. seemed to have problems of immediate auditory and visual memory and had very poor retention. He recommended further testing at the local community mental health center for speech and hearing evaluations, looking especially for auditory perception problems and receptive and expressive language ability. A social evaluation for a developmental history was also suggested. The parents did not pursue this but did agree to allow placement of Br. in the Learning Center for the fall term.

The following suggestions or recommendations for Br. are quoted from School Testing Report 7, March, 1973:

1. It is evident that Br. is not working on the level indicated by the present testing. Achievement levels should be established at which Br. can succeed. Emphasis should be placed on concrete ideas and associations, which seems to be one of Br.'s strengths. Possibly visual assists can be used to reinforce learning in reading, spelling, and arithmetic areas. Br. also seems to be able to work well with performance-type activities. These type of activities may be integrated into other subject areas Br. is working on in class. Work with flash cards in learning letters, words, and numbers can be used and possibly should be observed whether Br. displays any retention or immediate memory or material presented. Other exercises in the following areas are attached to the school testing report: the visual-sequential memory, auditory sequential memory, and verbal expression.

2. Br. is willing to do school work and is fairly persistent, even though he is working on a level below most of the other children in the class. In order to sustain his good attitude and persistent work, he should experience as much success as possible at this level. Also, he should be reinforced for achievement and behavior, such as completing tasks, attending to tasks, and following directions.

3. More specific recommendations may be given if Br. goes through further evaluation at the clinic.

Description of Phase I Process. Br. was absent from the Learning Center four days, and the number of observations equals 65. The LDT/LDP interaction process was observed 21 times, while the teacher's aide was observed interacting with Br. ten times. The LD teacher interacted with Br. about 32 per cent of the time that he was observed. Table II shows that this interaction per cent was the lowest of any of Teacher Y's observed LD students.

Of the 65 observations the LD teacher was observed following the recommendations only nine times. It should be noted that the recommendations are very poor. Only a few specific activities were listed, with further recommendations to follow a complete evaluation by the speech and hearing department and social services of the local community mental health center. As the parents did not take Br. into the center for a followup evaluation, no other recommendations were given. The parents

did agree to place Br. in the Learning Center. The LD teacher did her own diagnostic testing in order to set up activities.

The only recommendation followed was to make use of performance activities in learning situations. The LD teacher used the tape recorder, Language Master, filmstrip projector, and various manipulative devices, such as the typewriter, clay, magnetic letters, and overhead projector, in order to maintain Br.'s interest. Frostig exercise sheets were used, and activities from workbooks were also utilized: phonics, spelling, math, reading silently and orally.

Br. was observed fourteen times receiving some type of formative assessment in the 30 observation periods he was present. The LD teacher gave ten of these assessments. As in the other case studies, the feedback process is twice that of modifying instructions. (See Table I for a complete numerical summary of Case 7.) The teacher's aide seemed to play a minor role in the formative assessment process with Br.

Br.'s enthusiasm seemed about average, but his attending and his responding to the formative assessments was good. Most of the six affective behaviors observed of the LD teacher were of an encouragement type. Br. seemed to be highly self-motivated, and he made excellent gains in the six months that he was in the Learning Center. He made about one and one-half year's progress in reading and one year's growth in mathematics in the six-month period.

STUDENT Case 7 AGE 9-4 DATE 3-15-73 GRADE 4

WISC PROFILE OF LEARNING DISABILITY

	Picture Completion	10	
SPATIAL	Block Design	13	Mean 11.3
	Object Assembly	11	
	Comprehension	10	
CONCEPTUAL	Similarities	13	Mean 11.0
	Vocabulary	10	
	Coding	11	
SEQUENCING	Digit Span	6	Mean 8.7
	Picture Arrangement	9	
PERCEPTUAL ORGANIZATION	Block Design	13	Mean 12.0
	Object Assembly	11	
	Information	9	
VERBAL COMPREHENSION	Comprehension	10	Mean 10.5
	Similarities	13	
	Vocabulary	10	
FREEDOM FROM DISTRACTIBILITY	Arithmetic	9	Mean 7.5
	Digit Span	6	

Full Scale IQ 104 Verbal IQ 101 Performance IQ 106 MEAN SCALED SCORE 10.2

FROSTIG DEVELOPMENTAL TEST OF VISUAL PERCPETION

(1) Eye-Motor Coordination 8 (4) Position in Space 10+

(2) Figure Ground 10+ (5) Spatial Relations 10+

(3) Form Constancy 10+ TOTAL - VISUAL MOTOR AGE _____

BENDER-GESTALT

Neurological Indicators ____ Emotional Indicators ____ Koppitz V-M Age 9

DRAW-A-PERSON TEST

Level of Functioning _____

OTHER TEST INFORMATION

Figure 9. Test Profile Sheet, Case 7

Case Study 8

Social History. To. is a middle child, having an older sister and a younger brother. To. is a fifth-grade boy who is ten years and four months old. He has gone to the same elementary school all of his school years. Both of his parents work for an oil company where the father is an accountant. He reportedly had ear surgery in 1970. He is well liked by both adults and by his peers.

To.'s mother is somewhat bitter that he was a fourth grader and about to finish the fourth grade before anyone suggested diagnostic testing. She felt that his teachers should have noticed To.'s learning disability at an earlier date. When To. was placed on a waiting list for entry into the Learning Center, the mother was quite vocal about the delayed recommendation for school testing. To. is average in weight and in height. He is industrious and likes school.

Educational History. To. began to have difficulty with school in the first grade. His grades were all C's, except in arithmetic and in reading, which were D's. In second grade he was recommended for summer school for strengthening, and in the third and fourth grades he was placed in special reading classes. A slight problem with completing tasks and following directions was noted, and during the third and fourth grades, problems with self-control were indicated. His grades improved somewhat in the fourth grade.

An IQ test given in the second grade (P.M.A.) indicated an IQ of 97. He was given the Metropolitan Readiness Test in the second grade at the first part of school, and a grade equivalent of 1.7 was noted. The MAT tests indicated a decline from the third grade to the fourth in all areas on the MAT.

To. dropped most in mathematics on the MAT, going from a total math of 48 in the third grade to a total math percentile rank of 16 in the fourth grade. Total reading likewise dropped from 24 to 14, and spelling dropped from 30 to 18. To. had only one or two day's absences each year indicated during these four years of school. To. was referred for testing in February, 1973, the spring semester of the fourth grade.

Educational Diagnostic Testing. To. was referred for testing by the parents through his fourth-grade teacher. The parents thought that To. could have learning disabilities. The examiner gave the WISC, the Bender-Gestalt, and the Frostig. From this initial evaluation a speech and hearing evaluation was initiated at the local community mental health center.

The examiner made the following comments after observations of To.'s behavior during testing. The examiner said that To. was cooperative but somewhat nervous. It appeared difficult for him to recall the names of objects, and he had difficulty in expressing himself. He spoke very quietly, mumbled many of his answers, and appeared to lack confidence. Some immaturity in left-to-right movements was noted, and he took extra time in organizing.

To. had a full scale IQ of 97, a verbal IQ of 91, and a performance IQ of 104. His scatter among the WISC was extensive. There were indications of difficulty with abstract concepts and in integration of language comprehension and processing. His Bender visual-motor age was eight years to eight years and nine months, and the Frostig showed only a slight problem in eye-motor coordination. He needed extra time to adequately handle the visual perception. Visual perceptions and work

with concrete subject matter appeared to be a strength, but abstract reasoning or recall was weak. There were indications of anxiety, dependency, and insecurity.

Further diagnostic study was indicated, and the recommendation for a speech and hearing evaluation was accepted by the parents. Testing by the speech and hearing department of the local community mental health center indicated an oral expressive deficiency with depressed auditory-sequential memory. On the ITPA To.'s individual mean was 32, with a psycholinguistic age of 8.2, and a psycholinguistic quotient of 84. The Goldman-Fristoe Test of Articulation was normal, although some problem with the interdental production of the /s/ phoneme was noted.

Learning Disability Diagnosis and Recommendations. To. was observed to have a slight lag in visual-motor development. Overall developmental immaturity was indicated with a slight deficit in language integration and in auditory sequential recall. There may be an emotional overlay of anxiety, dependency, and insecurity in his academic performance.

The following list of recommendations are quoted from School Testing Report 8, February, 1973. (The mother agreed to placement of To. in the Learning Center when asked in November, 1973).

1. Build on his strength of visual perception and need for concrete learning by combining visual clues and aids with tasks and concepts that are generally presented auditorily.

2. Provide as many concrete materials as possible in the teaching of concepts.

3. Help To. feel that he is a worthwile person in his own right and that he is accepted and liked, even when he makes a mistake.

4. Make sure expectations are on a level where he can achieve success and help him feel there are many areas in which he is successful.

5. Perhaps setting up a positive goal of extra privileges to be earned for a certain number of tasks that have been completed would be helpful for To. This might be done by either the teacher or consultant if so desired.

6. It may help the child to gain in comprehension skills by using exercises involving such questions as, "Why do we do certain things?" or "What if . . .?" or "What would you do if . . .?"

7. It may help to develop integrative thought processes with such exercises as finding pictures of activities and relating them to other areas. (Such as finding a picture of men working and asking if the men are clearing land for a building or road and why.)

8. Tell a story, with pauses frequently, and have child fill in or make up the missing details.

9. Arrange for To. to learn how to play a game for him to teach to the class.

10. If progress is not seen or if further questions should arise, the teacher is asked to contact the consultant.

Description of Phase I Process. To. was observed 80 times with about 29 per cent of the observed time in some type of interaction with the LD teacher. There were 23 observed interactions with the LD teacher and nine observed interactions with the teacher's aide. It appeared that during the 80 observations, the recommendations were followed ten times. The recommendations were rather vague, brief, and were followed more closely the first portion of the observations than they were the last portion.

The recommendation that was followed most was that involving the comprehension skills by exercises involving "What if . . .?" questions. This was followed nine times. Other activities that were used extensively by the LD teacher involved work in phonics, math, spelling, reading orally and silently. The Language Master was used five time, and the tape recorder was used four times for auditory skills. Some visual-motor training using Frostig sheets were used.

The full 45 observations utilized in observing the formative assessment phase revealed a total of nineteen interactions of a formative assessment nature. The LD teacher had fifteen, thirteen of which were of a feedback type assessment. There were seven assessments of a nature that modified the type of individual learning task, but some of the seven came as a result of the feedback process. There was a high number of affective responses given by the LD teacher.

The LD pupil had a very high rate of attending and of responding, doing both fifteen times. He attended and responded every time that the LD teacher interacted with him. He also had a high rate of enthusiasm, showing some type of enthusiasm while attending and responding nine times. There was no enthusiasm shown after formative assessments by the aide, but he did attend and respond each time the four feedback assessments were made. To. appeared to be extremely cooperative and highly motivated.

STUDENT Case 8 AGE 10-4 DATE 2-21-73 GRADE 5

WISC PROFILE OF LEARNING DISABILITY

SPATIAL	Picture Completion	12	
	Block Design	10	Mean 10.7
	Object Assembly	10	
CONCEPTUAL	Comprehension	5	
	Similarities	13	Mean 9.0
	Vocabulary	9	
SEQUENCING	Coding	10	
	Digit Span	8	Mean 9.7
	Picture Arrangement	11	
PERCEPTUAL ORGANIZATION	Block Design	10	Mean 10.0
	Object Assembly	10	
VERBAL COMPREHENSION	Information	9	
	Comprehension	5	Mean 9.0
	Similarities	13	
FREEDOM FROM DISTRACTIBILITY	Vocabulary	9	
	Arithmetic	8	Mean 8.0
	Digit Span	8	

Full Scale IQ 97 Verbal IQ 91 Performance IQ104 MEAN SCALED SCORE 9.4

FROSTIG DEVELOPMENTAL TEST OF VISUAL PERCEPTION

(1) Eye-Motor Coordination 7 (4) Position in Space 8

(2) Figure Ground 10 (5) Spatial Relations 9

(3) Form Constancy 9 TOTAL - VISUAL MOTOR AGE

BENDER-GESTALT

Neurological Indicators Emotional Indicators Koppitz V-M Age8-83/4

DRAW-A-PERSON TEST

Level of Functioning

OTHER TEST INFORMATION

Figure 10. Test Profile Sheet, Case 8

Case Study 9

Social History. E. is a ten-year-old Negro boy in the fourth grade. He is an only child. His mother remarried two years ago, and this necessitated a move to another elementary school. He has lived all of his life in this community. His stepfather works as a laboratory operator at the local oil company, and his mother works there also as a secretary. E. was the first black student at the elementary school he currently attends.

The mother said that she has noticed a change in E.'s attitude since he has been attending the Learning Center. She said that he used to be moody and unhappy with himself for his continued failure in school tasks. He is happy now and brings home samples of his work that have good grades indicated. He likes to be around adults, and he loves the one-to-one contact in the Learning Center. The writer was constantly asked by E. to listen to him read or to help him with his arithmetic. Several times a problem with bladder control was noted by the writer.

Educational History. E. attended two elementary schools. He has missed only eight days of school for all four years of attendancy. His grades are mostly D's with a larger than usual number of C's for the third grade. He was in special reading classes during the second and third grades. The Otis-Lennon IQ test was given to E. in the second grade and indicated an IQ of 88. The Metropolitan Readiness Test was given in October, 1969, and indicated a percentile rank of seventeen.

The week the MAT tests were given in the third grade was the week that E. was absent two days, so the MAT scores are only partially complete for comparison with the second grade. E. had percentile ranks of

one and two on word knowledge, total reading, and mathematics: computation. This is in comparison to his scores in the second grade on the same subtests which were, respectively, 20, 12, and 20 percentile ranks. His high score was in language with a percentile rank of 12.

Educational Diagnostic Testing. E. was referred for testing in May of 1973 by his third-grade teacher who felt that E. may have learning disabilities. The WISC and the Bender-Gestalt were given initially, and then the Frostig was administered. E. had a full scale IQ of 91, a verbal IQ of 85, and a performance IQ of 100. The fifteen point difference between verbal and performance IQ's indicated a possible dysfunction in verbal and language development. For more specific test scores see the test profile that follows this case study.

The examiner commented that E. was not restless, was cooperative and quiet. Throughout the testing E. would turn his paper to write in an almost vertical position. He made many right-to-left movements on paper and pencil tasks, with most to the extreme left of his body. There was counting of the dots and anchoring on the Bender. He appeared to get tired or bored toward the end of the verbal subtests.

E. had low scores in arithmetic, information, and vocabulary. On the WISC learning disabilities profile E. seemed to be weak in conceptual skills, verbal comprehension, and to some degree was not free from distractions. On the Frostig E. was weak in eye-motor coordination and position in space. On the Bender E. had a visual-motor age of six years and nine months. The errors were all of tha neurological nature (Koppitz).

The examiner's recommendation for a speech evaluation was accepted by the mother, and E. was evaluated by the speech and hearing department

of the local community mental health center in July of 1973. The tests given indicated a two-year receptive vocabulary deficit according to Peabody Picture Vocabulary Test and a two and one-half year deficit in expressive and receptive syntactical abilities according to the Northwestern Syntax Screening Test. On the ITPA the age seemed normal, but three borderline disabilities were noted: auditory reception, auditory association, and grammatic closure. He was several years below his age level on these subtests.

Learning Disability Diagnosis and Recommendations. E. appeared to have a neurological involvement in laterality and/or directional functioning, according to the examiner. This apparently was also affecting his understanding, his memory, and his use of abstract reasoning. A possible language dysfunction existed. Fine motor skills were weak, and verbal expression and comprehension were very low. (Writer's note: The diagnosis is not explicit.)

The following recommendations are quoted from School Testing Report 9, May, 1973.

> 1. Test data indicates E. is eligible to attend a class for children with learning disabilities.
>
> 2. If placement is possible and the short attention span as mentioned by the teacher continues to be a disturbing influence to him, further evaluation at the clinic should be requested by the teacher.
>
> 3. Continue to provide as many concrete methods and materials as possible to aid E. in the gaining of abstract concepts.
>
> 4. Reinforce spelling and other skills with tactile-kinesthetic methods, using a clay tray, tracing on board with overhead projector, etc.
>
> 5. Combine visual and auditory methods with the use of the tape recorder, having him read along with the recorder as well as recording his own stories.

6. Encourage effort and progress with graphing of tasks completed with a goal of extra privileges for a certain number of tasks completed.

7. Behavior modification methods may also be used to encourage independent work after determining his independent working level in the various areas.

8. Use exercises to build the inner awareness of left and right, such as "Simon says," and include tasks that require the crossing of one side to the other, such as "touch your right ear with your left hand."

9. Use exercises of movement, such as making circles with either or both hands, changing the direction of movement frequently, requiring movement both toward and away from the middle of the body.

10. Involve the whole body, if necessary, with arithmetic tasks, such as jumping to the facts being studied, along with the recording of the abstract fact.

Description of the Phase I Process. E. was very attentive and motivated. There were 80 observations made, as E. was not absent any time an observational period was set up. One afternoon of observations did not have a full list of interactions, as a self-concept test was administered part of the time. Another time E. was involved with some other students in a group developing a more adequate self-concept. Of the 80 observations the LD teacher interacted with E. 29 times for 36 per cent of time spent in interactions. The teacher's aide interacted six times.

The LD recommendations that evolved from the testing situation were observed to be followed eighteen times. Two recommendations seemed to be followed consistently throughout the 80 observations: spelling exercises that were reinforced by tactile exercises and combining visual and auditory methods by using the tape recorder. Two other recommendations were observed once: gross motor activities involving the whole body and paper and pencil visual-motor tasks. Other activities that

were observed were mostly paper and pencil tasks involving work in mathematics, phonics, and workbooks of a skill series stressing "getting the main idea" and "following directions." Silent reading and oral reading were done also.

In the 45 observational periods involving formative assessment processes, six were lost as a result of E. being in a self-concept development group conducted by an educational consultant from the local community mental health center and because of his involvement in a group testing situation. There were 21 interactions, 18 of which were made by the LD teacher. For a complete number breakdown, see Table I.

As in the others, twice as many feedback types of interactions in formative assessments were observed than were modification of instructions. There were high attending and responding rates for E. when the LD teacher initiated a formative assessment but low when the aide was involved. The enthusiasm shown when involved with a formative assessment was about a third of the time. No enthusiasm was shown when observations of the aide formative assessments were made. E. enjoys the one-to-one contact and tried to actively involve the writer in learning activities, such as asking the writer to listen to him read.

STUDENT Case 9 AGE 10-3 DATE 5-17-73 GRADE 4

WISC PROFILE OF LEARNING DISABILITY

	Picture Completion	11	
SPATIAL	Block Design	9	Mean 10.3
	Object Assembly	11	
	Comprehension	7	
CONCEPTUAL	Similarities	10	Mean 7.7
	Vocabulary	6	
	Coding	9	
SEQUENCING	Digit Span	12	Mean 10.3
	Picture Arrangement	10	
PERCEPTUAL ORGANIZATION	Block Design	9	Mean 10.0
	Object Assembly	11	
	Information	5	
VERBAL COMPREHENSION	Comprehension	7	Mean 7.0
	Similarities	10	
	Vocabulary	6	
FREEDOM FROM DISTRACTIBILITY	Arithmetic	5	Mean 8.5
	Digit Span	12	

Full Scale IQ 91 VerbalIQ 85 Performance IQ100 MEAN SCALED SCORE 8.96

FROSTIG DEVELOPMENTAL TEST OF VISUAL PERCEPTION

(1) Eye-Motor Coordination 6-9 (4) Position in Space 7-0

(2) Figure Ground 8-3 (5) Spatial Relations 8-3

(3) Form Constancy 9-0 TOTAL - VISUAL MOTOR AGEPIQ=80 %tile=10

BENDER-GESTALT

Neurological Indicators 7 Emotional Indicators ____ Koppitz V-M Age6.75

DRAW-A-PERSON TEST

Level of Functioning _____

OTHER TEST INFORMATION

Figure 11. Test Profile Sheet, Case 9

Case Study 10

Social History. Jo. is a nine and a half year old boy with a very pleasant personality. He is well liked by his peers and by his teachers. Jo. is rather stocky, with dark hair and features. His father died four years ago. He has one younger brother. His behavior is characterized by his mother as a combination of mature and immature behaviors. When asked to specify what she meant she was vague but did say that "some days he would pick up his clothes and other days he wouldn't."

Jo. almost always has a smile on his face. He appears to be very energetic around school, asking for special tasks to do; and he is always hurrying to complete his work so that he can help someone else or get to do special tasks for the teacher. The other students in the self-contained classroom seemed to look up to Jo. as a leader, and most vied to be his best friend. At recess he was always surrounded by a group of boys.

Educational History. Jo. is a fourth grader who has missed twenty days of school while attending three grades in this community's school system. He transferred out for the second grade to a small rural community but came back before entering the third grade. His grades were mostly C's and D's. The Otis Mental Ability test given in the second grade indicated an IQ of 96.

His percentile rank scores on the MAT given in the second grade indicated performance in mostly the high 40's and mid-50's, except for math. His total math percentile rank was 28 with math computation at a low of 14. His strength in mathematics seemed to be in math concepts where he had a percentile rank of 48. On the Metropolitan Readiness Test given at the end of his kindergarten year he had a letter rating of C.

Jo. had some trouble in completing his tasks, developing self-control and in accepting responsibility when he was in the third grade. He had trouble in the second grade in completing tasks and in following directions; however, during kindergarten and first grade his teachers had praise for his behavior and work habits. This year at his home school Jo. quit working any school tasks after he began attending the Learning Center. The home school principal said that his homeroom teacher tried everything to induce Jo. to turn in his school assignments, but nothing worked.

Educational Diagnostic Testing. Jo. was referred for testing January 11, 1973, by his third grade teacher for the following reasons: "daydreaming, complete disinterest in school and in learning or achieving, messy writing, backward letters." The examiner gave the WISC, the WRAT, the Bender-Gestalt, and the Frostig.

The examiner commented about the following characteristics during the testing session. Jo. was cooperative and did not display much restlessness. However, when observed in a small group of four there was a great deal of restlessness and scooting around the room in his chair. He was observed making slow movements on pencil and paper tasks, often turning his book or standing in order to get the right perspective on the tasks. He was very verbal in his answers, but there was little spontaneous conversation.

He appeared, according to the examiner, to get very frustrated when he began to fail; and he had difficulty with any changing of a pattern, such as seeing parts of a puzzle in one perspective and not being able to shift his perception to a different relationship. On the coding he seemed to need time to shift his attention back from the left-right

progression, such as writing the symbol for a number following the preceding number (writing the symbol for five after a symbol for four was given). This caused him to miss quite a few markings.

On the WISC Jo. had a full scale IQ of 107, a verbal IQ of 115, and a performance IQ of 97. Overall, his subtest scores were good; but there was some variance in the scores. He seemed to be weakest in picture completion and strongest in comprehension. The lower performance score seemed to suggest a lag in the perceptual-motor areas; and this was substantiated by the scores on the Frostig, a below average score on picture completion on the WISC, and the slight lag noted on the Bender.

He seemed to have problems in how he related to other objects in space. He seemed to have poor eye control and some difficulty in his perception of spatial relationships. As none of the scores were exceptionally low, the examiner felt that the scores were indicative of a developmental lag. Some anxiety and immaturity of development appeared to be present. The examiner also felt that Jo. had a poor image of himself and of his relationships with others and perhaps lacked an adequate identification. He also seemed to be easily distracted. On the Bender Jo. had a visual-motor age of eight years. On the WRAT only spelling was significantly low.

On the WRAT reading was at the 4.2 grade level, arithmetic was at the 3.0 grade level, and spelling was at the 2.7 grade level. For a complete listing of the test scores and the WISC learning disability profile, see the test profile sheet following this case study.

Learning Disability Diagnosis and Recommendations. Developmental lags in his visual-motor perceptions and difficulty in spatial relationships seemed to have been Jo.'s problem when tested in January, 1973. A

slight problem in figure-ground was indicated by the Frostig, and problems in visualizing essential from non-essential details was indicated. A conference was held with the mother who accepted a referral for Jo. to attend the Learning Center the following fall school term.

The following suggestions for recommendations are quoted from School Testing Report 10, January, 1973.

> 1. There are indications that Jo. may have trouble visualizing essential from non-essential details. It may help him by using games that call attention to details, such as describing a person or object and having child guess who or what it is. This may also be used as a method for calling on children at certain times, thereby motivating more interest and closer attention to details.
>
> 2. It may be helpful to use the kinesthetic approach with spelling words to help him perceive the details of the formation of certain letters. This can be done with the use of a clay tray in which the child writes with a stylus over the letter that has been stipled in clay.
>
> 3. If reversals such as b and d are a problem, perhaps changing to cursive writing will aid this. If not, sometimes the use of color helps, such as making the stick of the b green and the ball of the d green, showing the side on which to begin. The ball of the b would be red and the stick of the d red. If this could be related to his left and right sides, it may also be helpful.
>
> 4. Mneumonic devices are also sometimes helpful, such as associating the d with the word "door" and saying that "we need to turn the knob before opening the door." Associate the letter b with the word ball, saying that "we bat the ball."
>
> 5. Exercises involving missing parts may be helpful, such as giving the child pictures of a person or object with a part missing. The child drawn in the missing part.
>
> 6. Finding hidden objects in pictures may help to develop some perception. Apply this to academic work by having a number of lines superimposed over a word being worked on. The child may use a crayon to trace over the word as he finds it.
>
> 7. If spelling is a problem because of missing or incomplete letters, it may help to use concrete, 3-D letters for the child to match to a model of the word and to trace in sequence.

8. Sometimes the tape recorder helps the child to combine auditory, visual, and kinesthetic methods to reinforce the visual memory of a spelling word. This may be used by having a model of the spelling word in front of the child. He reads the word into the tape recorder and then traces the model as he spells it aloud into the recorder. He may then say the word into the recorder, and as he writes the word without spelling it he leaves the recorder on. He then again says the word; and this time again spells it into the recorder, always using the model to make sure it is correct. Following this, he listens to the tape he has just made, writing the word with the recorder. When he comes to the blank portion of the tape he gives himself a test by writing the word with the recorder and all models put away. The recorder then proceeds to spell it as he checks his work.

9. Further suggestions may be found in the booklet on visual perception in the principals' office.

10. The completion of tasks may be motivated by the use of behavior modification techniques and the use of charts. This may be discussed with the consultant if so desired.

11. In as many ways as possible help Jo. to feel he is a special person in his own right; using some skill in which he excells may help him to gain a better sense of identification.

12. If progress is not seen and depending on further evaluation, consideration may be given to further determination of eligibility for attendance in the class at the Learning Center.

13. If progress is not made, if changes occur or other questions arise, the teacher is asked to contact the consultant.

Description of Phase I Process. Jo. was observed for 70 periods, as he had one absence from the time periods selected for observation. The LD teacher was observed interacting with Jo. 22 times and the aide 11 times. This percent of interaction by Teacher X (31 per cent) is somewhat misleading, as the pupil often sought out the aide for help while the LD teacher was busy helping another pupil.

Of all of the cases described the LD teacher followed the recommendations for a longer period of time with Jo. than with any other pupil, including the other LD teacher's pupils. The number of

interactions that were observed following LD recommendations totaled 28 for Jo. Other activities that were observed that were not included in the recommendations were: oral and silent reading, phonics work in a workbook, paper and pencil tasks in math and in a programmed reader.

The kinesthetic approach to spelling was observed twice, cursive writing practice observed seven times, Frostig worksheets exercising perceptual skills and visual-motor activity were observed nine times, and the combining of visual and auditory methods was observed eight times. The utilization of 3-D letters to increase spelling skills was observed twice.

In the 40 observational periods for Jo. the LD teacher made a formative assessment thirteen times and the aide six. This pupils' formative assessments were different from the others. There was one less observation of a formative assessment to modify instructions than there was for the feedback process. In other words, almost every feedback assessment resulted in some modification of the learning instructions. Only one of the aide feedback assessments resulted in modifying the instruction.

Jo. also had a very high rate of attending and responding to each of the formative assessment behaviors observed, as he attended every time for the LD teacher and responded every time except once. The ratio was the same for the aide. The enthusiasm was low; about one-fourth of the assessments showed a reflection of any enthusiasm. For a complete breakdown of the numbers see Table I.

It should be noted that Jo. was a pupil who sought help when he needed it, and many of the formative assessments were initiated by Jo. As a number of the interactions involved the following of recommendations, the modification of the instructions at times involved a shift to another method of instruction. An example would be if Jo. had difficulty with

spelling utilizing a tape recorder, the teacher would suggest the Language Master which also utilized his vision and tactile senses when he copied the word.

STUDENT Case 10 AGE 9-5 DATE 1-11-73 GRADE 4

WISC PROFILE OF LEARNING DISABILITY

	Picture Completion	8	
SPATIAL	Block Design	11	Mean 9.3
	Object Assembly	9	
	Comprehension	15	
CONCEPTUAL	Similarities	13	Mean 13.7
	Vocabulary	13	
	Coding	11	
SEQUENCING	Digit Span	9	Mean 9.7
	Picture Arrangement	9	
PERCEPTUAL ORGANIZATION	Block Design	11	Mean 10.0
	Object Assembly	9	
	Information	11	
VERBAL COMPREHENSION	Comprehension	15	Mean 13.0
	Similarities	13	
	Vocabulary	13	
FREEDOM FROM DISTRACTIBILITY	Arithmetic	10	Mean 9.5
	Digit Span	9	

Full Scale IQ 107 Verbal IQ 115 Performance IQ 97 MEAN SCALED SCORE 10.9

FROSTIG DEVELOPMENTAL TEST OF VISUAL PERCEPTION

(1) Eye-Motor Coordination 6-0 (4) Position in Space 8-9

(2) Figure Ground 7-0 (5) Spatial Relations 7-6

(3) Form Constancy 8-3 TOTAL - VISUAL MOTOR AGE PQ=82 %tile=12

BENDER-GESTALT

Neurological Indicators 4 Emotional Indicators ____ Koppitz V-M Age 8

DRAW-A-PERSON TEST

Level of Functioning ____

OTHER TEST INFORMATION

WRAT Reading 4.2 Spelling 2.7 Arithmetic 3.0

Figure 12. Test Profile Sheet, Case 10

Case Study 11

Social History. D. is a twelve-year-old sixth grader who finally entered the Learning Center after a number of years of frustration in school and disinterest in school work. He has an older sister; but according to the mother, all of the family spoils D. He is on medication for hyperactivity but has been on medication for only six months. He is teased a great deal by the students at his home school, as he gives the appearance of being dull-witted. The home school he attends has an above average income in most of the families.

He mixes well with the Learning Center students but does not relate well to his peers. The mother professes to be very interested in his welfare but forgets to show up for appointments and forgets to give him his medication. D. has lived in the same house since he was born and attended the same school for the past six years. He relates well to adults and is well mannered, cooperative, and industrious when he is on his medication.

Educational History. D. has not had many absences until this year. He currently has an exceptionally high number of absences. In the fifth grade he had only seventeen and one-fourth days of absence. Most of his grades are C's with an occasional D. An IQ test given in the second grade indicated an IQ of 108. On the Metropolitan Readiness Test given to him in the first grade D. had a percentile rank of 48. On the MAT given to him in the third grade D. had a grade equivalent of 2.1 and 2.8 in reading and word knowledge (further test information was not available).

On the subsequent MAT tests given in the spring of each year D. seemed to be scoring consistently in the low and middle teen percentile ranks. In his fourth-grade year he hit extreme lows, a total reading

percentile rank of eight and a total mathematics percentile rank of six. All of the other percentile rank scores were below twelve.

On the fifth-grade MAT D. seemed to regress, having a number of percentile rank scores of one and two. The highest percentile rank was ten, and this was in mathematics: computation. An Otis IQ test given to him in the fifth grade yielded an IQ of 92. D. was referred for complete testing in 1970, and the test results indicated an average ability with suggestions of a vision or of a perceptual disability. The examiner recommended that D. come into the local community mental health clinic for a full evaluation; and when the parents did not follow up, no other contact was made until November of 1973.

Educational Diagnostic Testing. The previous testing of 1970 indicated that D. had a verbal IQ of 92, a performance IQ of 103, and a full scale IQ of 97 (WISC). Low subtests were arithmetic, coding, comprehension, and digit span. His strengths seemed to be in the performance subtests. Vocabulary was about average.

D. was referred for testing in November of 1973 by the principal because of poor achievement at the sixth-grade level, problems of self-concept, and problems in social interactions with his peers. The examiner gave the WISC, WRAT, Bender, parts of the Frostig, DAP and sentence completion. The examiner commented that a more pronounced gap in achievement between D. and his peers was seen at this time than when previous testing was done in 1970, although the IQ scores remained about the same. He appeared to have great difficulty in reading.

Although receiving individual tutoring in reading, D. seemed to be impulsive in his reading, often missing or not perceiving words within a sentence. He was easily distracted, felt rejected by others, and was

unable to concentrate for very long periods of time. Achievement scores placed him about two to three and one-half years behind his present grade level in spelling, reading, and arithmetic (WRAT). Visual perception problems and eye-motor coordination appeared to be weak. He scored lower in this evaluation in areas dealing with retention and general education information as well as being lower in visual sequencing and visual memory.

D. is not accepted by his peers in the regular sixth-grade homeroom, according to his teacher. The teacher went on to comment that as D. is distractable and cannot concentrate on his tasks and with continued poor achievement leading to frustration, he bothers the other students. D. teases them, shows off in front of them; and his excessive activity keeps them from completing their work. When he gets into trouble with the teacher, they all laugh at him.

The WISC learning disability profile (complete test profile of test scores follows this case study) seemed to indicate problems in freedom from distractibility and in the conceptual areas. The Frostig test indicated weaknesses in eye-motor coordination, figure-ground, and position in space; however, the latter two were not as low as the earlier Frostig. The examiner commented that he was often impulsive in his problem-solving approach. He appeared to have a poor self-concept and lacked a mature social awareness. Consequently, some of his coping behaviors he has adopted were further retarding academic as well as social growth.

Learning Disability Diagnosis and Recommendations. D. was diagnosed as having a learning disability in reading, perhaps due to his poorly developed visual-motor coordination. His visual memory was weak, and his retention of numbers and numerical sequencing was weak. Problems were noted in visual perception, fine motor control, and auditory

perception. The examiner recommended further evaluation at the community mental health center for social/psychological testing as well as a speech and hearing evaluation. The parents agreed to have a neurological test given which resulted in D. being placed on medication.

After a conference with the mother, D. was placed in the Learning Center in November, 1973. (Writer's note: This is an apparent late placement for D., and the remedial help that he received for the seven months could not possibly compensate for the preceding five years of poor achievement and successive failure.) The following recommendations are quoted from School Testing Report 11, November, 1973.

> 1. I have discussed with the teacher and principal the possibility of Learning Center placement. I feel that this special placement may be beneficial to D., even though it would probably be only available this year. The structure and individualized achievement levels provided by the Learning Center may be of benefit to him. He can possibly pick up feelings of success within a more individualized program such as this. This class will also provide him with work in specific learning areas such as visual motor perception, which it appears he needs.
>
> 2. Structure - a program in which D. knows exactly what is expected of him and how to accomplish it. To go along with this, the program would need to provide achievement levels in different subject areas commensurate with his present functioning abilities.
>
> 3. D. also needs help in learning to compensate for visual-motor perceptual difficulties. This would include work in eye-motor coordination areas through drawing and tracing exercises. Visual sequencing and memory - exercises which by presenting letters, words and numbers D. could improve immediate visual memory then improve his ability to sequence visual items.
>
> 4. In regard to social interaction and self-concept, first let us build a feeling of success and ability to succeed within D. Help him to learn more appropriate means of gaining attention and the acceptance of others. This is one area in which I feel D. needs help in learning new alternative actions which will work in social interaction. I will discuss some behavior management methods with the teacher that we might use in helping D. to display less inappropriate behaviors within the classroom.

Description of the Phase I Process. D.'s recommendations were very brief and somewhat vague. He was absent a great deal, being absent from the observation days five times and being absent from the Learning Center seventeen days. Nevertheless, on the days that he did come he worked very hard. Twice he forgot to take his medication, and he did little work. There were 55 observation, and the LD teacher interacted with him nineteen times; while the aide interacted with him five times. (See Table II).

The per cent of time that the LD teacher interacted with him was 29 per cent. The recommendations that were given were followed nine times. Suggestions for eye-motor coordination in drawing and tracing were followed seven times, and the presenting of letters and numbers to improve intermediate visual memory was followed twice. Extensive use of the Language Master, tape recorder, and overhead projector to improve his spelling was made. Other activities observed were paper and pencil tasks involving phonics, mathematics, and two different workbooks on skills: "using context" and "locating answers."

D. also read aloud, answered questions orally, and read silently. D. was one of the pupils involved in a summative evaluation in Phase II.

There were only 30 observations of the formative assessment periods because of absences. However, there were still twelve LD teacher interactions of a formative assessment nature and only one involving the aide. Table I gives a numerical breakdown of the various types.

Only one-fourth of the number of feedback assessments were observed of the modification of instruction type of assessment. The ratio of numbers was four to one. The attending behaviors of D. were high, the responding behaviors were lower, and the enthusiasm was very low. The interaction with the aide was almost nonexistent. Because of the number

of absences this information will have to be carefully assessed, as one-third of the proposed observational time is missing. This could be misleading in looking at Table I for comparisons of formative assessments.

STUDENT Case 11 AGE 11-11 DATE 11-1-73 GRADE 6

WISC PROFILE OF LEARNING DISABILITY

SPATIAL	Picture Completion	11	
	Block Design	12	Mean 10.6
	Object Assembly	10	
CONCEPTUAL	Comprehension	7	
	Similarities	9	Mean 8.7
	Vocabulary	10	
SEQUENCING	Coding	8	
	Digit Span	7	Mean 9.0
PERCEPTUAL ORGANIZATION	Picture Arrangement	12	
	Block Design	11	Mean 10.5
	Object Assembly	10	
VERBAL COMPREHENSION	Information	12	
	Comprehension	7	Mean 9.5
	Similarities	9	
FREEDOM FROM DISTRACTIBILITY	Vocabulary	10	
	Arithmetic	8	Mean 7.5
	Digit Span	7	

Full Scale IQ 97 Verbal IQ 92 Performance IQ103 MEAN SCALED SCORE 9.3

FROSTIG DEVELOPMENTAL TEST OF VISUAL PERCEPTION

(1) Eye-Motor Coordination 7 (4) Position in Space 8

(2) Figure Ground 8 (5) Spatial Relations 9

(3) Form Constancy 9 TOTAL - VISUAL MOTOR AGE

BENDER-GESTALT

Neurological Indicators Emotional Indicators Koppitz V-M Age

DRAW-A-PERSON TEST

Level of Functioning

OTHER TEST INFORMATION

Figure 13. Test Profile Sheet, Case 11

Phase II

Introduction

Phase II of the study tried to answer two descriptive research questions. The first research question examined the indicators used to evaluate students who had been in LD self-contained classrooms for the current year and the decisions made about these LD students from these indicators. The second research question looked at the self-concept attributes of students who had had summative decisions made about them. Group II students were used in this portion of the study.

Of the original 25 Group II LD students, only six summative decisions involving their potential return to regular classrooms were made. There was some mobility, as five Group II students moved out of town. Seven of the Group II students returned to the regular classroom before the study was initiated. Most of the seven LD students returned to the regular classroom at the end of the first nine weeks or at the end of the first semester. This study examined only the summative decisions made during the second semester.

In Group II there were three students who were sixth graders. As these sixth graders would be going to junior high, no summative assessment was made because the junior high schools do not have any type of LD program. Of the remaining nine students a summative assessment was felt necessary for six. The other three Group II students had been in the Learning Center for barely a year, and the LD teacher decided that a summative assessment should be made at the end of the first nine weeks of the 1974-75 school year.

Originally it was thought that the summative assessments would be of only Group II students, as these students would have been in the LD self-contained classroom for at least a year. However, there were two Group I students who had summative assessments. Including the two Group I students, there was a total of eight summative assessments described. The report forms used for each of these students are given in Appendix F.

Summative Assessment Process

Of the eight summative cases described in this process, three elements were chosen to organize the description of the summative assessment. These elements are who, what, and how. Who refers to the various people involved in the summative assessments. The who element also describes the people who initiate the summative assessment process.

What refers to the description of the indicators used in making a summative decision. Examples of indicators would be test scores, teachers' opinions, LD pupil's parents' expressed desires, and observations of an LD pupil's performance in the classroom. Also examined was the utilizations of the school system's standardized testing program (MAT) and any special formal assessments made to determine grade level placement or achievement.

How is concerned with the unfolding procedure of the process. How a decision is reached, how the people are informed, and how it is implemented are described. Some information about the implementation of the decision is also given in this element.

In the who element the person emerging as the most influential in initiating or in determining a summative assessment was the LD teacher (see Table III). Other people in the who element of the summative

TABLE III

SUMMARY OF SUMMATIVE ASSESSMENTS

Case	Group	Teacher	Initiated By	Main Indicators Used in Decision Process	Decision
4	I	Y	LD Pupil	Desire to return. Achievement close to grade level.	Return regular class. Fall '74
11	I	Y	LD Pupil	Desire to stay. Poor achievement. Recent entry into L.C.	Stay in 6th. Remain in L.C.
S/A A	II	X	Principal	Coordinator's decision to assess after new LD teacher.	Remain in L.C. Reassess 1st 9 wks.
S/A B	II	X	LD Teacher	Tests close to grade level. LD teacher felt she could do much of 6th grade-work.	Return to regular class.
S/A C	II	X	Mental Health Consultant	LD teacher felt continued placement in L.C. necessary	Remain in L.C.
S/A D	II	Y	LD Teacher	LD teacher & parents felt continued need for L.C. Could not work in regular classroom.	Remain in L.C. if not placed in residential school.
S/A E	II	Y	LD Teacher	LD teacher's opinion to remain in L.C. Poor test scores (Durrell). May regress during summer.	Remain in L.C. Reassess 1st 9 wks.
S/A F	II	X	LD Teacher	LD teacher felt any additional growth gains slight. Others could benefit more from L.C.	Return to regular class.

assessment process were the educational consultant from the local community health center, the homeroom teacher, the principal, the special education coordinator, and the parents. The LD teachers initiated most of the summative assessments. Two LD pupils each initiated a request for a summative assessment. The mental health center consultant and a principal each initiated a request.

Actually, there was no real procedure for summative assessments; i.e., there was no set time for every student to be assessed, such as at the end of the third semester in the Learning Center or after each semester. The summative assessments seemed to be made only upon the specific request of some person, usually the LD teacher.

The what referred to the indicators used to make decisions about the summative assessments. Surprisingly to the writer, there was not much emphasis on any single factor except the LD teacher's opinion that the LD student was ready to return to the home school for full-time classes. The MAT scores were not considered at any time with any of the LD students. Some of the LD students were not even given the MAT in their home school, and no test scores were available. The book levels in which the LD students were currently working comprised much of the assessment used by the LD teachers to determine the LD students' achievement level.

The LD teacher would contact the home school teacher, and these two would compare work assignments and the pupil's potential. The parents who desired a return to the regular classroom for their child were also considered, as the child is in the Learning Center on a voluntary basis. When the pupil initiated the request, this was unusual enough that the request was given strong consideration. There was a group concensus

regarding a summative assessment in all but one. Generally, the LD teacher was the one who determined the decision; and the others abided by her decision.

The how of the summative decision method revealed a rather unorganized system. There was no set timetable to complete a summative assessment once a request was initiated. There was no designed time for all of the LD students to be assessed, such as the end of the semester or at the end of every two years. Only twice were conferences held with several people to determine a summative assessment. In the others the special education coordinator assimulated the information from the various sources.

The decision-making process seemed to emerge from a group concensus in all of the cases but one. There was no clear and concise decision-making procedure. In S/A Case A the special education coordinator felt that personality variables between the members involved in the summative assessment clouded the decision-making process. The coordinator disagreed with the decision to return the child to the regular classroom for the fall of 1974. The coordinator decided that the LD pupil should remain in the Learning Center and would be re-evaluated after the first nine weeks of the fall term. The coordinator of special education has the final authority on summative decisions, subject to parental wishes.

There was no reference made to previous school records from the Learning Center for Group II students. The curriculum records for Group II students were lost when the Learning Center was moved to another school this year, and both previous LD teachers moved out of town. Copies of school testing reports were obtained, but the summative decisions were based on the knowledge of this school year's work for a student in the Learning Center.

Both of the Group I students, Cases four and eleven, were in Teacher Y's self-contained classroom. Teacher Y seemed to utilize the formative assessments she had made (Phase I data) in making her decision for the summative assessments in both cases. The formative assessments appeared to be used in an informal manner by Teacher Y; as she considered motivation, the grade levels of their workbooks, and whether or not sufficient progress had been made in the assignments given in the weekly assignmeny sheet (Appendix E).

To the writer's knowledge neither teacher considered the recommendations contained in the school testing reports in reaching any summative decision. The school testing reports did not contain definite academic goals to be obtained. Case 4 was evaluated during the summative assessment by the consultant for the community mental health center, but the feedback consisted of the examiner saying that the student was working close to the expected grade level. No scores were given, but the consultant mentioned that the Wide Range Achievement Test was used in the evaluation.

Role of Self-Concept in Summative Assessment

The Piers-Harris Self Concept Scale was given to all of the LD pupils. Two students were absent when the test was given by the LD teacher in a group situation, and these two were both involved in a summative assessment. There were no scores available for Case 11 and S/A Case E. Raw scores were thought to be significant if below 46 or above 60. Only S/A case A scored higher than 60. His score was 69, considered to be significant if having a higher than usual self-concept.

None of the scores were below 46. The Piers-Harris scores are given in Table IV.

The Piers-Harris may not be able to discriminate exactly those attributes of the self-concept of the LD pupils involved in summative assessments in this study. In Table IV the raw score cluster for Factor 2 (Intellectual and School Status) shows that there was not much difference among the six students studied. Only S/A Case A had a significantly high positive attitude toward his intellectual ability and his school status. The use of this factor is still in the experimental stage; but in general the higher the number of positive statements, the better cluster about Factor 2.

Both Group I students approached their teacher about their educational placement for the next year. Case 4 wanted to return to the regular classroom, and Case 11 wanted to stay in the Learning Center rather than enter the junior high school. From their apparent motivation and expressed desire one would expect Case 4 to have a high self-concept and would expect Case 11 to have a low self-concept. Case 11 was absent the day the Piers-Harris was given. The Piers-Harris measured self-concept for Case 4 did not appear to be significantly high.

It would appear that Case 4 exhibited confidence in his ability to handle regular classroom work, but this may not be measured by the Piers-Harris. The expressed desires of both Group I students appeared to influence the suumative assessment, as the people involved in the assessment felt that the expressed desire would indicate attitude toward the future school work. For example, Case 4, if not returned, might not be motivated to work in the Learning Center; and Case 11, if promoted to the junior

TABLE IV

PIERS-HARRIS CHILDRENS SELF-CONCEPT SCALE

Case	Raw Score	Percentile	Factor 2 - Raw Score Cluster
4	60	69	11
S/A Case A	69*	91*	16
S/A Case B	53	49	11
S/A Case C	52	46	13
S/A Case D	53	49	11
S/A Case F	60	69	11

*Significantly high in direction of a positive self-concept.

Mean of Normative Sample = 51.84 (raw score)
Standard Deviation Sample = 13.87 (raw score)

high school, might be frustrated, as he would not be able to do the work expected of him.

It appeared as if the self-concept does have some influence on the summative assessment decisions, but this did not appear to be discriminately measured by the Piers-Harris. S/A Case A had a significantly high self-concept as measured by the Piers-Harris. This high concept may have influenced his building principal's decision that the student should return to the regular classroom full time, as the pupil was unhappy at the Learning Center. The LD teacher was unhappy with the principal and unsure of the reason the pupil was in the Learning Center, and she agreed with the principal. The special education coordinator disagreed, as he felt that a new assessment after the summer and after nine weeks with a new LD teacher would be more useful (see Table III).

The self-concepts of the other pupils involved in summative assessments did not appear to be influential in the final decisions made. As much information about a student's motivational and his feelings of adequacy in school work appeared to be gained from the expressed desire of the pupil as from the Piers-Harris measured self-concept.

Chapter Summary

It seemed as if the main teaching process was a mixture of individual learning procedures and a packaged instructional procedure where the LD pupil was directed to work on tasks alone. All of the eleven cases in Group I, Phase I, had weekly lesson plans depicting daily assignments. The weekly lesson plan format is shown in Appendix E. The teaching seemed to be mostly a feedback process in which a pupil had a certain square

checked off if completed. Workbook assignments seemed dominant over individual learning styles utilizing different instructional methods.

About one-third of the time was spent in LDT/LDP interactions. The LD recommendation for the cases were followed few times after the first nine weeks, suggesting that the usefulness of the recommendations is relatively short-lived. Case 10 was the exception. The recommendations many times were vague or concluded with a phrase stating that additional recommendations would follow further evaluation at the local community mental health center. Either the parents did not take the child in for further evaluation or else the center did not give further recommendations to the LD teachers.

Many times the LD diagnosis was inconclusive or vaguely suggested. There were no followup evaluations nor were there any "booster" type of recommendations given after the pupil was placed in the Learning Center. This was the LD teachers' first year in a self-contained LD classroom, and some classroom management problems developed. The teachers' aide was found to have some influence in the feedback process in interacting with the pupils. There seemed to be a higher number of absences than would be expected from the Learning Center.

The formative assessments were mostly of a feedback type, and the feedback behaviors were double those of an instructional modification nature. The pupils' attending and responding were high for each of these assessments, but in general their enthusiasm was low. The formative assessments were made during the last nine weeks. The LD teachers seemed to be engaged in formative assessment behaviors about twenty per cent of the time. The highest percentage of time spent in formative assessment was above 30 per cent and involved one student. The teacher's

aide was involved mostly with feedback processes, with a low number occurrence.

The summative assessments were largely initiated by and influenced by the LD teachers. Two pupils of the eight studied initiated the request to return to the regular classroom, and this influenced to some degree the decision to return. Two Group I students initiated the summative assessments made for them, and the LD teacher and principal were influenced by the expressed desires of these two students. It was felt by LD teachers that the students' motivation would be affected if their requests were not met. Case 4 wanted to return to the classroom, and Case 11 desired to remain in the Learning Center instead of being promoted to the junior high school.

Input seemed to be from the home school teacher and principal, the LD teacher, the parent, the educational consultant from the community mental health center, and the special education coordinator. In all of the summative decisions but one the group reached a concensus. In one the coordinator decided the course of action taken.

There did not seem to be any systematic method of summative assessing the LD pupils. The use of formal test instruments was very low. The MAT results were not used in any of the summative decisions, and many of the home schools had not given the MAT to their LD pupils. It appeared that Teacher Y made some use of the formative assessments she had made for the Group I students in reaching her decision in the summative assessments for Case 4 and Case 11.

The pupil's progress seemed to be measured by the LD teacher's opinion of the pupil's work, the grade level of the workbooks he maintained, and occasionally an assessment instrument such as the Durrell

Reading Analysis. In most cases the LD teacher visited with the home school teacher prior to an LD student's return.

The Durrell was administered by the LD teachers in several instances where a formal assessment was desired. For example, Teacher Y felt that one of her sixth-grade students had made significant progress in his reading since entering the Learning Center the first part of the year. As he was going to the junior high school, no summative assessment was made. The Durrell was to measure his progress. The Durrell was also given to some students who moved out of town. At the end of the school year the Durrell Reading Analysis was given to a number of the students who would be returning for the fall term. This was given at the request of the special education coordinator.

The LD student's self-concept may have some influence in the summative assessment made for him. The Piers-Harris did not seem to measure the motivational confidence that Case 4 exhibited when he desired to return to the regular classroom. The LD student's expressed desire did seem to have some influence in the decision-making process of the summative assessment, but this study did not indicate the role of the self-concept in summative assessments.

CHAPTER V

SUMMARY, DISCUSSION, AND RECOMMENDATIONS

Summary

The purpose of this study was to provide a system of describing the Learning Disabilities Teacher/Learning Disabilities Pupil (LDT/LDP) interaction process in a learning disabilities (LD) self-contained classroom in a normal school setting. This descriptive study was conducted in a middle-sized community in north-central Oklahoma over a semester's time period. The LD pupils were in the elementary self-contained LD classroom half days and were taught by two LD teachers, Teacher X and Teacher Y.

The teaching activities employed by LD teachers (interaction process) for LD students were examined in one phase of the study, and the LD assessments for pupils were discussed in another phase. A systems model (Figure 1) described the interaction process of an LD student. In this flow process for an LD pupil in a self-contained classroom, two phases of this model were described.

Phase I tried to answer Descriptive Research Question 1: What are the specific activities employed by LD teachers in a self-contained classroom to implement LD prescriptions? Phase I involved eleven Group I students who had recently entered the self-contained classroom (Learning Center). A case study approach was utilized for one semester of

observations. Each of the eleven case studies included, besides the description of the Phase I process, a social history, an educational history, a short summary of the educational diagnostic testing, and the learning disability diagnosis and LD recommendations.

Observations were made to determine the frequency of teacher activities implementing the recommendations evolving from the diagnostic process. The LDT/LDP interaction process described the LD teacher activities relating to the LD recommendations and the LD teacher formative assessment interactions with LD pupils. The formative assessments included those teacher behaviors involving feedback, modification of instructional activities and affective responses while the LD students were observed in paying attention to the task (attending), persevering in the work (responding) and showing enthusiasm for the tasks. The formative assessment observations were made during the last nine weeks of the study.

Another portion of the study was Phase II, which examined the summative assessment process for LD students under consideration for possible return to regular classroom. A total of eight summative assessments were made. A summative assessment is that assessment held for an LD pupil which summarized all of the available information about his intellectual potential, academic achievements, and his Learning Center progress in order to reach a decision about a possible return to a full-time, regular classroom.

Two Group I students were involved in the summative assessments. The other six summative assessments were held for Group II students. All Group II students were those LD students who had been in the Learning Center for at least one year. A description of the summative assessment

process was made and the self-concept attributes of those eight pupils having summative decisions made were examined.

Phase II tried to answer two descriptive research questions: What are the indicators used to evaluate students who have been in LD self-contained classrooms for the current year, and what are the decisions made from these indicators? What are the self-concept attributes of students who have had summative decisions made about them? The descriptive information gained was organized about the elements Who, What, and How. Who are the people involved in the summative assessments, what are the indicators used and what is the decision, and how is the summative assessment process developed. These are the foundation elements for the description of the Phase II process.

Discussion

The intent of this study was to describe the interaction process between the LD teacher and the LD pupil in a self-contained classroom. The reader should be cautious in considering the following statements that are derived from a descriptive study with limited subjects. No cause-effect relationship can be drawn from the results of the current study. Such terms as "seem" and "appear" should be viewed as speculations on the observations and relationships depicted in the discussion

Descriptive Research Question 1

The following comments in this discussion are based on the observations made in this descriptive study and are pertinent only to this study. However, a systems model (see Figure 1) of this community's self-contained LD classrooms is similar to other communities' LD programs. An

analysis by inspection of the various observations invites the following comments grouped under Descriptive Research Question 1: What are the specific activities employed by LD teachers in a self-contained classroom to implement LD prescriptions?

1. The LD recommendations that evolved from the educational diagnostic testing for each LD pupil were implemented by the LD teachers a fairly low percentage of the time during observations. The case with the highest percentage was Case 10, with 33 percent. The next two highest cases (Case 2 and Case 9) had 29 and 23 percent respectively. The LD recommendations seemed to be followed more during the first part of the semester; as the school year progressed, the recommendations were used less and less. The one exception was Case 10 where the recommendations were used consistently throughout the semester. The recommendations in the other cases were followed nine to fifteen times for about a twenty percent average of the total observation time for each pupil. In other words, in a case that had 70 observations of LD activities, the recommendations were observed being followed approximately fifteen times.

2. Some of the testing report recommendations appear to attempt to serve both the regular classroom teacher and the LD teacher. Some of the recommendations were very vague or incomplete. Cases having such recommendations are Cases 4, 7, and 11. Other recommendations appeared to be of the "cookbook" variety and were repeated in many of the test recommendations for a number of students.

3. Some of the educational diagnostic testing reports made reference to the further recommendations that would follow after a complete evaluation was made at the local community mental health center.

Examples of cases which had test reports like this are Cases 5, 6, 7, and 10. As many of the LD pupils' parents did not take them into the center for further evaluation, there were no additional recommendations.

4. Some of the LD recommendations were over two years old when the pupil entered the Learning Center, as in Cases 1, 2, and 6. Other recommendations came from tests given ten months prior to entry into the Learning Center. As there was no follow-up evaluation, it would appear that the recommendations from the two-year-old reports would not be educationally relevant for the current LD program, according to Bradfield (1965) and to Van Osdol and Shane (1972).

5. The learning disability diagnosis in some cases was not concise or specifically stated for remedial instructional use by the LD teachers. In several cases the examiner who initiated testing thought that an expressive language disability might exist. However, as the parents did not take the pupil into the community mental health center for a speech evaluation, there was no follow-up recommendations nor a determination of a possible language disability for Cases 2 and 7.

6. The LD teachers' aide, who is shared by both LD teachers, was shown to be an unsuspected influence in the learning process, as she was observed to be actively involved in the interaction and formative assessment processes. However, as Table I indicates, the aide interacted more frequently with some of the students than with others.

7. The LD pupil was given daily assignments on a weekly worksheet at the beginning of the week. The work was almost in a lock-step process which had the LD teacher interacting with the pupil about one-third of the time. The rest of the time the pupil was usually working on his own tasks, being monitored by the LD teacher to give feedback and new

materials. This is similar to a packaged instructional approach. The Frostig worksheets, pages torn out of a programmed reader, and weekly spelling lists are some examples. The individualized approach to learning was not maximized for these pupils.

8. Much of the learning process in the LD self-contained classroom involved a paper and pencil approach in such areas as phonics or mathematics. As many of the LD students had visual perception problems and had not achieved success with previous paper and pencil tasks, it would appear that another remedial approach would have better served the instructional needs of the pupils. Almost twice as many activities were observed for workbook-type of learning as for machine-oriented learning, such as utilization of the Language Master, tape recorders, filmstrip projectors, overhead projectors, and typewriters. There was, however, some use of concrete materials such as magnetic letters, clay, and sandpaper letters utilized for the teaching of spelling.

9. Both LD teachers were new, and the classroom management of the LD pupils appeared to present problems in control. There was little student enthusiasm evidenced from the formative assessment observations, especially for those pupils who had Teacher X Teacher X was not rehired for the next school year.

10. In the formative assessments for most cases there were twice as many LD teacher feedback behaviors observed than there were of activities modifying the instructions. This may have developed from the LD teachers' belief that the material such as that used in the programmed reader was adequate for sequential assignments. It seemed as if a packaged instructional approach was followed in a lock-step method. The frequency count of formative assessments for modifying instructions

did not appear to indicate much variation of the teaching approach, and this variation is needed by LD pupils (Van Osdol and Shane, 1972).

It appeared at times that the LD teachers and aide were busy checking work completed, and the teachers failed to vary instructional methods or to enlarge upon the directions given for an assignment to be completed. There was almost a traditional classroom atmosphere, only the students had more freedom of mobility.

11. The LD students' incidence of paying attention to the teacher (attending) in the formative assessments and their perservering in the task (responding) were usually high. The teachers' aide in a formative assessment usually was involved in a feedback assessment. The aide had more formative assessments in Teacher X's room than in Teacher Y's. It could be that the LD pupils felt more comfortable in approaching the aide. In two specific cases, 1 and 2, Teacher X had had a disagreement with the mothers of the pupils; and possibly the home influence caused these two pupils to dislike Teacher X. Teacher X responded by ignoring them much of the time. Bloom, Hastings and Madaus (1971) said that the main purpose of formative observations was to determine the "degree of mastery of a given learning task." The LD teachers did appear to have more feedback-type assessment behaviors than there were modifying instructions. However, the degree of mastery did not seem to be specifically and formally measured. The feedback seemed to be more of a correctional nature.

As mentioned earlier, there was a low incidence of observed recommendations being followed. This would appear to be related to the quality and small quantity of the recommendations given to the LD teachers. There appeared to be some vague learning disability diagnoses

and general cookbook recommendations. Bloom, Hastings, and Madaus (1971) said, "The diagnosis should be accompanied by a very specific prescription if the students are to do anything about it" (p. 54).

Descriptive Research Question 2

An analysis by inspection of the observations made in this descriptive study invites the following comments under Descriptive Research Question 2: What are the indicators used to evaluate students who have been in LD self-contained classrooms for the current year, what are the decisions made from these indicators; and how are these decisions made?

1. It was not specifically determined which indicators were used to make decisions for summative assessments. It appeared that the LD teachers made most of the requests for summative assessments and that their suggestions regarding the student's readiness to return was perhaps the most important element in the decision-making process. The MAT test results were not used in any fashion, and many of the home schools had not even given their LD students the MAT tests.

2. The LD teacher's opinion appeared to be considered over any test results yielding a grade level achievement. The home school teacher and principal's willingness to receive the student on a full-time basis, the parents' willingness to have him moved to a full-time, regular program, and the length of time that the student had been in the Learning Center were all factors that entered into the decision.

3. There was no systematic method to initiate or conduct a summative assessment process for an LD pupil. There was no set time for such assessments, such as at the end of the first year or at the

end of the semester. There were no records kept to be used for this purpose, and formal testing was done only occasionally by the LD teachers.

4. The LD pupils' requests to return to the regular classroom or to stay in the Learning Center were considered to be very important in the final decision, especially with the LD teachers and the home school teacher and principal. In both cases where a request was made, the request was granted.

5. One LD teacher made use of her formative assessments in reaching a decision for a summative assessment for two of her Group I pupils. Formative assessments may have been utilized by the other LD teacher, but this is not known to be an indicator for her decisions in summative assessments.

This lack of any systematic approach to the summative assessment process may be due to the community's heavy reliance upon the judgment and knowledge of learning disabilities of the educational consultants from the local community mental health center. Because of the need for identification of learning disabilities students, the emphasis at the center has been upon the identification of learning disabilities students and subsequent placement on a waiting list; there was little follow-up of students already placed in the Learning Center, unless the student was also involved in the community mental health center for other treatment.

Descriptive Research Question 3

The comments in this section of the discussion are from the observations made in this descriptive study. An analysis by inspection

invites the following comments grouped under Descriptive Research Question 3: What are the self-concept attributes of students who have had summative decisions made about them?

1. The self-concept of LD students who have had summative assessment decisions made about them appear to be average. Seven of the eight LD students had average or high average self-concept scores. One of the eight had a significantly high self-concept score. The Piers-Harris scores seem to indicate extremes (high or low only) in self-concept attributes of the LD pupils.

2. The LD student (S/A Case A) with the significantly high self-concept as measured by the Piers-Harris did not return to the regular classroom, although the principal and LD teacher seemed to be influenced by the pupil's self-concept. The special education coordinator decided that an assessment at a later date was essential.

3. There is some question of the validity of the Piers-Harris test to measure adequately the self-concept attributes that may be an influence in the summative assessment decision. For example, Case 4 desired a return to the regular classroom and exhibited a high degree of confidence in his academic ability. Case 4 did not have a significantly high score on the Piers-Harris nor did he have a significantly high score on the Piers-Harris Factor 2 (raw score cluster) which examined his school status and intellectual ability (see Table IV).

In order to complete the remainder of the discussion in this chapter, the following comments are made to give an impartial but fair picture of the LD teachers' interactions and teaching processes.

Dunsing (1973) said that "the LD teachers need to know something of:

> (a) the nature and extent of the child's learning problems,
> (b) the priorities to be established in programming for his educational needs,
> (c) the rationale and strategy behind her procedures
> (d) the educational methods, techniques, and materials available,
> (e) and the ongoing clinical evaluation methods which allow for a systematic and continuing appraisal of the child's progress and a "best fit" to his educational needs" (p. 453).

There was no continuing appraisal of the child's progress, either from the community mental health center, from the school system, or from the LD teachers themselves. This study seems to indicate that the LD teachers did not have sufficient background and testing information about their pupils nor did they appear to have adequate support from professionals. Support from professionals failed to provide continuing evaluations for programmed educational goals for the individual LD pupils.

It also appeared that the decisions made by the LD teachers regarding an LD pupil's progress or his educational needs were made hesitantly and reluctantly. This may be due to the LD teachers' inexperience or to the lack of adequate backup support from professionals in related fields. It may be that educators are expecting too much of LD teachers in self-contained classrooms in the areas of assessment, LD programming, and parent communication, as Dunsing (1973) suggests.

It appears that the LD teachers in this study did not have adequate information needed to provide a comprehensive, educational program for their pupils. It should be kept in mind by the reader that the following comments and discussion may be explained in part by this lack of adequate information, as listed by Dunsing (1973) at the top of this page.

In further development of this portion of Chapter V, the principles of remediation for LD teachers to follow, given by Johnson and Myklebust (1967), provide the framework for discussion. These principles include:

1. Individualizing the problem.
2. Teaching to the level of involvement
3. Teaching to the type of involvement
4. Teaching according to readiness
5. Input precedes output.
6. Teaching to the tolerance levels.
7. Multisensory stimulation.
8. Teaching to the deficits.
9. Teaching to the integrities.
10. Training in perception.
11. Controlling important variables.
12. Using both verbal and non-verbal means of communication.
13. Consideration of the psychoneurological implications.

The LD teachers appeared to be inconsistent in their approach to the LD pupils' learning process when viewed according to Johnson and Myklebust's (1967) suggestions. While it was not the main intent of this paper to examine remediation principles used by LD teachers, a brief discussion of each of the above principles is given below.

Principle I for remediation given by Johnson and Myklebust (1967) is individualizing the problem. As both teachers used a packaged instructional approach, this was not adhered to. The student worked individually, but the learning tasks did not appear to be uniquely designed for an individual's learning style. The programmed material which followed sequential steps did not allow variability in the learning approach. There was some variability in spelling assignments and in suggested means for spelling words, but this too became almost an automatic assignment in the weekly assignment sheet.

Principles 2 and 3, teaching to the level and to the type of involvement, concern interpreting the disability in terms of experience levels, such as in perception, imagery, symbolization, or conception.

These two also involve a determination of whether the deficit entails intra- or inter-sensory learning. Integration of experiences is also important. Johnson and Myklebust stress that one should teach to the level-- not over-simplify or over-generalize--and then structure the learning tasks accordingly. The LD teachers did not appear to utilize fully these two principles in the observations made for this study. Varied methods such as tactile and auditory reinforcement of visual cues were made, but this did not appear to be based upon any system or on any planned approach. Principles 2 and 3 were followed to a degree with Cases 3 and 5, while with Cases 2 and 7 they were not followed. It appears that the test reports and recommendations did not contain sufficient information for the teachers to have the information necessary to effectively implement Principles 2 and 3.

Principle 4, teaching according to readiness, stresses the importance of multiple readiness levels. This seemed to be followed satisfactorily for all cases except Case 2. The LD teacher apparently did not accept this pupil's attitude, and the pupil's instruction was mostly turned over to the teacher's aide. He was given Frostig work-sheets which kept him occupied the last few months. No attempt to ascertain or to teach to readiness was observed for Case 2.

As could be determined from observations and the rated disabilities in the testing reports, Principle 5, input precedes output, was followed by the LD teachers. Work on receptive disorders preceded the work on expressive disorders in Cases 8 and 9. It seemed almost an integrative approach rather than separated.

Principle 6, teaching to the tolerance levels, was apparently achieved by both LD teachers. Only in Case 11 did there appear to be

a tolerance problem. The LD teacher thought the pupil was lazy and spoiled, as he would do only a little work with little success. Reduction of the amount of his assignments with a reward of manipulating the machines in the Learning Center might have proved useful.

Principle 7, multisensory stimulation, was utilized in an inconsistent manner. The Language Master was used for auditory, visual, and motor functions. It did not appear that multisensory stimulation techniques were employed in any planned remedial program. Rather the LD teachers appeared to use the old teaching recipe of "a little of this and a little of that." Case 11 was allowed to use any of the machines, almost in lieu of his planned lessons, if he was quiet.

Principles 8, 9, and 10, which are teaching to the deficits, teaching to the integrities, and training in perception, were not observed sufficiently by the writer to allow for comment; but it did appear to the writer that sufficient perception training was taking place during the observation periods.

Principle 11, controlling important variables, was perhaps the most abused principle. Both LD teachers had this problem initially; but Teacher X apparently never could completely control variables, such as the LD students' out-of-seat behavior, structure of the classroom discipline, and talking-out behavior. The writer realizes that this is a personal point of view. Teacher X felt that most of the children should be on medication. Because the classroom management problem remained unresolved and because she could not accept constructive criticism, Teacher X was not rehired for the next year. There did not seem to be much attention given to the <u>rate</u> of learning tasks in the lock-step packaged instruction, especially by Teacher X.

Principle 12, both verbal and non-verbal means of teaching, was observed being followed by both LD teachers. The best examples are Cases 4 and 8 by Teacher Y and Case 5 by Teacher X. It appeared that the non-verbal means were stressed more than verbal means of learning. Paper and pencil tests were observed taking place twice as much as verbal learning tasks involving oral reading, oral responding to questions and utilization of machines such as the Language Master and tape recorder. In general the degree of flexibility was low.

The thirteenth and final principle, consideration of the psycho-neurological implications, was handled differently by each LD teacher. Teacher Y did not appear to fully recognize the neurological implications, and Teacher X seemed to unrealistically look for neurological reasons for a child's behavior. These comments by the writer are based on informal data from conversations and observations of the teachers' behaviors. With Teacher X the conversations and observations were of only three cases in Group I, Cases 1, 3, and 5. She felt medication was needed by all three. She did discover one pupil who needed glasses, Case 2, and was instrumental in obtaining an eye examination for him. She gave the writer the impression that she would be happiest in a one-to-one situation functioning as an LD therapist in a clinical setting.

Recommendations

This section of Chapter V is divided into two parts: LD program recommendations and recommendations for further research. The program recommendations evolve from the study and are organized about three areas: community recommendations, school district recommendations, and LD classroom recommendations, which include the LD teacher and the LD

pupil. This organization was used in order to facilitate focusing upon the various parts of the total learning disabilities program. The recommendations for research also evolve from the study. However, the reader may realize other research needs from the LD program recommendations given below.

LD Program Recommendations

Community Recommendations

1. Any community LD program should have a strong parent organization which is actively involved in assisting program development. This study indicated that there were communication problems between the parents and one LD teacher. Some parents indicated that more feedback regarding their child's progress in the Learning Center was needed, and some parents indicated that they would like to have assistance with a home-based behavior modification plan with their child. With a parent organization, direction in fulfilling parent needs could be given in type of feedback desired, support activities needed, and the nature of parent involvement desired. The writer learned from the parent conferences on the eleven case studies that the mothers were interested in helping the LD program by buying or making instructional materials or by tutoring other LD pupils. A parent organization could centralize such efforts and provide a reservoir of volunteer assistance for the LD teachers.

2. The study indicated that the LD teachers could use additional help in checking material completed by the LD pupils. As a number of school districts experience budget problems, volunteer aides who assist

the LD teachers in the self-contained classroom or the resource room could be used. If the community has a strong parent organization, the organization could provide these volunteers and facilitate the inservice training that these volunteer aides would need. This type of parent involvement could aid the communication between the parents and LD teacher by releasing the LD teacher for additional conference time with parents.

Other benefits gained from having volunteer aides can be seen. For example, the aides could conduct the games and peer-acceptance activities used for developing the LD pupil's self-concepts. The aides could also help in some of the feedback procedures by administering spelling tests, checking work completed, and maintaining the curriculum records for the pupils. This releases the LD teacher to prepare instructional activities

School District Recommendations

1. The study indicated that a school district needs a strong and ongoing inservice program about learning disabilities for all teachers, kindergarten through the twelfth grade. The writer feels that this study indicated that the district's teachers were misinformed or not informed about the LD program. Hopefully, the communication process between the LD teacher and the home school teacher would be improved and thus facilitate the movement of the LD pupils into and out of LD programs such as the self-contained classroom. The inservice training could be conducted on school time as part of an orientation when coming to work for the school system or on a volunteer basis for which local credit applicable towards additional salary would be given. The

inservice training about learning disabilities would center about three areas: early identification and recognition of learning disabled students, assistance in reading and interpreting diagnostic testing reports and subsequent LD recommendations, and explaining the district's program objectives regarding LD pupils and the involvement of teachers in the planning and implementation of needed improvements.

2. A school district's LD program should contain three types of LD remedial methods: the self-contained classroom, the itinerant teacher, and the resource room. This study indicated that there was a need for all three types of programs. The study examined only the self-contained classroom for LD pupils, as this school district had only the one method. The LD pupils' needs would be better met if a variety of methods for programming were available. The three programs are briefly described, and a brief explanation of utilization of each is given below.

The first type is the self-contained classroom for both primary and intermediate elementary grades for those LD students who cannot function within the regular classroom. The students could remain in this self-contained classroom for half-day or for the entire school day. A second type needed is the itinerant teacher who visits an elementary school to work with an LD pupil individually on a bi-weekly or daily basis for short periods of time. This itinerant teacher also aids the LD pupil's regular classroom teacher with understanding this pupil's learning style. This is best for an LD student who has a single deficit such as in mathematics. A third type needed is the resource room. Each elementary school and junior high school should have a resource room where a pupil could attend for the amount of time needed to assist him

in a prescriptive teaching technique. In this laboratory-like setting, the LD pupil might remain for one hour, two hours, or three; and a schedule of days he is to attend is given to the pupil and his teacher(s). There can be up to ten pupils in this resource room at a time, but three to six is the best size for a teacher to handle. At the junior high level a certified LD teacher is needed, and a certified LD teacher for the elementary resource room would be ideal. However, this would be costly to small and medium-sized school districts, especially if the resource room concept is in addition to a self-contained LD classroom concept.

A possible method to provide a resource room without the additional expense of hiring a certified LD teacher is given here. The school district should know the elementary teachers who the administration feels are interested in working in such a resource room. The school district could pay these teachers extra money to maintain the resource room, and these teachers could teach in the resource room for half-days and the other half day in the regular classroom. The teachers so chosen for this type of assignment would have evidenced the necessary energy levels, willingness to work with LD students, agreed to attend the necessary workshops and inservice training sessions, have secured a master's degree or are working on this advanced degree, and have references from former principals indicating high personal qualities and good relationships with parents and other teachers, and, most important of all, evidenced enthusiasm for learning new instructional techniques, teaching pupils, and for receiving guidance and assistance from other professionals. Van Osdol and Shane (1972) gave many of the above suggestions as preferred characteristics of LD teachers. The

writer believes that the teacher is the most important variable; and given assistance and some training in LD instructional techniques, the above chosen teachers could assist many of the LD pupils who do not have severe learning disabilities.

3. The school district's learning disabilities program should be based upon an early identification of potential LD pupils. The study indicated that most of the pupils identified for entry into the Learning Center were older students. If the itinerant teacher and the resource room methods were effectively utilized, many of the LD pupils would not have to be placed in the self-contained LD classroom. A rough screening procedure for kindergarten pupils would be the initial screening procedure and another screening process could take place during the second grade. Specific referrals for diagnostic testing should come whenever needed. The screening process would be in addition to the regular testing process the school district possesses. The parent organization could provide some assistance for the rough screening process, and some manpower aid from local university training programs for school psychologists and psychometrists would help in reducing the cost of this screening process.

4. The study indicated that the LD teachers did not receive adequate support from the other professionals in the education program of the district. Remedial reading teachers and speech therapists should be utilized to provide backup support, suggest specific remedial methods, and assist with inservice programs. Coordination of backup activities for a returned LD pupil to the regular classroom could be initiated through these professionals in addition to the LD itinerant teacher.

A sharing of teaching techniques, teaching materials, and educational knowledge should emerge from coordinating the efforts of all the special services personnel.

5. A centralized media center for equipment and instructional material would appear to be essential for proper utilization and budget operation. During the study the writer noticed that some specialized equipment was not in operation for several weeks or months at a time. To reduce costs and to utilize the instructional aids, materials, and specialized equipment efficiently, a centralized media center is best for small and medium-sized school districts. In larger districts, the distance to travel would reduce effective utilization, and area media centers located in specific geographical areas would be best. The study showed some specialized equipment in constant use, such as the Language Master, tape recorder, overhead projector, magnetic letters and board, and filmstrip projector.

Classroom Recommendations

1. The study indicated that there needs to be definite goals established for LD teachers to accomplish with their LD pupils. The writer will use the term "prescriptive objectives", as he feels that the prescriptive recommendations which evolve from the diagnostic process should have objectives which give purpose and direction in implementing the recommendations. In other words, when a prescriptive recommendation is given to the LD teacher to implement for an LD pupil, an objective for that recommendation should be given.

The LD teachers in the study had difficulty in formulating goals for their pupils. The learning disability diagnosis, even if definite,

does not give an objective to be reached, but rather indicates the nature of the disability. The recommendations in the eleven case studies, in addition to being brief, "cookbookish", or vague, did not give any direction or list any goal to be accomplished. The writer feels that a prescriptive objective for each prescriptive recommendation individualizes both the learning and the evaluation process for a particular LD pupil.

The evaluation process is more meaningful for an individual LD pupil when his progress is measured against his prescriptive objective evolving from the recommendation. The diagnostician and the LD teacher should have sufficient inter-communication to insure agreement upon the prescriptive objective for a specific LD pupil and upon the methods to achieve that objective. The assessments by the teacher to determine if the prescriptive objectives have been met can be made at any time. If a more formal assessment is desired, the LD teacher could contact the diagnostician. The writer is not implying that the LD teacher cannot or should not give diagnostic tests or formal assessment instruments, if the teacher is qualified.

2. The accepted basis for any type of LD program is that out of educational diagnostic testing some specific recommendations will evolve that will aid the LD student with learning in whatever specialized manner appropriate to his needs and abilities. Essential to this basic premise is the diagnostician. The LD diagnosis should be explicit; or, if a tentative diagnosis is given, then it should be so indicated with a specific time given to conduct the follow-up testing or evaluation. The recommendations should be relevant, sequential, definite, and of continued value until the next evaluation. The study indicated that

the recommendations were not utilized after the first few weeks. In many instances, the recommendations were vague, of general nature or "cookbookish", or more geared to the regular classroom teacher. Many of the recommendations were based upon tests given two years previously. The key person in the initiation of the LD teaching process is the diagnostician; and his competency in assessing, diagnosing, and prescribing recommendations is the pivotal point in any instructional program designed for an LD pupil. Knowledge of the district's equipment and good intercommunication with other education professionals are needed attributes of the diagnostician.

3. The writer also feels that the diagnostician should have had some educational background in classroom teaching and specialized training in learning disability assessment and prescriptive writing for school testing reports. The study indicated that there was little visitation or other involvement, such as follow-up evaluations, conducted by the diagnostician with the LD students, once placement was made. There was not sufficient communication between the diagnostician (examiner) and the LD teacher. Parent communications were not shared between the examiner and the LD teachers, and this led to some problems and expressed dissatisfaction with the LD program in the study.

4. Some type of formal assessment should be made on a yearly basis by either the LD teacher or the diagnostician for each LD pupil. This should be in addition to the informal assessments made for instructional purposes. Whenever a pupil is considered for return to the regular classroom from a self-contained LD classroom, formal testing should be done. A set procedure for this process should be established, and fully explained to all the educational personnel. The study

indicated that all of the above is needed to facilitate proper return to the regular classroom. With other types of LD programs, such as the itinerant teacher or resource room, a similar procedure should be established for both an annual evaluation and for release from the LD program. The LD teacher can and should make assessments whenever she feels it is appropriate for a pupil. The prescriptive objective assessment can also be made at any time as mentioned previously.

Recommendations for Further Research

The following are some suggestions for further research:

1. The complexity of human adaptive behavior and the unique learning styles of individual LD pupils present extreme difficulties for most research techniques, as most depend on isolating variables and describing averages. The writer feels that new and innovative research methods of a descriptive nature are needed as well as studies to develop such methods. As Dunsing (1973) said, "Thus, LD children are resistant to traditional educational programming" (p. 455).

2. Otto (1970) suggested that local community pressures have significant influence over school practices. A study might be undertaken that would involve a description of the LDT/LDP interaction process from a number of communities which utilize different agencies for assessing LD pupils.

3. Research could be undertaken to examine the assessment methods of both the formative and summative nature in a number of communities.

4. Research is needed of a longitudinal nature examining the LDT/LDP interaction process utilizing the descriptive method.

5. Research is needed examining the life span of the diagnostic testing recommendations; i.e., examination of the length of time that the LD recommendations remain viable and useful within an LD self-contained classroom. Similar research could be done dealing with other types of LD programs that use LD recommendations, such as the LD laboratory or the itinerant teacher.

6. Research is needed to determine if there is significant follow-up of an LD pupil's achievement and progress after placement in a self-contained classroom. There could well be a study conducted to see if any type of follow-up is made on an ID pupil once an educational program is set up for him.

7. A useful study of the types and extent of information needed by the LD teachers about learning disabilities could be made.

8. A study could be made of the preparation of LD recommendations for use by educators. There appears to be three possible types of LD recommendations for use by educators: classroom teacher recommendations, LD teacher recommendations, and combined recommendations to be used by both the classroom teacher and the LD teacher.

9. It would be beneficial to examine the length of time spent by the LD teacher with an LD pupil in a self-contained classroom in instructional activities and feedback activities. The number of affective responses and whether they are positive or negative responses needs research as well.

10. The role and influence of the LD teacher's aide could be examined, as many times the aide has had no professional training yet appears to be responsible for many feedback behaviors and some instructional activities.

11. A survey or a descriptive study needs to be made to determine if LD teachers in a self-contained classroom make use of preprogrammed, packaged instructional materials and, if so, to what extent and with what type of learning disabilities.

12. Finally, some research needs to be made of the training or educational background of the LD teacher aides. If university programs or workshops are in existence, some description of the objectives and subject matter is needed.

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APPENDIX A

DEFINITIONS OF LEARNING DISABILITIES

DEFINITIONS OF LEARNING DISABILITIES

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

(Kirk, 1962, p. 263)

"The child with a learning disability is characterized by an educationally significant discrepancy between his estimated potential for learning and his day to day level of functioning which is related to basic disorders in the learning process that may or may not be accompanied by demonstrable central nervous system dysfunctioning, and which is not secondary to generalized mental retardation, severe emotional disturbance, extreme environmental or educational deprivation, blindness, or deafness."

(United States Office of Education, 1964)

"The term 'minimal brain dysfunction syndrome' refers to children of near average, average, or above average general intelligence with certain learning or behavioral disabilities ranging from mild to severe, which are associated with deviations of function of the central nervous system. These deviations may manifest themselves by various combinations of impairment in perception, conceptualization, language, memory, and control of attention, impulse, or motor function.

"Similar symptoms may or may not complicate the problems of children with cerebral palsy, epilepsy, mental retardation, blindness, or deafness."

(National Institutes of Health, 1966)

"A child with learning disabilities is one with adequate mental ability, sensory processes, and emotional stability who has a limited number of specific deficits in perceptual, integrative, or expressive processes which severely impair learning efficiency. This includes children who have central nervous system dysfunction which is expressed primarily in impaired learning efficiency."

(Association for Children with Learning Disabilities, 1967)

"A learning disability refers to one or more significant deficits in essential learning processes requiring special educational techniques for its remediation.

"Children with learning disability generally demonstrate a discrepancy between expected and actual achievement in one or more areas, such as spoken, reading, or written language, mathematics, and spatial orientation.

"The learning disability referred to is not primarily the result of sensory, motor, intellectual, or emotional handicap, or lack of opportunity to learn.

"Deficits are to be defined in terms of accepted diagnostic procedures in education and psychology.

"Essential learning processes are those currently referred to in behavioral science as perception, integration, and expression, either verbal or nonverbal.

"Special education techniques for remediation require educational planning based on the diagnostic procedures and findings."

(Institute for Advanced Study, Northwestern University, 1967)

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

(National Advisory Committee on Handicapped Children, 1968)

"Learning Disability refers to one or more significant deficits in essential learning processes requiring special education techniques for remediation.

Children with learning disability generally demonstrate a discrepancy between expected and actual achievement in one or more areas, such as spoken, read, or written language, mathematics, and spatial orientation.

The learning disability referred to is not primarily the result of sensory, motor, intellectual, or emotional handicap, or lack of opportunity to learn."

(Special Study Institute, University of Arizone, 1969)

APPENDIX B

TEST PROFILE SHEET

Student_____ Age_____ Date_____ Grade_____

WISC PROFILE OF LEARNING DISABILITY

	Picture Completion	_____	
SPATIAL	Block Design	_____	Mean _____
	Object Assembly	_____	
	Comprehension	_____	
CONCEPTUAL	Similarities	_____	Mean _____
	Vocabulary	_____	
	Coding	_____	
SEQUENCING	Digit Span	_____	Mean _____
	Picture Arrangement	_____	
PERCEPTUAL ORGANIZATION	Block Design	_____	Mean _____
	Object Assembly	_____	
	Information	_____	
VERBAL COMPREHENSION	Comprehension	_____	Mean _____
	Similarities	_____	
	Vocabulary	_____	
FREEDOM FROM DISTRACTIBILITY	Arithmetic	_____	Mean _____
	Digit Span	_____	

Full Scale IQ___ Verbal IQ___ Performance IQ___ MEAN SCALED SCORE_____

FROSTIG DEVELOPMENTAL TEST OF VISUAL PERCEPTION

(1) Eye-Motor Coordination _____ (4) Position in Space _____

(2) Figure Ground _____ (5) Spatial Relations _____

(3) Form Constancy _____ TOTAL - VISUAL MOTOR AGE _____

BENDER-GESTALT

Neurological Indicators____ Emotional Indicators____ Koppitz V-M Age____

DRAW-A-PERSON TEST

Level of Functioning_____

OTHER TEST INFORMATION

APPENDIX C

OBSERVATION SHEET - PHASE I

CASE _____ DATE _____ TEACHER _____

DIAGNOSED LEARNING DISABILITY(IES) _____

_____

MAJOR RECOMMENDATIONS _____

_____

_____

_____

TIME PERIOD	ACTIVITY	INTERACTION	CHANGE
_____ 1			
_____ 2			
_____ 3			
_____ 4			
_____ 5			

APPENDIX D

SUMMATIVE ASSESSMENT CONFERENCE SHEET

Pupil_____Age_____Date of Assessment_____

School_____Grade(use of 10th's)_____b.d._____

Homeschool Teacher_____LD Teacher_____A.M.___P.M.___

Date Entry into LC_____Date of Testing_____Examiner_____

Reason for Assessment_____

	INITIATED CONFERENCE	PRESENT or/Input	RETURN Agree/Disagree		REASON
Parent	☐	☐	☐	☐	_____
LD Teacher	☐	☐	☐	☐	_____
Bi-State Consultant	☐	☐	☐	☐	_____
Home School Teacher	☐	☐	☐	☐	_____
Principal	☐	☐	☐	☐	_____
Elementary Supervisor	☐	☐	☐	☐	_____
Spec. Ed. Coordinator	☐	☐	☐	☐	_____
Other_____	☐	☐	☐	☐	_____

	ENTERING Assessment	CURRENT Assessment
Reading	_____	_____
Spelling	_____	_____
Mathematics	_____	_____
_____	_____	_____

METROPOLITAN TEST RESULTS		Total Reading	Total Math	Total Spelling
Date of MAT: _____	Scores:	_____	_____	_____
Previous MAT: _____	Scores:	_____	_____	_____

Summary of Conference: _____

_____

_____

_____When/Until/Re-Evaluate_____

WHO/INFORM: Parents_____School_____Pupil_____

APPENDIX E

WEEKLY LESSON PLAN

WEEKLY LESSON PLAN

Name_____ Date_____

	Monday	Tuesday	Wednesday	Thursday	Friday
Reading Silently					
Reading Questions					
Reading Orally					
Math					
Spelling: List ways you study clay paper board type sand magnetic letters					
Overhead					
Phonics					
Language Master					
Skill Series					
Listening Center					
Motor Activity					

APPENDIX F

COMPLETED SUMMATIVE ASSESSMENT CONFERENCE SHEETS

Pupil Case 4 Age 11-5 Date of Assessment 4-12-74

School R Grade (use of 10th's) 4.8 b.d. 11-8-62

Homeschool Teacher M LD Teacher Y A.M. X P.M.

Date Entry into LC 11-20-73 Date of Testing 7-17-73 Examiner REW

Reason for Assessment Pupil felt he could do regular classroom work.

INITIATED CONFERENCE		PRESENT or/Input	RETURN Agree/Disagree		REASON
Parent	/ /	/X/	/ /	/X/	Could benefit from staying rest of year.
LD Teacher	/ /	/X/	/ /	/X/	" " "
Bi-State Consultant	/ /	/X/	/ /	/X/	" " "
Home School Teacher	/ /	/X/	/ /	/X/	" " "
Principal	/ /	/X/	/ /	/X/	" " "
Elementary Supervisor	/ /	/ /	/ /	/ /	
Spec. Ed. Coordinator	/ /	/X/	/ /	/X/	" " "
Other Pupil	/X/	/ /	/ /	/ /	

	ENTERING Assessment	CURRENT Assessment
Reading	WRAT 3.0 grade level	May '74 Durrell Oral=3.5/Silent=3.8 gr.
Spelling	" 2.7 " "	" " WRAT 3.9 grade level
Math	" 2.6 " "	" " " 4.7 " "

METROPOLITAN TEST RESULTS		Total Reading	Total Math	Total Spelling
Date of MAT:	9-71	Scores: 11 PR	18 PR	14 PR
Previous MAT:	4-73	Scores: 10 PR	10 PR	16 PR

Summary of Conference: Remain in L.C. rest of 1973-74 term. To be tutored in summer of 1974 and remain in regular classes full time for 1974-75. Enter 5th grade.

When/[illegible] Fall, 1974

WHO/INFORM: Parent Coor. Sp. Ed. School Coor. Sp. Ed. Pupil Parents

Pupil Case 11 Age 12-4 Date of Assessment 5-8-74

School W Grade (use of 10th) 6.9 b.d. 1-4-62

Homeschool Teacher L LD Teacher Y A.M. P.M. X

Date Entry into LC 11-15-73 Date of Testing 11-1-73 Examiner L

Reason for Assessment Decision to promote to 7th or retain in L.C. & 6th.

INITIATED CONFERENCE		PRESENT or/Input	RETURN Agree/Disagree		REASON
Parent	/ /	/X/	/ /	/X/	Could benefit more from L.C.
LD Teacher	/ /	/X/	/ /	/X/	" " "
Bi-State Consultant	/ /	/ /	/ /	/ /	
Home School Teacher	/ /	/X/	/ /	/X/	" " "
Prinicpal	/ /	/X/	/ /	/X/	" " "
Elementary Supervisor	/ /	/ /	/ /	/ /	
Spec. Ed. Coordinator	/ /	/X/	/ /	/X/	" " "
Other Pupil	/X/	/X/	/ /	/X/	Enjoyed class in L.C.

	ENTERING Assessment	CURRENT Assessment
Reading	*	May '74 Durrell 3.5 Oral-3.8 Silent Gr.
Spelling	*	" " " 4.8 grade level
Math	*	" " " 4.5 grade level

METROPOLITAN TEST RESULTS		Total Reading	Total Math	Total Spelling
Date of MAT: 4-73	Scores:	6	4	6
Previous MAT: 9-71	Scores:	8	6	12

Summary of Conference: Repeat 6th grade. Remain on medication and remain in L.C. for 1974-75. This meets with the parents and D.'s approval.

When/[redacted] 1974-75 term.

WHO/INFORM: Parents Principal School Coordinator Pupil LD Teacher

*Scores not available.

Pupil S/A Case A Age 10-0 Date of Assessment 5-16-74

School T Grade (use of 10th) 4.9 b.d. 5-14-64

Homeschool Teacher P LD Teacher X A.M. P.M. X

Date Entry into LC 2-4-74 Date of Testing 12-12-73 Examiner L

Reason for Assessment Request of homeschool principal.

INITIATED CONFERENCE		PRESENT or/Input	RETURN Agree/Disagree		REASON
Parent	/ /	/ /	/ /	/ /	Felt that pupil had not benefited from L.C.
LD Teacher	/ /	/X/	/X/	/ /	Teacher unsure why she was chosen to enter L.C.
Bi-State Consultant	/ /	/ /	/ /	/ /	
Home School Teacher	/ /	/X/	/X/	/ /	
Principal - Homeschool	/X/	/X/	/X/	/ /	
Elementary Supervisor	/ /	/ /	/ /	/ /	
Spec. Ed. Coordinator	/ /	/X/	/ /	/X/	
Other	/ /	/ /	/ /	/ /	

	ENTERING Assessment	CURRENT Assessment
Reading		May '74 Slossom 3.3 grade level
Spelling		" " " 4.7 " "
Math		*

METROPOLITAN TEST RESULTS		Total Reading	Total Math	Total Spelling
Date of MAT:	4-74	10 PR	34 PR	24 PR
Previous MAT:	*Preceding year attended school in another community.			

Summary of Conference: Home school principal and teacher felt that pupil had not benefited from placement in L.C. and had in fact regressed academically. Coordinator felt that new teacher in fall '74 could aid learning.

~~WHEN/XXXXX~~/Re-Evaluate Fall '74 at end of nine weeks

WHO/INFORM: Parents Principal School Coordinator Pupil Principal

*not available

Pupil S/A Case B Age 11-2 Date of Assessment 5-16-74

School M Grade (use of 10th) 5.9 b.d. 3-10-63

Homeschool Teacher W LD Teacher X A.M. X P.M.

Date Entry into LC 1-15-73 Date of Teating 9-6-72 Examiner REW

Reason for Assessment Summative assessment. Possible return to regular classroom.

INITIATED CONFERENCE		PRESENT or/Input	RETURN Agree/Disagree		REASON
Parent	[ ]	[ ]	[ ]	[ ]	
LD Teacher	[X]	[X]	[X]	[ ]	Continued placement would not significantly benefit pupil.
Bi-State Consultant	[ ]	[ ]	[ ]	[ ]	
Home School Teacher	[ ]	[X]	[X]	[ ]	" " "
Principal	[ ]	[X]	[X]	[ ]	" " "
Elementary Supervisor	[ ]	[ ]	[ ]	[ ]	
Spec. Ed. Coordinator	[ ]	[X]	[X]	[ ]	" " "
Other	[ ]	[ ]	[ ]	[ ]	

	ENTERING Assessment	CURRENT Assessment
Reading	*	May '74 Slossom 5.0 grade level
Spelling	*	" " " 4.9 " "
Math	*	" " " 4.0 " "

METROPOLITAN TEST RESULTS		Total Reading	Total Math	Total Spelling
Date of MAT:	*			
Previous MAT:	*			

Summary of Conference: Promote to 6th. Should not return to L.C. but needs extra help and slower rate of instruction. Visiting teacher can help with special tutoring.

When/[illegible] Fall '74

WHO?INFORM: Parent Homeschool Principal School Coordinator Pupil Homeschool Principal

*test results not available.

Pupil S/A Case C Age 9-11 Date of Assessment 5-16-74

School M Grade (use of 10th) 4.9 b.d. 6-8-64

Homeschool Teacher G LD Teacher X A.M. P.M. X

Date Entry into LC Nov., 1972 Date of Testing 1-15-71 Examiner REW

Reason for Assessment Summative assessment for possible return to regular classroom

	INITIATED CONFERENCE	PRESENT or/Input	RETURN Agree/Disagree		REASON
Parent	/_/	/_/	/_/	/_/	1. Continued placement would be beneficial.
LD Teacher	/_/	/X/	/_/	/X/	Will agree w/majority.
Bi-State Consultant	/X/	/X/	/X/	/_/	
Home School Teacher	/_/	/_/	/_/	/_/	
Principal	/_/	/X/	/_/	/X/	IBID. w/# 1
Elementary Supervisor	/_/	/_/	/_/	/_/	
Spec. Ed. Coordinator	/_/	/X/	/_/	/X/	IBID. w/# 1
Other_____	/_/	/_/	/_/	/_/	

	ENTERING Assessment	CURRENT Assessment
Reading	*	May '74 Slossom 5.8 grade level
Spelling	*	" " 4.5 " "
Math	*	" " 3.5 " "

NOTE: Unilateral hearing loss-left ear

METROPOLITAN TEST RESULTS		Total Reading	Total Math	Total Spelling
Date of MAT:	*			
Previous MAT:	*			

Summary of Conference: Promote to the 5th grade in 1974-75, and return ½ day to the Learning Center. Platoon in 5th, and re-evaluate at the end of 1st nine weeks.

_____ ~~WHEN/WHERE~~/Re-Evaluate End of 1st nine weeks, 1974-75

WHO/INFORM: Parents Principal-Home school School Coordinator Pupil LD Teacher

*Test results are not available.

Pupil S/A Case D Age 10-8 Date of Assessment 5-10-74

School M Grade (use of 10th) 5.9 b.d. 9-2-63

Homeschool Teacher M LD Teacher Y A.M. X P.M.

Date Entry into LC 9-71 Date of Testing 11-16-70 Examiner REW

Reason for Assessment Summative assessment at end of 3 years.

	INITIATED CONFERENCE	PRESENT or/Input	RETURN Agree/Disagree		RETURN
Parent	/_/	/X/	/_/	/_/	Cannot function in a regular classroom.
LD Teacher	/X/	/X/	/_/	/_/	
Bi-State Consultant	/_/	/_/	/_/	/_/	
Home School Teacher	/_/	/_/	/_/	/_/	
Principal	/_/	/_/	/_/	/_/	
Elementary Supervisor	/_/	/_/	/_/	/_/	
Spec. Ed. Coordinator	/_/	/X/	/_/	/_/	
Other	/_/	/_/	/_/	/_/	

	ENTERING Assessment	CURRENT Assessment
Reading	9-3-71 Gray Oral=1.0	May '74 Durrell Oral=1.8 Silent=2.0 gr. level
Spelling	*	" " " 1.8
Math	" 1.4	" " " 3.0

METROPOLITAN TEST RESULTS		Total Reading	Total Math	Total Spelling
Date of MAT:	*			
Previous MAT:	*			

Summary of Conference: Student needs to be in a residential LD school where there is a controlled environment. Mother agreed to this and is currently seeking entry for B. this fall. If not entered into Texas school, will remain in L.C.

~~XXXXXXXXX~~/Re-Evaluate Pending

WHO/INFORM: Parents LD Teacher School Coordinator Pupil Parents

*not available

Pupil S/A Case E Age 11-8 Date of Assessment 5-10-74

School J Grade (use of 10th's) 5.8 b.d. 8-29-62

Homeschool Teacher S LD Teacher Y A.M. X P.M.

Date Entry into LC 9-71 Date of Testing 3-9-70 Examiner REW

Reason for Assessment Assessment at end of 3 years in L.C.

INITIATED CONFERENCE		PRESENT or/Input	RETURN Agree/Disagree		REASON
Parent	/ /	/ /	/ /	/ /	Will strengthen those skills possibly weakened during the summer.
LD Teacher	/X/	/ /	/ /	/X/	
Bi-State Consultant	/ /	/ /	/ /	/X/	
Home School Teacher	/ /	/ /	/ /	/X/	
Principal	/ /	/ /	/ /	/ /	
Elementary Supervisor	/ /	/ /	/ /	/ /	
Spec. Ed. Coordinator	/ /	/ /	/ /	/X/	
Other	/ /	/ /	/ /	/ /	

	ENTERING Assessment	CURRENT Assessment
Reading	Gray Oral 1.0	May '74 Durrell Silent=3.0 Oral=3.0 gr. level
Spelling	WRAT 2.6 Sep. '71	4.5 grade level
Math	" 2.1 " "	3.8 " "

METROPOLITAN TEST RESULTS		Total Reading	Total Math	Total Spelling
Date of MAT:	*			
Previous MAT:	*			

Summary of Conference: Remain in L.C. first nine weeks of 1974-75. Re-evaluate. All felt there may be some loss during the summer & his self-concept would be hurt if he immediately experienced failure in 1974-75 in a regular classroom.

~~WHEN/WHERE~~/Re-Evaluate Fall '74 at end of 1st nine weeks.

WHO/INFORM: Parents Principal School Coordinator Pupil LD Teacher

*not available

Pupil S/A Case F Age 10-10 Date of Assessment 5-16-74

School L Grade (use of 10th's) 4.9 b.d. 7-25-63

Homeschool Teacher C LD Teacher X A.M. X P.M.

Date Entry into LC 9-71 Date of Testing 3-5-70 Examiner REW

Reason for Assessment Assessment after 3 years in L.C.

	INITIATED CONFERENCE	PRESENT or/Input	RETURN Agree/Disagree		REASON
Parent	/ /	/ /	/ /	/ /	Any growth gains would be outweighed by time spent. Others could benefit more in time slot.
LD Teacher	/X/	/X/	/X/	/ /	
Bi-State Consultant	/ /	/ /	/ /	/ /	
Home School Teacher	/ /	/ /	/X/	/ /	
Principal	/ /	/X/	/ /	/ /	
Elementary Supervisor	/ /	/ /	/ /	/ /	
Spec. Ed. Coordinator	/ /	/X/	/X/	/ /	
Other	/ /	/ /	/ /	/ /	

ENTERING Assessment CURRENT Assessment

Reading Gray Oral 9-71 1.0 grade level May '74 Slossom 4.8 grade level

Spelling WRAT 9-71 1.3 grade level " " " 3.9 " "

Math " " 1.4 " " *

METROPOLITAN TEST RESULTS Total Reading Total Math Total Spelling

Date of MAT: _____ Scores: _____ _____ _____

Previous MAT: _____ Scores: _____ _____ _____

Summary of Conference: Promote to 5th for 1974-75. Remain full time at home school. Slow curriculum & much encouragement is suggested. Potential improvement from placement in L.C. outweighed by number of pupils on waiting list.

When/~~XXXXXXXXXXXXXXXX~~ Fall '74

WHO/INFORM: Parents Homeschool Principal School Coordinator Pupil LD Teacher

*Test results not available.

VITA

Joe Robert Surber

Candidate for the Degree of

Doctor of Education

Thesis: A FIELD STUDY OF THE SPECIAL EDUCATION PROCESS OF LEARNING DISABLED STUDENTS

Major Field: Educational Psychology

Biographical:

Personal Data: Born in Pawhuska, Oklahoma, April 11, 1942, the son of Hugh R. and Odema H. Surber; married to JoDel Novak Surber; two children, Robert Brian Surber and Karrie Jo Surber.

Education: Graduated from Pawhuska Junior-Senior High School, Pawhuska, Oklahoma, May, 1960; received Bachelor of Arts in Education degree from Northeastern State College, Tahlequah, Oklahoma, May, 1964, with a major in English; received Master of Science degree from Oklahoma State University, May, 1969, with a major in Student Personnel and Guidance; completed requirements for the Doctor of Education degree at Oklahoma State University in July, 1974.

Professional Experience: Taught junior high language arts in Jefferson County Schools, Colorado, 1964-64; taught junior English, debate, and stagecraft in Ponca City, Oklahoma, 1965-68; junior high guidance counselor, Ponca City, Oklahoma, 1969-70; high school principal, Unity High School, Ponca City, Oklahoma, 1970-71; junior high guidance counselor, Bi-State Mental Health Foundation, Ponca City, Oklahoma, 1971-73; school psychology intern, Ponca City, Oklahoma, 1973-74.

Professional Organizations: Phi Delta Kappa, Professional Counselors Association, National Association of School Psychologists, American Personnel and Guidance Association, American School Counselors Association, National Vocational Guidance Association, Oklahoma School Psychologists Association, Oklahoma Personnel and Guidance Association, Oklahoma Psychology Association, National Education Association, Oklahoma Education Association, Ponca City Education Association.