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A CORRELATIONAL STUDY OF ORGANIZATIONAL CHARACTERISTICS AND INSTRUCTIONAL TIME IN THE MAINSTREAM RATES (ITM) FOR MILDLY HANDICAPPED STUDENTS IN ELEMENTARY AND MIDDLE SCHOOLS

Michigan State University PH.D. 1986

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A CORRELATIONAL STUDY OF ORGANIZATIONAL CHARACTERISTICS AND INSTRUCTIONAL TIME IN THE MAINSTREAM RATES (ITM) FOR MILDLY HANDICAPPED STUDENTS IN ELEMENTARY AND MIDDLE SCHOOLS

BY

Kathryn A. Moran

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ABSTRACT

A CORRELATIONAL STUDY OF ORGANIZATIONAL CHARACTERISTICS AND INSTRUCTIONAL TIME IN THE MAINSTREAM RATES (ITM) FOR MILDLY HANDICAPPED STUDENTS IN ELEMENTARY AND MIDDLE SCHOOLS.

by

KATHRYN ANNE MORAN

Understanding the interaction between the general and special education systems as it relates to integrated programming for mildly handicapped students (LD, EI, EMI) is limited. This study examines organizational characteristics that are correlated to mainstreaming rates, both high and low, for the purpose of locating predictive measures for determining integrated, effective special education programs in elementary and middle school buildings.

Using existing data, 528 Michigan school districts were assigned one of three identification rates corresponding to a high, mid, or low identification range, and one of two Instructional Time in the Mainstream ratings: High -ITM and Low-ITM. Sixty school districts were found to similarly identify the population within a mid-identification range. Thirty of these districts mainstreamed the population at a H-ITM rate while the other thirty mainstreamed at a L-ITM rate.

Four hypotheses speculating on no differences between H-ITM and L-ITM districts regarding district teacher/pupil ratios, district size, and district expenditures for both general and special education instruction were tested. Of

the four district hypotheses tested, three hypotheses were not rejected with the fourth hypothesis speculating on no difference in the size (state aid membership) of H-ITM and L-ITM districts being rejected.

From the 60 school districts identifying within a mid-identification range, 9 H-ITM districts and 10 L-ITM districts were randomly selected from a size-stratified population representative of the original 528 school districts. Questionnaires were sent to principals and special education teachers in 56 elementary and 21 middle schools. Data were received from nineteen districts and used to test four building level hypotheses. These hypotheses speculated on no differences between buildings in H-ITM and L-ITM districts regarding the type of general education classes accessed by mainstreamed students, the number of special education referrals, and the number and type of alternative programs available in elementary and middle school buildings. The alternative programs investigated include; Headstart, transition rooms, bilingual programs, remedial reading, remedial math, and instructional or volunteer aide programs. Three of these four hypotheses were not rejected with the fourth hypothesis speculating on no differences in the number and type of general education classes attended by mainstreamed students in H-ITM and L-ITM districts being rejected.

DEDICATION

To my father and mother,

ROBERT BRYNE MORAN

a smart, tough Irishman whose lessons in determination sustained me throughout my education, and

MARY HAZEL MORAN

a warm, caring woman who, in spirit, has been with me every step of the way.

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I would like to thank my sister, JANET MORAN HEEKE, and her family, David Sr., David Jr., Rob, Jenifer and Kathryn who have taught me family can be best friends; and, my friends Dr. Patt Kearly, Dr. Rebecca Rude and Mr. Don Anderson who have taught me best friends can be family.

I would also like to thank my committee members, each a mentor for me in the goals I set for myself as an advocate for special education students, a dedicated educator, an insightful researcher, and an administrative leader.

CHAIRPERSON : DR. DONALD BURKE

DR. RICHARD FEATHERSTONE
DR. LAWRENCE LEZOTTE
DR. EDWARD BIRCH

A special acknowledgement and a special thank you is extended to Captain John Wissink and our enterprise, `Alternative'. The combination has provided for me beauty, excitement, knowledge, challenge, exploration, fun, friendship and love.

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CHAPTER I

THE PROBLEM

America's dedication to protect the human and civil rights of the nation's citizens, young and old, has, at different times in history, substantially reshaped the composition of public school classrooms. In the early 1970s parents of handicapped children initiated extensive legal action against public school districts bringing attention to existing segregation policies in the educational system. The landmark cases of Pennsylvania Association for Retarded Children v. Commonwealth of Pennsylvania (1971, 1972) and Mills v. Board of Education of the District of Columbia (1972) clearly established the responsibility of the educational system to provide handicapped students equal opportunities and, when shown to be educationally beneficial for the students, integrated programming. By 1975 Congress had passed Public Law 94-142, the Education for All Handicapped Children Act, mandating that educational systems provide a continuum of educational services to ensure all handicapped students are educated within a `least restrictive environment.'

The increased interest and financial support of the federal government to educate handicapped children

strengthened the special education division in educational systems. With the eventual growth of special education programs and an increase in personnel, a dyadic rather than a unified educational system developed. Technically, special education as an educational delivery system is a subsystem of regular education (Reynolds & Birch, 1982; Ysseldyke & Algozzine, 1984). "In practice, however, a dual system of education for regular and special students operates, each with its own pupils, teachers, supervisory staff, funding systems," and evaluation processes (Stainback & Stainback, 1984, p.102). The dyadic system, analysts warn, may sustain rather than eliminate segregation policies (Lilly, 1983; Martin; 1973; Ysseldyke & Algozzine, 1984).

Recently, discussions focusing on a merger of special education and general education have resurfaced in the literature (Dunn, 1968; Hobbs, 1975; Meyen, 1978; Lilly, 1979; Reynolds & Birch, 1982; Stainback & Stainback, 1984). Various philosophies generated over the years in the special education movement have been bound together for the prevailing purpose of integration. Stainback & Stainback (1984) pointed out, trends in the direction of eventually eliminating the dichotomy between educating exceptional and nonexceptional students have existed throughout the history of special education. "This has been reflected in the past several decades by the emergence of concepts such as deinstitutionalization, normalization, integration,

mainstreaming and zero rejection" (p.110).

Reynolds and Birch (1982) suggest "The whole history of education for exceptional students can be told in terms of one steady trend that can be described as progressive `inclusion'" (p.27). However, "at this point in the progressive inclusion trend, it is time to stop developing criteria for who does or does not belong in the mainstream and instead turn the spotlight to increasing the capabilities of the regular school environment, the mainstream, to meet the needs of all students" (Stainback & Stainback, 1984, p.110).

Developing a continuum of effective programs and services for handicapped students which includes a least restrictive environment opportunity as mandated by P.L. 94-142 requires that eligible handicapped children must be offered instructional time in general education programs. As a result, general educators became, in part, responsible for educating a segment of the handicapped population. In an attempt to meet these responsibilities, mainstreaming, or providing handicapped students instructional time in general education programs, has become the generally accepted delivery system model for most school districts.

A current understanding of necessary interactions between general and special education systems that lead to effective mainstreaming practices is limited for several reasons. First, the student population referred to as the mainstreamed population has not been clearly identified.

The number of special education categories, as well as the number of students within the categories, represented in mainstreamed populations vary considerably from district to district as well as from building to building. Additionally, the size of the group of students reported as mainstreamed also varies considerably across the districts.

Second, there is no available information as to the actual amount of time handicapped students spend in the general education programming. Currently, Michigan reports the mainstreamed student as any identified special education student who attends general education classes for a minimum of 2.5 hours per day. The use of a half-day formula may significantly underrepresent the actual amount of instructional time accessed by the mainstreamed population.

Third, there is no information available regarding the type or content of general education classes most often attended by mainstreamed students. At best, there are only speculations that handicapped students may be mainstreamed into basic academic classes of math, reading and science in one district and supplementary classes of gym and art in other districts. Without clear definitions of the mainstreamed population the needs of the populations are vague. Understanding the responsibilities of both special and general education to develop mainstreamed programming will continue to be limited until the mainstreamed population and their needs are more precisely identified.

A related problem and an impetus for this study is the concern special and general educators have expressed in the availability of evaluation models sensitive to the unique needs of the mainstreamed population. Differences between goal statements associated with general and special education systems have been recognized and accepted in the field. However, these differences have resulted in different and often unrelated evaluation models for educational programming. Yet an increase in the number of students educated in an environment where there is an overlap of general and special education provisions brings attention to the need for new, interrelated evaluation models responsive to integrative programming.

The lack of understanding but increasing interest in how the special education system merges with the general education system to provide integrative programming forces a renewed interest in mainstreaming and its related issues. Mainstreamed programming is the arena in which the special and general education systems interact. Correspondingly, mainstreamed students are the product of the interaction. Identifying group characteristics of the products and examining system characteristics associated with the interaction are the purposes of this study.

Purpose of the Study

The purpose of the study was twofold. First, attention was given to identifying group characteristics

of the mainstreamed population to develop a descriptive educational profile of the mainstreamed population currently in Michigan elementary and middle schools. The characteristics examined for the profile included:

1. amount of time in the general education programming accessed by mainstreamed students,
2. special education categories represented in the mainstreamed population,
3. course content of the general education classes accessed by mainstreamed students.

The second purpose of the study was to identify system characteristics associated with high and low mainstreaming rates in educational systems. System characteristics at two levels, district level and building level, were examined. The characteristics examined included:

DISTRICT LEVEL CHARACTERISTICS

1. district per-pupil expenditure for the basic instructional programs (general education),
2. district per-pupil expenditure for the added needs instructional programs (special education),
3. district teacher/pupil ratio for general education programs, and
4. district size (state aid membership).

BUILDING LEVEL CHARACTERISTICS

5. type of general education classes accessed by the mainstreamed population,

6. number of `alternative educational programs' available in elementary and middle schools,
7. type of `alternative educational programs' available in elementary and middle schools, and,
8. number of special education referrals in elementary and middle school buildings.

Definition of Terms

For the purposes of this study, the following definitions were employed.

ALTERNATIVE EDUCATIONAL PROGRAMS: programs with a remedial focus available to students experiencing difficulty in learning. Alternative programs examined in this study include remedial reading, remedial math, Headstart, bilingual programming, transition classrooms, instructional aide programs, and volunteer aide programs.

ADDED NEEDS COSTS: the costs of activities dealing directly with the teaching of students in the classroom or classroom situation including the classroom costs of the added needs instructional programs of special education, compensatory education, vocational education and other added needs programs.

BASIC INSTRUCTIONAL PROGRAM COSTS: the costs of activities dealing directly with the teaching of students in the classroom or classroom situation including the classroom costs of the basic instructional programs of preschool, elementary, middle and high school grades.

SPECIAL EDUCATION CATEGORY: an educational/diagnostic label determined by the Individual Educational Planning Committee (IEPC) describing the handicapping condition.

LEARNING DISABLED,(LD): a condition which is characterized by a disorder in one or more of the basic psychological processes involved in understanding or in using language, spoken or written. The disorder may be manifested in an imperfect ability to listen, think, speak, read, write, spell, or do mathematical calculations. The category includes such conditions as perceptual handicaps, brain injury, minimal brain dysfunction, dyslexia, and developmental aphasia. It does not include children who have learning problems that are primarily the result of mental retardation; of emotional disturbance; visual hearing, or motor handicaps; or of environmental, cultural, or economic disadvantage.

EMOTIONALLY IMPAIRED,(EI): a condition which is characterized by problems primarily in the affective domain, over an extended period of time, which adversely affect education achievement to the extent that the subject cannot profit from learning experiences without special education support. The problems result in behaviors manifested by one or more of the following characteristics: (a) inability to build or maintain satisfactory interpersonal relationships within the school environment, (b) inappropriate behavior or feelings under normal circumstances, (c) general pervasive mood of unhappiness or depression, and (d) tendency to develop physical symptoms or fears associated with personal or school problems. The term "emotionally impaired" also includes persons who, in addition to the preceding characteristics, exhibit maladaptive behaviors related to schizophrenia or similar disorders.

EDUCABLE MENTALLY IMPAIRED,(EMI): a condition manifested by all of the following characteristics: (a) development at a rate approximately two to three standard deviations below the mean, as determined through intellectual assessment; (b) scores within approximately the lowest six percentile on a standardized test in reading and arithmetic; (c) lack of development primarily in the cognitive domain; and, (d) impairment of adaptive behavior.

INSTRUCTIONAL TIME IN THE MAINSTREAM RATING,(ITM): a rating assigned to each Michigan school district which indicates the percentage of mildly handicapped students in the three diagnostic categories of LD, EI, and EMI who are mainstreamed into general education programming for a minimum of 2.5 hours per day. The rating is established by averaging the district's individual school building reports that publish the numbers of mildly handicapped students participating in mainstreaming programs.

> HIGH INSTRUCTIONAL TIME IN THE MAINSTREAM,(H-ITM) a rating assigned to Michigan school districts which educate an average-to-above-average percentage of mildly handicapped students in the general education program.
>
> LOW INSTRUCTIONAL TIME IN THE MAINSTREAM, (L-ITM) a rating assigned to Michigan school districts which educate a below average percentage of mildly handicapped students in the general education program.

Research Questions

The research questions addressed in this study explored four issues related to mainstreaming practices in public school districts: (a) the amount of time the mainstreamed population spends in the general education programming, (b) special education categories represented in the mainstreamed population, (c) the general education classes attended by mainstreamed students, and (d) characteristics of educational system related to high and low mainstreaming rates.

It was postulated that school districts which mainstream an above-average percentage of the district's handicapped population differ from school districts mainstreaming a below average percentage of handicapped students on several system characteristics. It was also speculated that the variation in system characteristics associated with high and low mainstreaming rates is more localized at the building level rather than the district level in educational organizations.

The following research questions were evaluated in this study.

1. What amount of time does the mainstreamed student spend in the general education programming?

2. What is the composition of the mainstreamed population?

3. What type of general education classes does the mainstreamed student access?

4. Do the monetary resources available for instruction in general and special education programs differ significantly in high and low mainstreaming districts?

5. Do the teacher/pupil ratios differ significantly in high and low mainstreaming districts?

6. Does the size of high mainstreaming districts differ significantly from the size of low mainstreaming districts?

7. Does the number and/or type of alternative programs available in the general education system vary significantly in high and low mainstreaming districts?

8. Does the number of referrals for special education services vary significantly in in elementary and middle school buildings in high and low mainstreaming districts?

Significance of the Study

The implications which may be drawn from this research have the potential for application to a variety of educational issues at a number of levels. Since the special education system and the general education system operate under different evaluation processes, information derived from a study of mainstreaming practices could provide information for evaluation and monitoring personnel interested in measuring the continuum of services that exist for handicapped students. The movement of students from one system to another should generate interest for both general and special education personnel to develop evaluation models that examine the effectiveness of this transition.

Any study of mainstreaming requires that identification issues be addressed. This study addressed the issue of variance in identification practices that persists among Michigan school districts. The results may provide pertinent information to personnel working in a consultant or diagnostic role. Also, the review of identification practices across the State should provide valuable information to members of the special education multidisciplinary evaluation team interested in free, appropriate education for all students.

Increased understanding of mainstreaming practices might also be generalizable to a wider population of educational administrators who develop programming at the building level. The influence that administrators, particularly principals, have on the effectiveness of schools is widely recognized. Their understanding of mainstreamed programming, programming that today includes over ten percent of the total student population in some districts, is necessary for developing effective schools for all students.

Finally, since mainstreamed programming is increasingly expanding in the public schools, research in this area is necessary to understand current provisions and insure future provisions meet the needs of both general and special education students.

Delimitations and Limitations

This study was delimited to include only the population of mainstreamed, mildly handicapped students, ages 6-17, in the State of Michigan for the school year 1984-1985. Furthermore, due to excessive variation in identification practices, only those districts identifying mildly handicapped students within an established mid-range were examined to determine characteristics associated with high and low mainstreaming practices. Generalizability is limited to this population.

A limited number of system characteristics associated with high and low mainstreaming practices were examined. The study does not view the selected system characteristics as determinants of high or low mainstreaming rates nor as the only characteristics associated with high or low mainstreaming rates. Additionally, the characteristics selected may not be representative of all the system characteristics associated with various rates of mainstreaming.

Limitations imposed by the design of the study were also related to the subjective nature of the instruments used in the study. A portion of the study was constructed as survey research and results are based on self-reported data. Personal interpretations are limited, as always, to subjective perceptions and understanding.

Limitations imposed by the design of the study were also related to constraints of limited resources. While data regarding the characteristics of the mainstreamed population were available for the 1984-1985 school year, system characteristics related to size of district, dollar resources and teacher/pupil ratios for the same year were not available at the time of data collection for the study. Typically this type of data is not published until twelve to eighteen months after the school year of which the data represents. However, system characteristic data were available for the school year 1982-1983 and was used in the study. When the 1983-1984 data regarding the system

characteristics was published in late Spring of 1985 during the data analysis of this study, the data from both years were examined for change. The comparison of the two sets of data showed no substantial differences.

Finally, child count data are subject to considerable error and open to debate. Data derived from local education districts are aggregated, often revised, and tend to disguise dissimilarities in collection procedures and variability in both state and local educational practices. Consequently, data may be more representative of the dissimilarities in collection procedures and practices than the population they are intended to represent.

Organization of the Dissertation

Chapter I reviews social, political and educational events and inquiries that led to the problems forcing a renewed interest in mainstreaming and its related issues. The dual purpose of the study is presented, and definitions of terms used throughout the dissertation are provided for clarity. The research questions are presented, and potential significances of the study are previewed. Additionally, delimitation and limitations of the study are offered for examination. The chapter concludes with an overview of the organization of the dissertation.

Chapter II is divided into two sections. The first section provides a review of the literature related to five special education principles most often associated with the

successful inclusion of handicapped citizens into the mainstream of life and handicapped children in to the mainstream of public school education. Different time periods associated with the development of the principles and implementation of accompanying policies adds an historical perspective to the review.

The second section provides a brief review of the efficacy and continued use of two program evaluation models most often associated with evaluation of special education services. The section continues with an extensive review of the literature associated with a current academic interest in merging general education and special education.

In Chapter III, a preliminary analysis of existing data regarding identification and mainstreaming practices in 528 school districts in the State of Michigan is provided. Identification rates of the mildly handicapped population are established for each district. Additionally, statewide mainstreaming rates for the mildly handicapped population are established. The identification and mainstreaming rates are compared, and a descriptive portrayal of the mainstreaming practices of 489 public school districts identifying mildly handicapped students within a average identification range is presented.

Chapter IV presents a description of the methodology for the study. The eight hypotheses tested are presented with a description of the general research design following.

The population of interest is defined, and the process for selecting the research groups and the sample population for testing the hypotheses is presented. A discussion of instrumentation and data collection procedures are presented.

Chapter V begins with a report of the response rate for the cross-sectional survey. The report is followed by a presentation of the results of the study. The presentation is divided into two sections: (a) statistics for the descriptive profile of the mildly handicapped student mainstreamed into the general education programming, and (b) the results of the test of eight hypotheses. Findings for the tests of the four district level hypotheses are reported in the first part of this section, with the findings for tests of the four building level hypotheses reported in the second part.

In Chapter VI, a summary of the research study is presented to include a brief review of the problems leading to the research questions. The methodology and analysis leading to the findings of the study are also briefly reviewed. A discussion of the results of the study is expanded to include implications for educational issues at several levels within the education system in the State. The chapter ends with recommendations for policy development, evaluation, and research addressed to several audiences within both the special and general educational system.

CHAPTER II

REVIEW OF LITERATURE

Education and evaluation of special education students mainstreamed into general education programming are of interest to both general and special educators. While an overlap of the two systems in providing services to the same students is a relatively new development in America's public schools, the demand for integrative programming has escalated rapidly in the last decade. This escalation has prompted an increased interest in the instructional delivery model referred to as mainstreaming and the accompanying student population known as mainstreamed students. Yet, a recognized separateness of the two educational systems has confounded understanding the responsibilities of each system to educate and evaluate mainstreamed students and mainstreaming programs.

This review of literature focuses on the social, political, and economic factors which contributed to the development of mainstreaming as an instructional delivery model and which continue to influence the interaction between the two educational systems. The review is organized into two sections. In the first section, the literature reviewed focuses on the development of five special education principles most often associated with the

successful inclusion of handicapped citizens into the mainstream of life and handicapped children into the mainstream of public school education. Different time periods associated with the development of the principles and the subsequent implementation of accompanying policies add an historical perspective to the acceptance of mainstreaming as an instructional delivery model.

The review of literature in the second section begins with an examination of some of the problems associated with operating separate educational systems. The efficacy and continued use of two program evaluation models most often associated with evaluating special education services is briefly reviewed. A third line of evaluative inquiries, inquiries resembling questions of an evaluation of an efficiency model, are reviewed. The chapter concludes with a review of the literature associated with a current academic interest in merging general and special education systems.

An Historical Perspective of Mainstreaming

Prevailing attitudes of a society directs the type and quality of care and treatment given the developmentally disabled in that society (Doll, 1972; Ysseldyke & Algozzine, 1984). The changing attitudes have, at one time or another, inspired feelings of dread, reverence, menace, charity, obligation, and love (Kanner, 1964; Wolfensberger, 1976). A review of the history of special education

indicates the general prevailing attitude and resulting trends have been in the direction of eventually eliminating the dichotomy between serving exceptional and nonexceptional students. "This has been reflected in the past several decades by the emergence of concepts such as deinstitutionalization, normalization, integration, mainstreaming and zero rejection (Stainback & Stainback, 1984, p. 110).

Ironically the growth of institutionalization and the subsequent acceptance of segregated facilities for disabled citizens were a legacy of the cultural and intellectual movement of humanism. Humanism, a philosophy emphasizing the human side of life, human achievements and human interests, was the prevailing philosophy in Europe and America in the late 18th century and most of the 19th century. The philosophy effected an increase in the number of large institutions throughout the United States (Doll, 1967, 1972; Kanner, 1964; Sarason & Doris, 1969). At the turn of the century 25 institutions serviced 15,000 mentally retarded individuals in the United States, an estimated two percent of the retarded population (Kuhlmann, 1940).

The international model of institutional-residential care facilities for the retarded was built on Guggenbuhl's Abendberg, a residential treatment center founded in Europe in 1841. Abendberg, combining both medical and educational practices, was located in a peaceful setting in the

mountains. It was speculated that "pure mountain air, the incredible beauty of Nature, simple diet, massage, and warm baths could not fail to `awaken the souls' of these unfortunate children" (Heal, Sigelman, & Switzky, 1978, p. 211).

The predominant educational techniques used in institutions during this period of time were based on Sequin's educational model. This educational curriculum and instructional methodology was designed around sensory-motor training. Sequin viewed institutions as predominantly an educational setting similar to boarding schools: students were to attend classes organized around habilitation objectives but would eventually return home upon completion of the course of study. According to Sequin, permanent custodial care was not the intent of the institution. However, "once established, institutions experienced inexorable pressures to grow and their original intent to habilitate the mentally retarded was often frustrated by parent, professional, and public pressures to prevent re-entry of the handicapped into the community" (Heal, Sigelman & Switzky, 1978, p. 211).

As the number and size of institutions grew, public attitudes toward the retarded changed. The general community reaction to the retarded population was fear, and the concept of the retarded as a social menace began to emerge. Ignoring convincing research indicating the retarded were not necessarily destined to develop into

social deviants, the social menace image of the mentally retarded persisted, and public groups rallied against re-entry of the graduates. By 1925, the number of mentally retarded individuals institutionalized showed an increase of 230% in only five years (Kuhlmann, 1940).

Deinstitutionalization and Normalization

Eventually the humanistic view of institutionalizing individuals came under scrutiny by members of an emerging psychological school of thought, behaviorism. Behaviorists, advancing the notion that objectively-observable organismic behavior constitutes the essential or exclusive scientific basis of psychological data and investigation, stressed the role of environment as a determinant of human and animal behavior. A round of research inquiries into the effects of institutionalization followed.

While there is often inconsistency regarding an accurate operational definition of the intervention called 'institutionalization', nevertheless, the literature is reasonably consistent in its indications that commitment to an institution often occasions a decline in IQ scores (Crissey, 1937; Kaplan, 1943; Kephart & Strauss, 1940; Sloan & Harmon, 1947; Sternlicht & Siegel, 1946; Heal, Sigelman, & Switzky, 1978). However, contrary to many peoples' expectations, there is considerable evidence that placement in the large institution can be beneficial for

retarded persons (Balla & Klein, 1981; Balla, Butterfield, & Zigler, 1974). "The preinstitutional environments of retarded persons in such cases may have been so deleterious that placement in the less-than-adequate environment of the large institution was a substantial improvement" (Switzky, & Haywood, 1985, p. 268).

Efforts toward empirical resolution of the educational efficacy of institutionalization were eventually overshadowed in importance by changing sociological, political, and legal issues associated with institutionalization. One of the most pervasive and persuasive political groups incorporating themselves for the purpose of advocacy were parents of handicapped students. Heal et al. (1978) pointed out, "in the United States, the National Association for Retarded Children (now for Retarded Citizens) has been especially persistent in its effort to develop a posture and an ideology appropriate to the dignity of mentally retarded individuals" (p. 214). The emerging ideology of the advocate groups is expressed in the developmental model and normalization principle. The normalization principal had come to mean the utilization of means that are as culturally normative as possible to establish and/or maintain behaviors and characteristics that are as culturally normative as possible. Regardless of any inconvenience to the larger society, the handicapped, advocates argued, were entitled to culturally normative opportunities, rhythms,

surroundings, experiences, associations, and risks (Wolfensberger, 1972). The disabled, Wolfensberger and parents argued, should be entitled to forms of address, labels, expectations, roles and environments afforded other members of the culture. At the very basis of normalization is integration and continuity of activities and services in the mainstream of society. This posture and accompanying ideology revolutionized residential services.

Other expectations afforded a disabled individual should be of a developmental focus rather than a medical focus encouraged the advocates. The view of the disabled should be one of a growing, developing person and not one of an incurable invalid. The normalization principle combined with the developmental view of the disabled individual focused, for the first time, on the commonalities between handicapped and nonhandicapped individuals. Basic human wants and needs, the principle posited, follow the same pattern for all individuals, and a handicapped individual is "more like" than "less like" a nonhandicapped individual.

Advocacy groups began to question the isolation of the handicapped population from the general society, arguing the isolation resulted in a limited access to the resources of that society. Eventually individuals from large, usually publicly-supported residential facilities were transferred to smaller, usually privately-owned facilities in the community. By 1967, over 100 years after

Abendberg's influence on America's residential facilities, the first reported decline in the number of handicapped citizens institutionalized was recorded.

Integration and Zero Reject

The return of institutionalized citizens to local communities affected the society at every level. Adults were relocated into small, family-style living units in the community, and children were placed with foster parents or, through adoption, became brothers and sisters in family units. Throughout the 1960s and 1970s, the civil rights of these individuals were recognized and consistently supported in the courts. Courts upheld the

> right of institutionalized handicapped persons to be free from unusual and cruel treatment; the right of institutionalized handicapped persons to be freed from employment without reimbursement and without rehabilitative purpose; the right to avoid involuntary institutionalization on the part of persons who represent neither a danger to society nor to themselves; the right of the handicapped to exercise the power to vote; the right of the handicapped both to marry and to procreate; the right of the handicapped to travel on the nation's public conveyances; and the right of the handicapped to access to America's buildings by means of removal of environmental barriers (Abeson, 1976, p. 5).

One system of the community, however, lagged behind in the civil rights' revolution of the handicapped--the educational system. Advocacy groups for the handicapped argued that a goal of the American educational system should be the right to an education for all American children, and particularly those usually known as `the handicapped.' In

1971, it was estimated that seven million students in American schools were handicapped and needed special education services. One million of these children received no educational services at all (Weintraub, Abeson, & Braddock, 1971). "Further, only 40% of these children, all of whom will be in need of special education services at some time during their education careers, are receiving the services they need" (Weintraub & Abeson, 1974, p. 7).

The obstacles facing parents of and advocates for the handicapped seemed overwhelming. Yesseldyke (1982) suggested that one way that the schools have coped with the failure of certain students to acquire education objectives is by simply doing nothing about it. A comprehensive review of the diversity and complexity of the obstacles is succinctly stated in a Children's Defense Fund study initiated in 1970 to examine the problem of American children not in school. Thirteen factors which the authors labeled "bureaucratic excuses" for inaction were identified.

1. We're the Experts. Parents are often told that they (parents) do not understand the complexity of the problem and that they (educators) know best.

2. Agency Denial. Many state and local education agencies deny that students are not being served, that students are being excluded from school, or that they may be inappropriately classifying students.

3. The Exception. When school officials are confronted with evidence of failure to educate students, they often labeled these as exceptions to the normal state of affairs.

4. Priorities. Those who call attention to the problem are told that the problem just is not as important as others.

5. Confession and Avoidance. School officials often admit to the facts but claim that "overriding considerations" keep them from acting.

6. Improper Jurisdiction. School officials often claim that it is not their responsibility to deal with instances of academic and/or social deviance, but the responsibility of the family and other institutions.

7. Prematurity of Request. Those who confront the school with evidence of failure are told that the school has "a plan to correct the situation."

8. Generalized Guilt. Those who confront the school are told that "other school systems have similar problems."

9. Improper Forum. School officials often claim that the problem is in the hands of local, state and/or federal government agencies, and that there is little they can do to alleviate the problem.

10. Recrimination. School officials often simply recognize that there are students who are excluded and who have problems, but simply state "It's their own fault."

11. Further Study. School officials often say that they have referred the problem for further study.

12. Community Resistance. Schools often fail to take action under the guise that the attitudes of the community are such that they (the community) won't support action.

13. Funding. Parents and others who confront school officials are told there is no money.
(Washington Research Project, 1978, p.12-14).

The summary of the study personalized the victims.

> We found that if a child is white but not middle class, does not speak English, is poor, needs special help with seeing, hearing, walking, reading, learning, adjusting, growing up, is pregnant or married at age 15, is not smart enough or is too smart, then, in too many places school officials decide school is not the place

> for that child. In sum, out of school children share a common characteristic of differentness by virtue of race, income, physical, mental or emotional `handicap', and age. They are, for the most part, out of school not by choice but because they have been excluded. It is as if many school officials have decided that certain groups of children are beyond their responsibility and are expendable. Not only do they exclude these children they frequently do so arbitrarily, discriminatorily, and with impunity. (Washington Research Project, 1974, p. 4).

It is not surprising in light of the complexity of the problems and the apparent lack of action that advocate groups turned to the legal system for support in their requests and demands of the educational system. Education is not a fundamental right protected by the United States Constitution (San Antonio Independent School District v. Rodriguez, 1973) but rather a state created property (Goss v. Lopez, 1975) which could, in some circumstances, be withdrawn by the state. However, in the landmark case of Brown v. Board of Education of Topeka (1954) dealing with racial discrimination, the Supreme Court made it clear a state may not chose to provide education to some and not others.

> Today, education is perhaps the most important function of state and local governments. Compulsory school attendance laws and the great expenditures for education both demonstrate our recognition of the importance of education in a democratic society. ...It is the very foundation of good citizenship. ...In these days, it is doubtful that any child may reasonably be expected to succeed in life if he is denied the opportunity for an education. Such an opportunity, where the state has undertaken to provide it, is a right which must be made available to all on equal terms" (Brown v. Board of Education of Topeka (1954).

This landmark case provided a model for advocates seeking an education for all handicapped students, with integration into the mainstream as the preferred model.

The Pennsylvania Association for Retarded Children v. Commonwealth of Pennsylvania (PARC), (1971, 1972) was the first class action civil rights suit challenging the educational system for handicapped students. Specifically, the suit challenged the application of four Pennsylvania statues regarding mentally retarded children. The statutes in question (a) relieved the State Board of Education from the duty to educate children who were certified as untrainable or uneducable; (b) allowed indefinite postponement of admission to public school of children who had not attained the mental age of five; (c) excused children from compulsory attendance if a psychologist determined that they were unable to profit from school; and (d) defined compulsory school age as eight to seventeen, allowing school officials to exclude children who did not fall within that range (PARC, 1971, 1972).

The resulting consent agreement between the parties in the case established three broad guidelines for providing education to handicapped students:

1. all mentally retarded persons are capable of benefiting from a program of education and training;
2. placement in a regular public school class is preferable to placement in a special public

school class, and placement in a special public school class is preferable to any other type of program of education and training; and

3. every retarded person between the ages of six and twenty-one would receive access for a free educational program appropriate to his or her capacities. (PARC, 1971, 1972)

One of the most significant outcomes of PARC was judicial acceptance of what has become known as the 'zero reject' (Yeagley, 1982). Zero reject refers to the principle that all handicapped children can benefit from some kind of educational program. Similar to Pennsylvania, many states had statutory provisions which provided a legal basis for excluding children from an education program. Two classifications of retarded children, based on IQ testing, had developed over the years: educable mentally retarded (EMI) and trainable mentally retarded (TMI). In most states only educable mentally retarded students were admitted to public schools.

The PARC case, however, required for educational provisions for all retarded children. "Expert testimony in this action indicates that all mentally retarded persons are capable of benefiting from a program of education and training; that the greatest number of retarded persons, given such education and training, are capable of achieving self sufficiency, and the remaining few, with such

education and training, are capable of achieving some degree of self care . . . " (PARC, 1971,1972).

The zero reject principle was addressed again in a Maryland state court. "There is no distinction between the words training and education. A child may be trained to read and write, or may be educated to read and write. A child may be educated to tie his shoes or may be trained to tie his shoes. Every types of training is at least a sub-category of education." (Maryland Association for Retarded Children v. State of Maryland, 1974)

The slowness of the Pennsylvania school districts to implement the court agreement promoted a second important court case, namely, Mills v. Board of Education of the District of Columbia (1972). One of the many important results of the Mills case was that the principles established in the PARC agreement were expanded to <u>all</u> exceptional children. By this time several categories of handicapping conditions had been identified and defined. Civil and educational rights of <u>all</u> handicapped students in <u>all</u> the categories were now protected under the law.

An unprecedented list of courts cases regarding the issues of civil and educational rights for handicapped students continued. Finally, in 1975 the congress passed an all inclusive law, P.L.94-142 the Education for All Handicapped Children Act, which stated: The purpose of the Act is to:

1. assure that all handicapped children have

available to them a free and appropriate public education,

2. assure that the rights of handicapped children and their parents are protected,
3. assist the States and localities to provide for an education of all handicapped children, and
4. assess and assure the effectiveness of efforts to educate handicapped children.

The rights of handicapped children to be integrated into society and particularly into the public schools across the nation were firmly established.

Mainstreaming

Of all the principles covered in P.L. 94-142, the principle of the least restrictive environment (LRE) has impacted the general education system the most. The principle refers to the right of handicapped children to be educated in the least restrictive environment. While the determination of which environment is least restrictive for a student is individual and dependent on the student's needs, in general the most restrictive environment for a student is a segregated institutional setting which provides no opportunity for integration with nonhandicapped peers. The least restrictive environment is a general education classroom setting which provides unlimited opportunity for interaction with nonhandicapped peers and

other normative experiences.

Advocacy groups were persistent in their expectations that public schools should conscientiously and programmatically adhere to the least restrictive environment principle for all students. On the assumption that integration would increase the academic and social development of the handicapped student as well as reduce the stigma of being educated in segregated special education settings, mainstreaming, an instructional delivery model integrating the handicapped students with their nonhandicapped peers in general education programming, was advanced as the preferred model (Dunn, 1968; Birch, 1974; Kaufman, Gottlieb, Agard & Kukic, 1975; Salend, 1984). The practice of integrating handicapped students into public school buildings but not into general education classes was, argued advocates, not in keeping with the original intent and spirit of the law.

In 1976 an influential advocacy group, the Council for Exceptional Children (CEC) Delegate Assembly, adopted the following definition of mainstreaming:

> a belief which involves an education placement procedure and process for exceptional children based on the conviction that each such child should be educated in the least restrictive environment in which his education and related needs can be satisfactorily provided. The concept recognizes that exceptional children have a wide range of special educational needs, varying greatly in intensity and duration; that there is a recognized continuum of education setting which may, at a given time, be appropriate for an individual child's needs; that to the maximum extent appropriate, exceptional

> children should be educated with nonexceptional children and that special classes, separate schooling, or other removal of an exceptional child from education with nonexceptional children should occur only when the intensity of the child's special education and related needs is such that they cannot be satisfied in an environment including non-exceptional children, even with the provisions of supplementary aids and services.

Tracing the number of students mainstreamed into the nation's general education programming began in 1976 with the first annual special education student count. The recorded number of mainstreaming programs grew rapidly. Six years later the Annual Report to Congress on the Implementation of P.L. 94-142 reported that the impact of the Education for All Handicapped Children Act had been primarily positive, and the law had been a major factor in effecting change in special education.

"Specifically, the law had increased the scope and comprehensiveness of special education programs and related services at the local level: 10.76% of the nation's student population, Pre-K to 12, were currently receiving special education services. Of the 4,298,327 served, 93% of these student were educated in `regular' schools and a relatively stable 68% are served in `regular' classrooms" (Annual Report, 1984, Executive Summary). The integration of handicapped students into the general education classes, the missing link in the continuum of services demanded by advocate groups and supported by Federal and State statues, had finally become an accepted instructional delivery model.

Summary: Historical Perspective

Special education policy, starting with an acceptance of institutionalization of handicapped children as a preferred treatment model, has moved through a period of successfully orchestrated judiciary action leading to an inclusion of a significant number of handicapped children in the general education classrooms. The evolution of five special education principles generating and directing the policy change was reviewed in this section. These fundamental principles, each being influenced differently by social, political, and economic philosophies of the time, shared a common goal of inclusion of the handicapped population into the mainstream of the American way of life.

The review of current literature suggests a continuation of an inclusion trend, yet researchers are now increasingly recognizing a need for alternative conceptualizations, directions and theories (Algozzine & Yesseldyke, 1983; Gerber, 1984). An examination of the mainstreamed population has led some critics to question whether the "positive impact" of the law is true for all handicapped children. Gerber (1984) suggests " the prevalence of learning disabled students in mainstream service programs permits the Annual Report to imply much greater social and education integration resulting from P. L. 94-142 than probably exists" (p. 222). The growing rate of an overlap of handicapped and nonhandicapped

students in general education classrooms across the nation has generated new questions for educators; specifically, are the differences between the two types of students, special and regular, so distinctive they warrant the operation of a dual system of education?

A current trend advocated in the literature sustains a dedication to the inclusion philosophy yet focuses on a new, and for some educators, a radical approach of inclusion. This trend focuses on eliminating the dichotomy existing between serving exceptional and nonexceptional students through a new course of direction -- a merger of special education and general education systems.

Current Issues of Mainstreaming

Merger of Special Education and General Education

A suggestion to merge special education and general education implies that, at a minimum, two apparent systems exist. A review of literature indicates researchers, policy makers and other professionals are divided as to whether special education exists as a dual system (Stainback & Stainback, 1984) or as a subsystem of general education (Yesseldyke & Algozzine, 1984; Reynolds & Birch, 1982). Setting aside nomenclature or taxonomy differences as to where special education exists on an organizational flow chart, there is consistent recognition in the literature of a disconnectedness of special education and general education.

The disconnectedness has "fostered competition and, in some cases, unnecessary duplication rather than cooperation among professionals and services. The dual system creates artificial barriers between people and divides resources" (Stainback & Stainback, 1984, p. 105). In 1973, Martin, then Associate Commissioner of Education and Director for the Bureau of Education for the Handicapped stated, "One of the places where many of us concerned with education have been wrong has been in our conceptualization of the normal child as sharply dichotomized from the handicapped child"(p. 2). Five years later, commenting on the future of education for the exceptional students, Martin wrote:

> We need to examine the assumptions that have led us to think of regular education and special education as dichotomous constructs. This kind of thinking has led to the treatment of common problems by separate groups who use different language constructs, publish in different journals, and in general, cannot communicate. We need to find a way to share and to work together, rather than to continue to divide our tasks (Martin, 1978, p. iv).

Evaluation Issues

An ideology behind a merger of special and general education is being developed from what appears to be a movement in special education toward evaluations of efficiency and away from evaluations of process and outcomes. Widespread process evaluations under the rubric of compliance and monitoring followed unprecedented changes in special education after the Education for All Handicapped Children Act was passed in 1975. However,

Yesseldyke & Algozzine (1984) suggest "a system driven to change by legislation and litigation will make shallow gains by keeping only one step ahead of the threat of court action for compliance" (p. 383).

Evaluations of outcomes parallel the creation of programs for handicapped students. However, Polloway (1984) suggests that empirical resolution of special education student placement issues "will perhaps never be attainable since almost before research can be reported, the question inevitably changes as various sociological, political, legal, and educational trends gradually invalidate the precarious findings of previous days." Furthermore, Polloway continues, "the nature of the schools, teachers, and students today would make any attempt at direct generalization from twenty or thirty years ago an extremely doubtful practice" (p. 19).

Moreover, recent evaluations of outcomes also have provided little convincing evidence that supports or rejects the effectiveness of special or regular class placement for the exceptional child. Carlberg & Kavale's (1980) meta-analysis of 50 primary research studies of special versus regular class placement concluded: "The review of the literature failed to reveal unilateral evidence that establishes the superiority of one educational arrangement over another on academic or social criteria" (p. 296). Carlberg & Kavale noted:

> No great differences among classes of outcome measures were identified, Thus, regardless of whether achievement, personality/social, or other dependent variables were chosen for investigation, no differential placement effects emerged across studies. Similarly, variables such as IQ, age, percent of male subjects, duration of treatment, sample size, blindness of measures, internal validity, and date of publication had little effect on the relative superiority of regular class placement to special class placement (p. 304).

Category of exceptionality, however, revealed differential placement effects.

> The results suggested that the problems of LD and BD/ED (behaviorally disturbed or emotionally disturbed) children were apparently more tractable in the special class than children whose primary problem was low IQ. Thus slow learners and EMRs experience negative consequences because of special class placement, while positive effects from special class placement were found for LD and BD/ED children (Calberg & Kavale, 1980, p. 304).

The ambiguous results of efficacy studies and lack of direction from process evaluation, both prominent throughout the growth of special education, have prompted efficiency evaluations. Unlimited expansion of special education, indications of misclassification of students, and exponential growth in the costs of special education have accelerated the interest in evaluations of efficiency.

Classification and Efficiency Issues

While there have been time periods demonstrating precipitous growth patterns for special education, it is the consistency in the growth of special education over the past eighty years that marks the field for renovation.

"The continual expansion of special education has reached the point that many educators are beginning to ask where it will (and should) end. Many basic tenets of special education which have never been subjected to probing analysis are now the subject of substantial discussion" (Lilly, 1983, p. 1).

The growth of special education has been recorded in both the number of categories and the number of children within the categories recognized by the special education classification framework. "At the beginning of the 20th century, special education was a very limited field, and the primary 'categories of exceptionality' which were recognized were sensory impairments, physical impairments, severe emotional disturbance, and severe/profound mental deficiency" (Lilly, 1983, p. 30). Today the number of handicapping conditions recognized in P.L. 94-142 is 11 and some state regulations recognize up to 14 different categories. Additionally, in some school districts as many as 20-25% of elementary aged students are receiving some sort of special education services (Pugach & Lilly, 1983). Throughout the history of education, various political, social and economic trends have resulted in an influx of a large population of students moving into already existing educational programs. During these periods of influx, special education was used to alleviate the pressures of serving new groups of students in the schools (Lilly, 1983; Yesseldyke & Algozzine, 1984).

Child labor laws, movement towards universal schooling (including compulsory school attendance laws) and the development intelligence tests were catalysts for a dramatic change in the school population in the early 1900s. A new population moved into America's schools experiencing "a system and a curriculum which had been designed for the elite of society, and encountered teachers and other school personnel who were not prepared for all that is implied in `schooling for the masses.' And, finally when the inevitable school problems occurred, a diagnostic system existed which pinpointed the problem in the child by labeling him/her as `moron' based on results of a test of intelligence which bore striking resemblance to the same school curricular which was implicated in the original problem" (Lilly, 1983, p. 4).

America's schools faced another influx of students into existing programs again in the desegregation movement following the Brown v. Board of Education of Topeka. This landmark civil rights case drastically changed the racial and socio-economic composition of the schools. "The population of individual schools became more diverse and many previously white, middle class schools experienced an influx of poor and minority students. Increased racial integration of the schools was followed closely by the rapid expansion of EMR (educable mentally retarded) classes. Not coincidentally, the majority of students labeled EMR and put in these classes were minority and

poor" (Lilly, 1983, p. 7). In both incidents of rapid expansion in the school population, providing special education, Lilly (1983) concluded, became the accepted general solution to the complex educational problems facing the growing American education system. The simple solution he suggests, was "the removal of children from the common, diverse educational settings" (Lilly, 1983, p. 4).

The concept that special education at any point in history will be what society needs and permits it to be is also advanced by Yesseldyke & Algozzine (1984). "If society and the agencies that reflect society are willing to provide extensive services, then many students will be perceived as in need of special services and will be enrolled in special education. If, on the other hand, a restrictive social policy is in force, then relatively few individuals will be seen as in need of special education services" (p. 427).

An increase in the identification of mildly handicapped students in public schools today, particularly in the category of learning disabilities, has sustained an interest in the role of special education and its relationship to general education. Special education services are provided within a categorical framework, and learning disabilities emerged as a category in the middle 1960s. "The learning disabilities category is growing at a rate of approximately 3% of the special education population a year. At that rate of progress, all currently

classified students in high prevalence categories would be classified learning disabled by around the year 2001" (Algozzine & Korinek, 1985 , p. 393). Such reclassification practices questions an established belief that learning disabilities is a "category of children" as opposed to a "category of services". On the other hand, Lilly (1983) suggests, the expansion "is a result of special education's role in supplanting regular education, not adding to existing regular educational support services" (p. 9).

The Sixth Annual Report to Congress on the Implementation of Public Law 94-142 indicated "...variations continue in the number of children served within the different handicapping conditions. Large increases in the number of learning disabled children served overshadow the decreased in number of children served in most other categories. Since 1976 the learning disabled population has grown by 119 percent" (Annual Report, 1984, Executive Summary).

In interpreting the quick growth of learning disabilities in the schools, some policy analysts, researchers and other professionals have simply reiterated past interpretations of analogous growth spurts in special education and suggest the learning disabled student has always been in the student population but has gone unrecognized. However, Lilly (1983) suggests, "the field of LD emerged as both a political and an educational movement, as a means of providing special education

programs for predominantly middle and upper middle class students, programs which were less isolated from the regular classroom and contained fewer poor and minority children than the EMR special classes. Whereas it is clear from research cited earlier that the EMR population has been composed of predominantly poor minority children many of the same studies demonstrated that LD programs served disproportionately low numbers of minority student. In addition, the concept of `learning disabilities' was clearly more palatable to many parents than the concept of `mental retardation' in explaining their children's difficulties in school" (p. 7).

The National Association of State Directors of Special Education (NASDSE, 1983) surveyed directors in several states about reasons for the increase in the count of learning disabled children. The five most frequent responses recorded are:

1. improvement in procedures for identifying and assessing children with learning disabilities,
2. liberal eligibility criteria for learning disabilities,
3. cutbacks in other programs and lack of general education alternatives for children who experience problems in the regular class,
4. social acceptance/preference for the learning disabled classification, and
5. court order.

The reclassification, and perhaps misclassification, of increasing numbers of students as learning disabled may be due, in part, to special education's persistent use of the categorical framework to provide special education services. However, categorical labeling makes several assumptions that cannot be supported: for example, (a) the definitions of the categories are functional and each disability is homogeneous with no overlaps between categories, (b) knowing a child's disability label is sufficient to select one instructional program over another, (c) diagnostic labeling interacts positively with teacher programs and changes in skill levels, and (d) all children in need of special education will be identified and served appropriately by use of the categorical model (Yesseldyke & Algozzine, 1982).

Continuing to assess students as well as provide services within a categorical framework is inefficient. "The categories are ever changing, for the definitions of specific conditions like mental retardation and learning disabilities constantly change as a function of both social pressure and the amount of money that can be spend on special education" (Yesseldyke & Algozzine, 1984, p. 427).

The categorization persists however because, as Stainback & Stainback (1984) suggest, "it is necessary within a dual system to determine who belongs in which system. A great deal of time, money, and effort are currently expended trying to determine who is regular and

who is special and what 'type' or category of exceptionality each special student fits. This continues to be done in spite of the fact that a combination of professional opinion and research indicates that classification is often done unreliably, it stereotypes students, and is of little instructional value" (Stainback & Stainback, 1984, p. 104).

In an investigation into the criteria for identifying learning disabled students Yesseldyke & Algozzine (1984) found more than 40 sets of criteria. They report: "We have considered seventeen different sets of criteria and classified groups of school-identified learning disabled students, low achievers, and normal students. Overall, we have found that all school-identified LD students, all low-achieving students, and more than 80 percent of normal students could be called LD on the basis of at least one set of criteria. We have found that no student meets all criteria" (Yesseldyke & Algozzine, 1984. p.160).

Expansion and Cost Efficiency Issues

"The special education delivery system is growing at an unacceptable rate and will likely not be tolerated as public policy for much longer" (Yesseldyke & Algozzine, 1983, p.28). Federal and state legislation demand that services be provided to all students who are declared eligible. Yet eligibility criteria have not be consistently applied across populations, and students

labeled learning disabled are not readily distinguishable from other low achievers in the schools. Nevertheless, since the special education system must be responsive to all identified students, special education services have grown precipitously without, in many cases, proper coordination or long range planning.

The educational cycle for the majority of mildly handicapped students begins with general education teachers. Based on a belief that the child is not making as much progress as his or her peers, the general education classroom teacher refers the student for evaluation and assessment services. These services are provided by the special education system. Once referred for evaluation, a student is more probable than not determined to be "handicapped" and declared eligible for special education (Algozzine, Christenson, & Yesseldyke, 1982; Pugach & Lilly, 1984; Lilly, 1983).

The referred student is seen by a multidisciplinary team and receives a categorical label certifying that he or she is handicapped. However, "special education diagnostic, assessment and classification procedures are time consuming and the period between referral an initiation of service is typically six weeks to three months. Obviously, if one of the goals of the special education services is to provide support for the classroom teacher and help arrange conditions for success in the classroom, the lengthy period between referral and service can only work contrary to this

goal" (Pugach & Lilly, 1984, p. 4). Lilly (1983) reports of state regulations "allowing up to 60 school days from referral to the staffing for special education placement, a reasonable time given the diagnostic work required. However, sixty school days can be three to four months of real time, during which the teacher is receiving no assistance. Often, by the time a student is declared eligible for services the teacher has already solved the problem through other means or despaired of ever receiving help" (Lilly, 1983, p. 12). Thus it seems, that while the educators are absorbed with compliance to policy and regulations, the goal of their service is thwarted by those very policies.

The issue of increasing costs to provide educational programs for special education students questions the efficiency of the current instructional delivery system. An editorial in the New York Times, reports on the issue of cost.

> The New York City school system's special education program was designed to help mentally, physically or emotionally handicapped children who can't cope in regular classrooms. Yet the program seems misused, at enormous expense as it enrolls more and more children who are not seriously impaired. ...over the years special education has become a dumping ground for students able to function well in regular classes if only they had the remedial help and individual attention once available. The number of students in special education has tripled since 1974 ...to twelve percent of the school population but it consumes twenty-three percent of the school system's $4 billion budget (April 30, 1985).

Complicated economic relationships arise when new populations of students are identified and require school services. Special education is a social service and competes with other social services. Additionally, special education also competes with general education for financial resources. " When the amount of money spent on providing special education services is increased, the amount available for regular education is decreased. Regular educators and special educators may become adversaries, each competing for more of a small amount of money appropriated for education" (Yesseldyke & Algozzine, 1984, p. 394).

Further competition exists internally in the special education system. "Within the overall pool of monies available to provide services to handicapped students, decisions must be made about who is to be served. This fact creates competition for resources among the various categorical programs. If a fixed amount of money is available to educate handicapped students, and if school personnel decide to spend a greater proportion of that money on education of deaf students, then less money will be available for educating other kinds of students" (Yesseldyke & Algozzine, 1984, p. 409).

The resources needed to finance ideals in education are limited, and major questions arise regarding the limits of responsibility for funding. "Schools are required to provide all services that students need, including such

related services as speech and language therapy, counseling, physical therapy, or medical services. School personnel must work out interagency agreements with local agencies on who will pay for the related services" (Yesseldyke & Algozzine, 1984, p. 410). However, competition with other social agencies has in many cases, resulted in adversarial relationships, and ideals are lost in the interaction or lack of interaction. Craig summarized the complexity and the losses associated with the current funding process when she wrote:

> Prior to the passage of P.L. 94-142, schools did not hesitate to recommend such resources as psychological counseling or physical or occupational therapy for students in need of these services. Since the passage of this omnibus act, however, school personnel have become reticent about discussing the need for such resources with parents because of their responsibility for assuring that services are provided; in many schools informal policies have been established that discourage teachers from initiating discussions with parents about the possible need for noninstructional resources that cannot be provided directly by the the school. Thus the intent of the law, which is to enhance and expand the availability and provision of necessary services for the handicapped...has actually created disincentives for school to identify these students needs (Craig, 1981, p. 12).

When the cost of assessing and evaluating a student equals or exceeds the cost of educating the student for one year (Davis & Smith, 1984) in a program which is presumably designed to meet specific needs of students with a specific categorical label but which looks suspiciously like a program for other children with other categorical labels

and/or the educational program from which the student was referred, then the efficiency of the system must be seriously questioned.

Rationale for a Merger

Advocates for the merger of special education and general education base their arguments on two premises: first, the instructional needs of the students do not warrant the operation of a dual system; and second, a dual system unnecessarily creates inefficiency. They argue there are not two distinct types of students -- special and regular. "The designation of arbitrary cutoffs does not make students any more different between the special and regular groups than within these groups" (Stainback & Stainback, 1984. p. 103).

While individualization in basic educational programming is important for all students, there is increasing recognition in both special education (Lloyd, 1984) and regular education (Goodlad, 1983) that individual differences among students do not necessarily imply that students should be given different educational treatments. Lloyd posits that based on the 'aptitude-treatment interaction' research, there is considerable doubt on the practice of individualizing or assigning students according to the remedial, compensatory, or preferred learning style training models (Lloyd, 1984). "While instructional methods needs to be tailored to individual characteristics and

needs, few, if any, can be clearly dichotomized into those applicable only for special students or only for regular students" (Stainback & Stainback, 1984, p. 103).

A second premise on which the rationale for a merger is based focuses on the inefficiency of operating two systems. The dual system creates an unnecessary and expensive need to classify students (Stainback & Stainback, 1984). Classifying students according to one or a few characteristics is minimally useful in planning a total educational program and is an inefficient model for determining program participants. However, classification practices continue in spite of the fact that a combination of professional opinion and research indicate that classification is often done unreliably, it stereotypes students and is of little instructional value (Blatt, Biklen, & Bogdan, 1977; Gables, Hendrickson, Shores, & Young, 1983; Potter, Yesseldyke, Regan, & Algozzine, 1983; Stainback & Stainback, 1984).

Additionally, the operation of a dual system has fostered unnecessary competition and duplication. Lortie (1978) comments:

> The historical separation of special and regular educators has taken its toll in the relations between them; shared viewpoints and mutual understanding, it appears, are not the rule. Educators outside special education are often perceived as either indifferent to, or even prejudiced against, the needs of children considered handicapped. Special educators, on the other hand, sometimes project the attitudes of an embattled group with its "them versus us" mentality (Lortie, 1978, p. 236).

Duplication is often found in research and evaluation projects, college and university training programs, purchase of instructional material and equipment, hiring of personnel, and operations of accounting, monitoring and funding mechanisms. Furthermore, the dual system unnecessarily reduces, or unnecessarily duplicates, a range of curricular options available to students.

Summary: Current Issues

"Dichotomizing students into two basic types (special and regular), and maintaining a dual system of education, separate professional organizations, separate personnel preparation programs, and separate funding patterns do very little to foster the values inherent in the mainstreaming and integration movement of the past decade" (Stainback & Stainback, 1984, p. 109). The move towards a merger of the two systems does not in any way discredit the efforts and successes of special education. On the contrary, special education has been very successful in fulfilling its goal of inclusion of handicapped citizens into the mainstream of life and handicapped students in a free and appropriate educational setting. However, the continuing practice of separating America's student population into two groups does, it seems, work contrary to the integration movement. A dual system, by its very existence can sanction some forms of discrimination and reduce opportunity for equal opportunity for both general and special education

students. "With careful planning, it should be possible to meet the unique needs of all student within one unified system of education--a system that does not deny differences, but rather a system that recognizes and accommodates for differences" (Stainback & Stainback, 1984, p. 109).

CHAPTER III

PRELIMINARY ANALYSIS

In Chapter III an analysis of existing data regarding identification and mainstreaming practices of 528 school districts in Michigan is presented. The first section describes the procedures followed to develop a statewide mean identification rate for three special education diagnostic categories: learning disabilities, (LD), emotionally impaired, (EI), and educable mentally impaired, (EMI). The development of three identification ranges -- high, middle and low -- is discussed.

The second section describes the development of a statewide mean Instructional Time in the Mainstream (ITM) rating for the three special education diagnostic categories. The formulation of two rates, High Instructional Time in the Mainstream (H-ITM) and Low Instructional Time in the Mainstream (L-ITM) is discussed. In the final section, the mainstreaming rates and identification ranges are aggregated. The chapter closes with a descriptive portrayal of the mainstreaming practices of 489 public school districts identifying LD, EI and EMI students within various identification ranges.

Identification Measures

State Mean Identification Rates and Ranges for Three Diagnostic Categories

Beginning with Michigan's 529 public school districts, the 1984-1985 student enrollment for each district, ages 6-17, was examined to determine a State identification rate for three types of mildly handicapped students; learning disabilities (LD), emotionally impaired (EI), and educable mentally impaired (EMI). Because of its uncomparable size the Detroit Public School system was eliminated from the examination. An identification rate for each of the three categories were computed for each of the remaining 528 districts. Two sources provided by the Michigan Department of Education were used in the examination: Source Form, SE 4568 and Bulletin 1014: Michigan K-12 Public School Districts Ranked by Selected Financial Data

Each year Michigan's Special Education Service Department compiles the individual district's special education student count as reported by (a) diagnostic category, (b) age group, and (c) primary educational placement (Source Form SE:4568). These data were referenced against the state aid membership count obtained from the annually published BULLETIN 1014. An identification rate for each of the three categories for 528 school districts in Michigan was computed.

Variation in the identification efforts of the individual districts across the state is indicated by the

range of the identification rates established for each of the categories. Michigan school districts, as a group, identify 0% - 22% of the student population as learning disabled, 0% - 12% of the student population as emotionally impaired, and 0% - 14% of the student population as educable mentally impaired.

The school districts also varied as to the number of the three diagnostic categories identified. For example, 45 districts failed to identify any educable mentally impaired students, 29 districts failed to identify any emotionally impaired students, and 5 districts failed to identify any learning disabled students within the district's student population. Furthermore, eight districts identified only learning disabled students, one district identified only emotionally impaired students and three districts identified only educable mentally impaired students. The highest district identification rate when combining the three diagnostic categories was 49% (22% LD, 12.5% EI, 14.5% EMI), the lowest district identification rate was .96% (.48% LD, .24% EI, .24% EMI).

Data from 39 school districts were reported through an Intermediate School District (ISD) student count and could not be extrapolated. Therefore, an identification rate could not be established for 39 districts and they were eliminated from the study, leaving 489 school districts in the population. A mean identification rate for each of the three special education diagnostic

categories for the school year 1984-1985 was established from this population and are presented in Table 3.1.

Table 3.1
STATE MEAN IDENTIFICATION RATES FOR THREE DIAGNOSTIC CATEGORIES: LD, EI, EMI: 1984-1985

ID RATE	CATEGORY
.0336	Learning Disabilities
.0092	Emotionally Impaired
.0069	Educable Mentally Impaired

Attempting to control for variation in district identification efforts, an identification range for each diagnostic category was established by incrementing the mean identification rate by 50%. The identification ranges established are presented in Table 3.2.

Table 3.2
STATE IDENTIFICATION RANGES FOR THREE DIAGNOSTIC CATEGORIES: LD, EI, EMI: 1984-1985

HIGH	MID	LOW	Category
>.050	.050 - .017	<.017	LD
>.014	.014 - .005	<.005	EI
>.010	.010 - .004	<.004	EMI

Aggregated Identification Rates for Three Diagnostic Categories by District

Three hundred and eighty-one school districts across Michigan (78%) identified the learning disabilities population within the mid-identification range, leaving 57 districts (12%) identifying above the mid-identification range and 51 districts (10%) identifying below the mid-

identification range. Two hundred and fifty districts (51%) identified the emotionally impaired population within the mid-identification range, leaving 95 districts (19%) identifying above the mid-identification range and 144 districts (29%) identifying below the mid-identification range. Two hundred and forty districts (49%) identified the educable mentally impaired population within the mid-identification range, leaving 65 districts (13%) identifying above the mid-identification range and 184 districts (38%) below the mid-identification range. Table 3.3 compares 489 school districts identification rates for the three special education diagnostic categories.

Table 3.3
IDENTIFICATION RANGES FOR THREE DIAGNOSTIC CATEGORIES BY DISTRICT: 1984-1985

	LEARNING DISABILITIES IDENTIFICATION RANGE			TOTALS
	HIGH	MID	LOW	
	>.050	.050 -.017	<.017	
# DIST.	57	381	51	489
% DIST.	.117	.779	.104	100

	EMOTIONALLY IMPAIRED IDENTIFICATION RANGE			TOTALS
	HIGH	MID	LOW	
	>.014	.014 -.005	<.005	
# DIST.	95	250	144	489
% DIST.	.194	.511	.295	100

	EDUCABLE MENTALLY IMPAIRED IDENTIFICATION RANGE			TOTALS
	HIGH	MID	LOW	
	>.010	.010 -.004	<.004	
# DIST.	65	240	184	489
% DIST.	.133	.491	.376	100

The 489 districts were further examined to determine the number of districts that identified all three of the diagnostic categories within the mid-identification range established for each category. Table 3.4 presents the number of Michigan school districts which identified all three diagnostic categories within the mid-identification range.

Table 3.4
AGGREGATED IDENTIFICATION RATES FOR THREE DIAGNOSTIC CATEGORIES: LD, EI, EMI.

	LD EI EMI (1)	LD EI EMI* (2)	LD EI* EMI (3)	LD* EI EMI (4)	LD EI* EMI* (5)	LD* EI EMI* (6)	LD* EI* EMI (7)	LD* EI* EMI* (8)	TOTAL
NUMB DIST.	112	94	89	20	91	25	19	39	489
PRCT DIST.	.23	.19	.18	.04	.19	.05	.04	.08	100

* = Identification rate outside of mid-identification range.
( ) = Column identification number.

As indicated in column one, 112 districts (23%) across the state of Michigan identify all three of the diagnostic categories within the mid-identification range established for each of the categories. The variation in identification procedures across the Michigan public school districts is shown in the remaining columns. The second, third and fourth columns present the number of districts that identify two diagnostic categories within the

mid-identification range leaving one category identified outside of the mid-identification range as depicted by an asterisk (*). Columns five through seven present the number of school districts that identify one diagnostic category within the mid-identification range, leaving two diagnostic categories identified outside the mid-identification range. The last column presents the number of districts showing the most variation in identification procedures. Thirty-nine Michigan school districts identify all three diagnostic categories outside of the mid-identification range.

The variation in identification practices observed from the existing data can be accounted for in part by fiscal arrangements between neighboring districts. Some districts provide center programs for emotionally impaired and mentally impaired students, and students identified in these categories are transferred from one district to another for educational services. The receiving district reports an increased student population for these categories while the sending district reports no students identified in these categories.

Other sources of variation in identification practices among school districts, however, are not so easily explained. Definitions of handicapping conditions are listed in federal and state laws. Furthermore, conditions are defined and criteria for the conditions are listed in laws and the guidelines and regulations accompanying those

laws. However, as Ysseldyke & Algozzine, (1984) point out, "both federal and state officials often list nonspecific, fairly `loose' criteria, and this fact puts a lot of responsibility on local school officials who must have criteria for deciding whether individual students are eligible for special education services" (p. 156). Thus special education students may be called different names in different districts because the criteria or conditions are interpreted differently among district personnel. Thus, it is not unusual to have a learning disabled student move from one school district only to become an emotionally impaired student in another school district.

Since classification practices in special education are essentially arbitrary, attitudes about who should receive services may differ among district personnel involved in diagnostic procedures. However, classification practices strongly influence mainstreaming practices. For example, it is probable that districts which identify 22% of the school population as learning disabled mainstream more learning disabled students than districts that identify under 1% of the population as learning disabled. While the time, effort and resources needed to untangle the sources and effects of variation in identification procedures may prove to be informative to the broad understanding of mainstreaming practices under examination in this study, an indepth examination of the variation in district identification procedures across the state is

beyond the scope of this study. Nevertheless, since mainstreaming practices are influenced by identification practices, any comparison of mainstreaming practices requires a homogeneously identified population. The districts grouped within the three established identification ranges (high, middle and low) provide homogeneous populations for comparison. The group of districts in the mid-identification range demonstrates the most homogeneous district population for examining mainstreaming practices among school districts and, for the purpose of this study, became the population of interest.

Instructional Time in the M-instream (ITM) Measures

State Mean Instruction Time in the Mainstream (ITM) Rates for Three Diagnostic Categories

A second rating, Instructional Time in the Mainstream (ITM), was established for each of the 489 school districts. Information needed to develop the index was obtained from Source Form: 4568. As noted above, Source Form: 4568 indicates the primary placement of all the special education students in Michigan. Primary placement alternatives available for Michigan special education students are (a) regular education classroom, (b) public school special education classrooms, (c) separate facility, and (d) other environments (hospitals, homebound, etc.). As defined by the state, primary placement is determined by clock hours. Thus a special education student spending 2.5 hours per day in the regular education

classroom is reported as a student with a primary placement in the regular classroom.

District Instructional Time in the Mainstream (ITM) rates for each of the three diagnostic categories were established for each of the 489 Michigan school districts. District ITM rates were calculated by referencing the number of students in each of the three categories assigned to the general education classroom against the district's total number of students in each of the three categories. The district ITM ratings for each of the three diagnostic categories varied as extensively as did the districts identification ratings.

Ninety-four districts (19%) mainstreamed all of the identified learning disabled students, while 20 districts (4%) mainstreamed no identified learning disabled students. One hundred and three districts (21%) mainstreamed all of the identified emotionally impaired students, with 34 district (7%) mainstreaming no identified emotionally impaired students. Sixty-five districts (13%) mainstreamed all of the identified educable mentally impaired students, while 97 districts (20%) mainstreamed no identified educable mentally impaired students.

By averaging the district ITM rates for each of the three diagnostic categories across 489 school districts, a statewide, mean ITM rate for each of the three diagnostic categories was established and are presented in Table 3.5.

Table 3.5
STATE MEAN INSTRUCTIONAL TIME IN THE MAINSTREAM (ITM) RATES FOR THREE DIAGNOSTIC CATEGORIES:LD, EI, EMI.

ITM	CATEGORY
.72	: Learning Disabled
.59	: Emotionally Impaired
.33	: Educable Mentally Impaired

Aggregated Instructional Time in the Mainstream for Three Diagnostic Categories

Using the statewide mean ITM rate as a basis, a High-Instructional Time in the Mainstream (H-ITM) range and a Low-Instructional Time in the Mainstream (L-ITM) range were developed. The H-ITM range for each of the three categories includes the mean ITM through a 100% rate. The L-ITM range includes rates from 0% to the mean ITM rate. Table 3.6 compares the number of districts which mainstream students in the three diagnostic categories at an established H-ITM and L-ITM rate.

Table 3.6
INSTRUCTIONAL TIME IN THE MAINSTREAM (ITM) RATES FOR THREE DIAGNOSTIC CATEGORIES BY DISTRICT: 1984-1985

	LEARNING DISABILITIES INSTRUCTIONAL TIME IN THE MAINSTREAM		
	HIGH-ITM (72% - 100%)	LOW-ITM (0% - 71%)	TOTALS
# DIST.	298	191	489
% DIST.	.61	.39	100

Table 3.6, continued

EMOTIONALLY IMPAIRED
INSTRUCTIONAL TIME IN THE MAINSTREAM

	HIGH-ITM (59% - 100%)	LOW-ITM (0% - 58%)	TOTALS
# DIST.	276	213	489
% DIST.	.56	.44	100

EDUCABLE MENTALLY IMPAIRED
INSTRUCTIONAL TIME IN THE MAINSTREAM

	HIGH-ITM (33% - 100%)	LOW-ITM (0% - 32%)	TOTALS
# DIST.	205	284	489
% DIST.	.42	.58	100

The 489 school districts were further examined to determine the number of districts that mainstreamed all three diagnostic categories within a H-ITM range established for each category. Table 3.7 presents the number of Michigan school districts that mainstream each of the three diagnostic categories at a H-ITM rate.

Table 3.7
AGGREGATED INSTRUCTIONAL TIME IN THE MAINSTREAM FOR THREE DIAGNOSTIC CATEGORIES: LD, EI, EMI.

	LD EI EMI (1)	LD EI EMI- (2)	LD EI- EMI (3)	LD- EI EMI (4)	LD EI- EMI- (5)	LD- EI EMI- (6)	LD- EI- EMI (7)	LD- EI- EMI- (8)	TOTAL
NUMB DIST	131	84	30	39	50	34	16	115	489
PRCT DIST	.27	.17	.06	.07	.10	.07	.03	.23	100

\- Low-Instructional Time in the Mainstream (L-ITM) Rate

The mainstreaming rates across Michigan public school districts vary as extensively as do the identification rates observed above. Column one (1) presents the number of school districts that mainstream at a H-ITM rate consistently. One hundred and thirty-one districts (27%) mainstream all three of the diagnostic categories at a H-ITM rate. The variation in the mainstreaming practices is shown in the remaining columns. The second, third and fourth columns present the number of districts that mainstream two diagnostic categories at a H-ITM rate leaving one category mainstreamed at a L-ITM rate as depicted by a hyphen (-). Columns five through seven present the numbers of school districts that mainstream one diagnostic category at a H-ITM rate, leaving two diagnostic categories mainstreamed at a L-ITM rate. The last column presents the number of school districts showing the lowest mainstreaming rates. One hundred and fifteen school districts (23%) mainstream all three diagnostic categories at a L-ITM rate.

The variation in mainstreaming practices existing across the State of Michigan as demonstrated above was the central focus of this research study.

Comparison of Michigan's School Districts Identification Ranges and Instructional Time in the Mainstream Rate

ITM Rates within Identification Ranges

Mainstreaming rates for three diagnostic categories for 489 school districts grouped into three identification ranges were examined. Variation existed over the patterns of mainstreaming services for the three categories. Of particular interest for this study are the school districts that have identified mildly handicapped population within the mid-identification range.

Two hundred and ninety-eight school districts (61%) mainstream the identified learning disabled student population at a H-ITM rate, leaving 191 school districts (39%) mainstreaming learning disabled students at a L-ITM rate. Of the 489 districts, 381 (78%) districts fall within the mid-identification range.

Two hundred and seventy-six Michigan school districts (56%) mainstream the identified emotionally impaired student population at a H-ITM rate, leaving 213 school districts (44%) mainstreaming emotionally impaired students at a L-ITM rate. Of the 489 districts, 250 (51%) districts fall within the mid-identification range. Two hundred and five Michigan school districts (42%) mainstream the identified educable mentally impaired student population at a H-ITM rate, leaving 284 districts (58%) mainstreaming educable mentally impaired students at a L-ITM rate. Of the 489 districts, 240 (49%) fall within the mid-identification range.

Table 3.8 presents ITM rates within three identification ranges for 489 Michigan school districts.

Table 3.8
ITM RATES WITHIN THREE IDENTIFICATION RANGES FOR THREE DIAGNOSTIC CATEGORIES: 1984-1985

LEARNING DISABILITIES
IDENTIFICATION RANGE

	HIGH >.050	MID .050 -.017	LOW <.017	TOTAL
DISTRICT ITM				
H-ITM	38	231	29	298
PERCENT	.08	.47	.06	.61
L-ITM	19	150	22	191
PERCENT	.04	.31	.04	.39
DIST. TOTALS	57	381	51	489

EMOTIONALLY IMPAIRED
IDENTIFICATION RANGE

	HIGH >.014	MID .014 -.005	LOW <.005	TOTAL
DISTRICT ITM				
H-ITM	57	154	65	276
PERCENT	.12	.31	.13	.56
L-ITM	38	96	79	213
PERCENT	.08	.20	.16	.44
DIST. TOTALS	95	250	144	489

EDUCABLE MENTALLY IMPAIRED
IDENTIFICATION RANGE

	HIGH >.010	MID .010 -.004	LOW <.003	TOTAL
DISTRICT ITM				
H-ITM	22	104	79	205
PERCENT	.04	.21	.16	.42
L-ITM	43	136	105	284
PERCENT	.09	.28	.21	.58
DIST. TOTALS	65	240	184	489

Aggregated ITM Rates and Aggregated Identification Ranges

Charting the 489 school districts into groups which demonstrate homogeneous identification efforts and similar mainstreaming practices follows. Table 3.9 portrays the district groupings that exist when comparing similar ITM rates within similar identification ranges. The columns of the table demonstrate district identification efforts. Column one (1) portrays districts that demonstrate the least amount of variation in identification practices: all three categories are identified within a mid-identification range. Column eight (8) portrays the districts that demonstrate the most amount of variation in identification practices: all three categories are identified outside of the mid-identification range.

The rows of the table demonstrate the mainstreaming efforts. Row one portrays districts which mainstream all three categories of the mildly handicapped population at a H-ITM rate. Row eight portrays the districts that mainstream all three categories of the mildly handicapped population at a L-ITM rate.

As observed in Table 3.9: Column one (Total), 112 school districts demonstrate similar identification efforts. These districts, 23% of the 489 school district population, identify three categories of mildly handicapped students within a mid-identification range. Row one (Total) indicate that 131 districts demonstrate

Table 3.9
COMPARISON OF AGGREGATED ITM RATES FOR THREE DIAGNOSTIC CATEGORIES WITHIN AGGREGATED IDENTIFICATION RANGES

Variation Low		COMBINED IDENTIFICATION RANGES							Variation High	
		LD EI EMI (1)	LD EI EMI* (2)	LD EI* EMI (3)	LD* EI EMI (4)	LD EI* EMI* (5)	LD* EI EMI* (6)	LD* EI* EMI (7)	LD* EI* EMI* (8)	TOTAL
MAINSTREAMING RATES - High - Low -	LD EI EMI	30	27	21	7	24	8	5	9	131 .268
	LD EI EMI-	14	25	13	1	17	4	1	9	84 .172
	LD EI- EMI	6	5	7	0	7	0	0	5	30 .061
	LD- EI EMI	6	6	6	3	2	1	1	4	29 .059
	LD EI- EMI-	13	5	9	1	13	3	2	4	50 .102
	LD- EI EMI-	9	8	2	2	6	3	3	1	34 .070
	LD- EI- EMI	4	2	5	1	1	0	2	1	16 .033
	LD- EI- EMI-	30	16	26	5	21	6	5	6	115 .235
TOTAL		112	94	89	20	91	25	19	39	489
PRCNT.		.229	.192	.182	.041	.186	.051	.039	.080	100

* = Identification rate is outside mid-identification range
- = Mainstreaming rate is L-ITM

similar effort in mainstreaming students in the three diagnostic categories. These 131 districts, 27% of the 489 school district population, mainstream all three types of mildly handicapped students at a H-ITM rate. Row eight (Total) indicates that 115 districts demonstrate similar effort in mainstreaming the three diagnostic categories. These districts, 24% of the 489 school district population, mainstream all three types of mildly handicapped students at a L-ITM rate.

The mapping of Michigan school districts on identification and mainstreaming practices resulted in two research groups for the study. The 30 districts in the first cell (column one, row one) mainstream at a H-ITM rate when the identification rate is held constant within a mid-identification range. The 30 districts in cell 57 (column one, row eight) mainstream at a L-ITM rate when the identification rate is held constant within the mid-identification range. The two groups demonstrated contrasting mainstreaming practices within a homogeneously identified special education population. These two sets of 30 school districts served as the research groups for the tests of hypotheses in the study.

CHAPTER IV

METHODOLOGY

This chapter presents a description of the methodology for the study. The major research question is discussed and the eight hypotheses tested are presented. A description of the general research design is provided and the population of interest is defined. The process for selecting the research groups for testing the district level hypotheses and the process for selecting the sample population for testing the building level hypotheses are presented. Instrumentation and procedures for data collection are discussed. The chapter concludes with a rationale for the procedures and analysis of the study.

Major Research Question and Hypotheses

The dual purpose of the study was, first, to identify and describe the mainstreamed population in the public school districts across the State of Michigan and, second, to identify system characteristics associated with high and low rates of mainstreaming. The major research question addressed in this study was whether or not relationships exist between system characteristics of an educational organization and rates of mainstreaming (ITM) reported by educators in the organization. It was postulated that

school districts mainstreaming an above average percentage of the mildly handicapped population differ from school districts mainstreaming a below average percentage of the mildly handicapped population on several system characteristics. Also, it was speculated that variation associated with system characteristics correlated with high and low mainstreaming rates would be more localized at the building level rather than the district level in educational organizations. The major research question of the study is presented as follows.

> Does a relationship exist between system characteristics of an educational organization and the rates of mainstreaming reported by educators in the organization?

Eight hypotheses speculating on a relationship between mainstreaming rates and system characteristics at district and individual school building levels were developed to explore the research question. The eight major hypotheses of the study are presented as follows.

DISTRICT LEVEL HYPOTHESES:

HYPOTHESIS 1: There is no difference between the mean per pupil expenditure for the basic instructional programs in Michigan school districts with a High Instructional Time in the Mainstream rating and Michigan school districts with a Low Instructional Time in the Mainstream rating.

HYPOTHESIS 2: There is no difference between the mean per pupil expenditure for the added needs instructional programs in Michigan school districts with a High Instructional Time in the Mainstream rating and Michigan school districts with a Low Instructional Time in the Mainstream rating.

HYPOTHESIS 3: There is no difference between the mean teacher/pupil ratio in Michigan school districts with a High Instructional Time in the Mainstream rating and Michigan school districts with a Low Instructional Time in the Mainstream rating.

HYPOTHESIS 4: There is no difference in the mean size of Michigan school districts with a High Instructional Time in the Mainstream rating and Michigan school districts with a Low Instructional Time in the Mainstream rating.

BUILDING LEVEL HYPOTHESES:

HYPOTHESIS 5: There is no difference in the types of general education classes accessed by mainstreamed students in schools within districts with a High Instructional Time in the Mainstream rating and schools within districts with a Low Instructional Time in the Mainstream rating.

HYPOTHESIS 6: There is no difference in the number of 'alternative programs' available in the general education programming in schools within districts with High Instructional Time in the Mainstream rating and schools within districts with a Low Instructional Time in the Mainstream rating.

HYPOTHESIS 7: There is no difference in the type of 'alternative programs' in the general education programming available in schools within districts with a High Instructional Time in the Mainstream rating and schools within districts with a Low Instructional Time in the Mainstream rating.

HYPOTHESIS 8: There is no difference in the number of special education referrals received in schools within districts with a High Instructional Time in the Mainstream rating and schools within districts with Low Instructional Time in the Mainstream rating.

Design of the Study

Two methods of research were employed for the study: analysis of existing data and a cross-sectional survey design (Babbie, 1973). The district level hypotheses were tested using data obtained from Bulletin 1014: Michigan K-12 School Districts Ranked by Selected Financial Data

(1983). The bulletin is published by the Board of Education for the State of Michigan and provided data regarding district size, teacher/pupil ratio and per pupil expenditures for the basic instructional programs and the added needs instructional programs. The second set of hypotheses, the building level hypotheses, were tested using data gathered from questionnaires in a cross-sectional survey. Questionnaires were sent to principals and special education teachers in all the elementary and middle school buildings in 19 school districts. The information was analyzed using the Statistical Package for the Social Sciences, (SPSS: Nie, Hull, Jenkins, Steinbrenner & Bent, 1975).

Procedures for Selecting the Sample Population

The population of interest for the study was the local public school district in the state of Michigan. Preliminary examination of existing data regarding the number of LD, EI, and EMI students mainstreamed in Michigan school districts was conducted. It was established that 39 school districts operated their special education programs through a cooperative arrangement within an Intermediate School District (ISD) organization. The mainstreaming practices of these 39 districts could not be determined and the districts were eliminated from the study. Preliminary analysis of data from the remaining 489 school districts was undertaken to determine district identification and

mainstreaming measures. Development of these measures are discussed in Chapter III.

Sample Population for Testing District Level Hypotheses

From the data analysis regarding identification and mainstreaming practices of Michigan school districts it was determined that 112 school districts identify all three diagnostic categories within a mid-identification range: (LD 5.0%-1.7% / EI 1.4%-.5% / EMI 1.0%-.4%). Within these 112 districts, only 30 mainstreamed mildly handicapped students in the three diagnostic categories at a H-ITM rate: (LD 72%-100% / EI 59%-100% / EMI 33%-100%). Contrastingly, 30 school district mainstreamed mildly handicapped students in the three diagnostic categories at a L-ITM rate: (LD 0%-71% / EI 0%-58% / EMI 0%-32%). The two groups of 30 school districts, each demonstrating similar identification efforts, but contrasting mainstreaming efforts, were used as the research groups for testing the district level hypotheses.

Sample Population for Testing Building Level Hypotheses

Prior to selecting a sample of districts to survey for testing the building level hypotheses, attention was given to two considerations: first, location of special education programs in the district, and, second, district size. It was speculated that the location of special education classrooms across the district would effect mainstreaming practices. For example, if the majority of the special

education classrooms in a district were concentrated in one or two school buildings then a handicapped student's access to the general education programming might be limited. However, if the special education classrooms in the district were more evenly distributed among the district's buildings then a handicapped student might have more access to the general education programming. Therefore, a total of 18 directors of special education from the two research groups of 30 H-ITM and 30 L-ITM districts were randomly selected and surveyed by phone to determine the location of special classrooms in their districts.

The directors were told that preliminary research activities regarding mainstreaming practices in the state of Michigan had been conducted over the past six months and further information was needed. The surveyor read the name of each elementary and middle school building in the district and asked the director to describe any special education programming that existed in the building. The location of the special education classrooms in eighteen districts was established.

The 18 districts contacted varied in the number of elementary and middle school buildings existing with their boundaries. The number of elementary buildings ranged from two buildings to 15 buildings. The number of middle schools located in the surveyed districts ranged from one to three buildings. Twenty-two percent of the surveyed districts located special education classrooms in 50%-75%

of the elementary school buildings in the district. Thirty-nine percent of the 18 districts located special education classrooms in 75%-80% of the elementary buildings. The remaining seven districts (38%) located special education classrooms in all of the elementary school buildings in the district. It was determined from the telephone survey that special education classrooms were not concentrated in a single building in school districts and this issue should not be a concern when selecting the sample population of school districts to test the building level hypotheses.

A second consideration before selecting the districts for testing the building level hypotheses was the district size. Results of the district level hypotheses testing indicated the size of the school district is related to mainstreaming rates (ITM) with large districts mainstreaming handicapped students at a L-ITM rate. Thus the sample of districts selected to test the building level hypotheses required a greater number of L-ITM districts in order for the sample to more representative of the general population.

A listing of Michigan school districts grouped into 13 levels of membership size was obtained from Bulletin 1014, a document published by the Michigan State Board of Education. Table 4.1 presents the number of school districts in the 13 levels. One district, Detroit Public Schools District was eliminated due to the unparalleled

size of the district. Additionally, the table presents the number of H-ITM and L-ITM districts in each of the membership levels.

Table 4.1
NUMBER OF MICHIGAN SCHOOL DISTRICTS AND NUMBER OF H-ITM AND L-ITM DISTRICTS IN THIRTEEN LEVELS OF MEMBERSHIP SIZE

MEMBERSHIP SIZE	NUMBER OF SCH. DIST	NUMBER OF H-ITM DIST	NUMBER OF L-ITM DIST
0 - 500	43	2	0
501 - 1,000	90	4	1
1,001 - 1,500	87	8	4
1,501 - 2,000	69	1	6
2,001 - 2,500	56	8	3
2,501 - 3,000	40	3	4
3,001 - 3,500	27	1	2
3,501 - 4,000	17	1	1
4,001 - 4,500	19	1	0
4,501 - 5,000	11	1	1
5,001 - 10,000	50	0	5
10,001 - 20,000	13	0	2
20,001 - 50,000	6	0	1
TOTAL	528	30	30

The 13 levels were collapsed into four membership size levels with approximately the same number of districts in each level. The percentage of the total number of Michigan districts at each level was used as a guide to select the number of H-ITM and L-ITM districts from each level for the sample population used in testing the building level hypotheses. For example, 29.5% of the 528 school districts fell into Level 2. Thus 29.5% of the H-ITM/L-ITM districts, also in Level 2, were selected at random as part of the sample population to test the building level

hypotheses. Table 4.2 presents the number of Michigan school districts in each of the established four levels. Again, the number of H-ITM/L-ITM districts within each level is provided. The number enclosed within parentheses designates the number of of H-ITM or L-ITM districts selected. Since it was determined large districts tend to mainstream at a L-ITM rate, one additional L-ITM district from Level 3 and two L-ITM districts from Level 4 were selected to develop a more representative sample.

Table 4.2
NUMBER OF MICHIGAN SCHOOL DISTRICTS AND NUMBER OF H-ITM AND L-ITM DISTRICTS IN FOUR LEVELS OF MEMBERSHIP SIZE

DISTRICT SIZE	NUMBER OF DIST	PERCENT OF DIST	NUMB. OF H-ITM	NUMB.OF L-ITM
0-1,000	133	.252	6 (1)	1 (1)
1,001-2,000	156	.295	9 (3)	10 (3)
2,001-3,501	123	.233	12 (3)	9 (3)
3,501-50,000	116	.220	3 (2)	10 (3)
TOTAL	528	100	30 (9)	30 (10)

The 19 school districts selected represented 56 elementary school buildings and 21 middle school buildings for a total of 77 buildings.

Instrumentation

An instrumentation packet requesting information from administrators and special education teachers in the 77 school buildings was developed and is available for examination in Appendix A. Since programming for elementary and middle school aged students obviously differ, two slightly different questionnaires for elementary and middle school administrators were developed. The section requesting information regarding the types and numbers of alternative programs available in elementary and middle school varied on the administrators' questionnaires. The remaining questions on the two questionnaires, however, were identical. Also, the teacher questionnaires were identical except for the listing of the grades following the question: "Circle the grades represented in your classroom."

The administrator's questionnaire was not field tested. The teacher questionnaire, however, was field tested using elementary and middle school special education teachers attending a weekend, graduate seminar. The 31 teacher-subjects were representative of both large and small districts across the State. The length of time to complete the questionnaire averaged approximately 15 minutes. The original questionnaire contained several attitude questions, however, these questions were eliminated from the questionnaire as the study took form

and the type of information requested of the teachers in the final questionnaire was factual information only. Other minor modifications in the format of the questionnaire were made to improve clarity and comprehension.

Procedures for Data Collection

The process used to collect data to test the district level hypotheses was an examination of existing data provided by the Michigan Department of Education. The process used to collect data to test the building level hypotheses consisted of mailing packets to 77 principals of elementary and middle school buildings in the 19 selected H-ITM/L-ITM districts.

The teacher questionnaires were included in the packet sent to the principal. The principal was asked to distribute a teacher questionnaire to any special education teacher consultant and/or special education classroom teacher in the building who worked with LD, EI, and/or EMI students. Since 10 of the districts in the population had been contacted in the phone survey, the exact number of teacher questionnaires needed for the buildings was known. Where the number of special education teachers in the building was unknown, the size of the building was examined and enough questionnaires were sent to cover the number of special education teachers needed for 10% of the school's enrollment. The number of teacher questionnaires sent to

the schools averaged three per packet. The packets distributed included the information listed below: (see Appendix A).

1. a personalized cover letter to the principal describing the broad purpose of the study and directions for distribution of the teacher questionnaires;
2. one questionnaire for the principal entitled: Administrator's Report: School Year 1984-1985;
3. post paid, pre-addressed envelop for return data from the principal; and
4. addressed envelopes containing a questionnaire for the special education teachers entitled: Special Education Teacher Report: School Year 1984-1985 and, a post paid, pre-addressed envelop for return data from the teacher.

Analysis and Rationale

The dual purpose of the study required use of different types of statistical analysis for the research questions and tests of hypotheses. The research questions and hypotheses were primarily directed toward discovering and evaluating differences between effects, rather than the effects themselves. Thus, the analysis compared two groups of school districts with the group means as the basis for comparison. The data were analyzed using the Statistical Package for the Social Sciences.

The selection process of the research groups used to test the district level hypotheses controlled for variation in identification practices among 528 school districts. The process resulted in the development of two research groups which demonstrated similar practices in

identifying handicapped students but contrasting practices in mainstreaming those students: one group mainstreamed at a H-ITM rate while the other group mainstreamed at a L-ITM rate.

The first four hypotheses, district level hypotheses, speculated that no significant differences existed between high and low mainstreaming districts on the amount or level of four system characteristics . A T-test provided the capability of computing the probability levels for testing whether or not the difference between the sample means was significant. Since it was unknown whether the two populations had the same variance, initially an F-test of sample variances was performed using an alpha level of .05. The T-test analysis was then performed to determined the significance of the differences between the sample means. An alpha level of .05 was also used for the T-test of sample means.

The F-test and T-test were also employed when testing three of the four building level hypotheses. Hypotheses 5, 6, and 8 speculated on differences existing between school buildings in high and low mainstreaming districts. An alpha level of .05 was set for both the F-test and T-test analysis. Hypothesis 7, speculating on the differences between the type of alternative programming available in schools in H-ITM and L-ITM districts, was tested using a chi-square test of statistical significance and the Fisher exact test of statistical significance. The tests are

similar in purpose and each determines whether a systematic relationship exists between two variables. The chi-square test is employed when the sample populations are large in number while the Fisher exact test is employed when the sample numbers are low. The chi-square test was used to test the elementary school population findings. However, since the number of principal-respondents for the middle school groups was considerably less, due to fewer numbers of middle schools in districts in the general population, the Fisher exact test was used for the test of relationship for the middle school population.

Summary

Questions of whether or not system characteristics of an educational organization are related to mainstreaming practices of the organization is exploratory research. Throughout the research of literature, no reports of this type of questioning or research studies were located. The questioning is, however, of importance to the educational systems that are interested in adding quality and understanding to the mandated provision of mainstreamed programming.

The study was designed to define the mainstreamed population when the variables associated with identification practices are controlled. The design allowed for an exploration into whether system characteristics of the educational organization might add

to or subtract from mainstreaming practices in school districts.

This chapter has presented the questions and hypotheses used to begin the exploration. The population of interest was defined and the processes to select the research groups and the sample population used in testing the district and building level hypotheses were presented. Finally, the statistical analysis employed to test the hypotheses was discussed. The findings of the questions and hypotheses testing follow in Chapter V.

CHAPTER V

RESULTS AND FINDINGS

Chapter V begins with a report of response to the cross-sectional survey. The report is followed by a three part presentation of the results of the study. The first part presents the descriptive statistics used to develop the educational descriptive profile of the mainstreamed population. In the second part, results of the hypotheses testing are reported. The results of the tests of district level hypotheses, along with tests of significance of related issues, are presented first. The results of the tests of building level hypotheses follow. In the final part, a summarizing listing of the findings of the tests of hypotheses is presented.

Cross Sectional Survey Response

The population of interest was defined as the public school districts in Michigan. Sixty districts demonstrating similar identification rates but contrasting mainstreaming rates were selected to test the district level hypotheses. From this population, a sample population of 19 districts was selected and surveyed for testing the building level hypotheses.

The response rates of principals and special education teachers in elementary and middle school buildings in the 19 districts surveyed are presented in Table 5.1.

Table 5.1
SUMMARY OF RESPONSE RATES FOR SCHOOL DISTRICTS, PRINCIPALS AND SPECIAL EDUCATION TEACHERS IN THE CROSS SECTIONAL SURVEY OF NINETEEN MICHIGAN SCHOOL DISTRICTS

	Population Surveyed			Response Rate			Percent Response	
	H-ITM	L-ITM	Total	H-ITM	L-ITM	Total	H-ITM	L-ITM
SCHOOL DISTRICTS	9	10	19	9	10	19	100	100
BUILDINGS								
Elem.	22	34	56	18	23	41	.82	.68
Middle	10	11	21	7	8	15	.70	.73
PRINCIPALS								
Elem.	22	34	56	14	22	36	.64	.65
Middle	10	11	21	5	7	12	.50	.64
TEACHERS								
Elem.	NB		NB	26	41	67	.82*	.59*
Middle	NB		NB	14	16	30	.70*	.73*

NB: The exact number of special education teachers in each building surveyed was unknown. Therefore, the enrollment of each building was examined and the number of questionnaires sent matched the number of special education teachers needed for 10 percent of the building's enrollment (15 students per teacher).

* Percent based on the number of school buildings represented by one or more teacher responses.

As can be seen in Table 5.1, information was received from all of the districts surveyed. Responses from 41 of the the 56 elementary school buildings surveyed were received. The response rate of the elementary buildings in

H-ITM districts (82%) was slightly higher than the response rate of the elementary buildings in the L-ITM districts (68%). Of the 21 middle schools surveyed, information from ' buildings was received with a similar response rate for middle school buildings in H-ITM (70%) and L-ITM (73%) districts.

The four response rates of principals in elementary and middle schools in both H-ITM and L-ITM districts were relatively similar with the response rate of middle school principals in H-ITM districts (50%) being slightly lower by comparison. The response rates of the special education teacher groups were established by determining how many schools were represented in the pool of teacher questionnaires returned. Eighty-two percent of the elementary schools in H-ITM districts surveyed were represented by one or more teacher responses, while 59% of the elementary schools in L-ITM districts were represented by teacher(s) responses. The percentage of middle schools in H-ITM (70%) and in L-ITM (73%) districts represented by one or more teacher response were relatively similar.

Five of the elementary buildings and three of the middle school buildings were represented by teacher responses exclusively. Correspondingly, three of the elementary buildings and one of the middle school buildings were represented by principal responses exclusively.

Descriptive Statistics for the Educational Descriptive Profile of the Mainstreamed Population

General Education Classes Accessed

One of the student characteristics examined in developing the educational descriptive profile of the mainstreamed population was the type of general education class accessed by the population. In order to determine the attendance rate of mainstreamed students in general education classes, special education teachers in the 19 districts surveyed were asked to indicate the number of LD, EI, and EMI students in their classes who were mainstreamed into general education classes. The questionnaire listed seven different general education classes along with an eighth option entitled `Other'. The number of special education students in the three diagnostic categories the teachers listed as mainstreamed into general education classes was referenced against the total number of special education students in each category reported in the classroom. A representative percentage of the total number of students in each category accessing the different general education classes was established. In Table 5.2, general education classes with attendance rates for the elementary mildly handicapped students are presented. The statistics presented in the table should be viewed as descriptive. The significant differences noted in the table will be discussed in the following section reporting on the results of the tests of hypotheses.

In Table 5.2, the two lowest attendance rates reported for all three types of elementary, mildly handicapped students are attendance rates for reading and language arts classes. The two highest attendance rates reported for the elementary students are attendance rates for gym and art classes.

Table 5.2
PERCENTAGE OF MILDLY HANDICAPPED STUDENTS MAINSTREAMED INTO SEVEN GENERAL EDUCATION CLASSES IN ELEMENTARY SCHOOLS IN H-ITM AND L-ITM DISTRICTS

GEN.ED. CLASSES	LEARNING DISABLED			EMOTIONALLY IMPAIRED			EDUCABLE MENTALLY IMPAIRED		
	H-ITM	L-ITM	Diff	H-ITM	L-ITM	Diff	H-ITM	L-ITM	Diff
Reading	.33	.14	.19*	.50	.12	.38*	.13	.004	.13
Math	.60	.50	.10	.60	.21	.39*	.26	.06	.20
L.Arts	.49	.24	.25*	.67	.13	.54*	.27	.004	.27
S. Studs.	.66	.60	.06	.70	.28	.42*	.49	.15	.34
Science	.68	.61	.07	.77	.29	.48*	.59	.15	.44*
Art	.74	.80	.06	.78	.52	.26	.65	.41	.24
Gym	.79	.86	.07	.90	.66	.23	.85	.59	.26
Other	.51	.22	.29	.67	.46	.21	.66	.50	.16

* significant at alpha level .05

Table 5.3 presents the general education classes accessed by mainstreamed students in the middle schools. The attendance rates of the middle school students follow the same pattern as the elementary attendance rates. The two lowest attendance rates reported for the middle school

mildly handicapped population were attendance rates for reading and language arts classes.

Table 5.3
PERCENTAGE OF MILDLY HANDICAPPED STUDENTS MAINSTREAMED INTO SEVEN GENERAL EDUCATION CLASSES IN MIDDLE SCHOOLS IN H-ITM AND L-ITM DISTRICTS

GEN. ED. CLASSES	LEARNING DISABLED			EMOTIONALLY IMPAIRED			EDUCABLE MENTALLY IMPAIRED		
	H-ITM	L-ITM	Diff	H-ITM	L-ITM	Diff	H-ITM	L-ITM	Diff
Reading	.18	.17	.01	.28	.06	.22	.00	.16	.16
Math	.56	.43	.13	.46	.29	.17	.25	.28	.03
L. Arts	.13	.24	.11	.37	.21	.16	.00	.20	.20
S. Studs	.69	.38	.31	.80	.32	.48*	.33	.01	.27
Science	.82	.44	.38	.66	.38	.28	.60	.00	.60*
Art	.83	.49	.34	.71	.46	.24	.75	.57	.18
Gym	1.00	.80	.20	.89	.64	.25	.91	.68	.23
Other	.25	.47	.22	.23	.59	.36	.34	.35	.00

* significant at alpha level .05

Length of Time in the Mainstream

A second student characteristic examined in developing the educational descriptive profile was the amount of time mainstreamed students spend in the general education programming. Special education teachers were asked to indicate the length of time LD, EI, and EMI students were mainstreamed into general education programming. Six time periods were listed. The number of special education students in each of the three categories the teachers

listed as mainstreamed for a certain time period was referenced against the total number of students in each category reported in the classroom. A representative percentage of the total number of students in each category accessing general education programs for differing amounts of time was established. In Table 5.4, the amount of time elementary mildly handicapped students access general education programming is presented.

Table 5.4
PERCENT OF MILDLY HANDICAPPED STUDENTS MAINSTREAMED FOR DIFFERENT TIME PERIODS IN ELEMENTARY SCHOOLS IN H-ITM AND L-ITM DISTRICTS

TIME PERIOD	LEARNING DISABLED			EMOTIONALLY IMPAIRED			EDUCABLE MENTALLY IMPAIRED		
	H-ITM	L-ITM	Diff	H-ITM	L-ITM	Diff	H-ITM	L-ITM	Diff
No Mnstrm.	.00	.14	.14	.02	.18	.16	.00	.23	.23*
Less 1 Hr.	.05	.10	.05	.02	.52	.50*	.11	.43	.32*
2 Hour	.11	.23	.12	.16	.12	.04	.29	.15	.14
3 Hours	.43	.32	.11	.46	.05	.41*	.33	.12	.21
4 Hours	.16	.17	.01	.09	.11	.02	.05	.00	.05
4 Hrs. +	.20	.12	.08	.26	.07	.19	.15	.00	.15

* significant at alpha level .05

As can be seen in Table 5.4, the median time for all elementary mildly handicapped student in H-ITM districts is three hours per day. While the median amount of time for the elementary learning disabled student in L-ITM and H-ITM districts is similar, the median amount of time for

emotionally impaired and educable mentally impaired students in L-ITM districts is approximately two or more hours less then their counterparts in the H-ITM districts.

The percentage of middle school students accessing the general education programming for different time periods appears in Table 5.5.

Table 5.5
PERCENTAGE OF MILDLY HANDICAPPED STUDENTS MAINSTREAMED FOR DIFFERENT TIME PERIODS IN MIDDLE SCHOOLS IN H-ITM AND L-ITM DISTRICTS

TIME PERIOD	LEARNING DISABLED			EMOTIONALLY IMPAIRED			EDUCABLE MENTALLY IMPAIRED		
	H-ITM	L-ITM	Diff	H-ITM	L-ITM	Diff	H-ITM	L-ITM	Diff
No Mnstrm.	.00	.00	.00	.02	.00	.02	.00	.00	.00
Less 1 Hr.	.08	.007	.073	.06	.20	.14	.14	.24	.10
2 Hours	.11	.26	.15	.03	.13	.10	.51	.17	.34
3 Hours	.21	.23	.02	.24	.26	.02	.06	.46	.40
4 Hours	.40	.30	.10	.37	.19	.18	.31	.05	.26
4 Hrs.More	.24	.23	.01	.29	.24	.05	.00	.08	.08

Comparing Tables 5.4 and 5.5, the median mainstreamed time for the middle school mildly handicapped students in the three diagnostic categories generally increases over the median time established for the elementary school population. While the median time for middle school learning disabled and emotionally impaired students is approximately four hours, the median amount of time for the educable mentally impaired student is between two and three

hours. With the exception of educable mentally impaired students in the H-ITM districts, the amount of mainstreamed time for mildly handicapped students in middle schools appears to increase by one hour over the amount of mainstreamed time for mildly handicapped students in elementary schools.

Results of Hypotheses Testing

District Level Hypotheses

Findings for Test of Hypothesis 1: Since the general funding philosophy supporting special education programs is "the dollar follows the child," it was hypothesized there would be a difference in the expenditure for special education instruction in high and low mainstreaming districts and, correspondingly, a difference in the expenditure for general education instruction in high and low mainstreaming districts. To test the hypotheses, the costs of activities dealing directly with the teaching of sudents in the classroom, or classroom situations, for special and general education were examined. Two separate hypotheses were developed to test the differences between the mean per-pupil expenditure for the instructional programs in special education and in general education programing.

The first district level hypothesis tested against the two groups of 30 districts, each demonstrating similar identification practices but contrasting mainstreaming

practices, focused on the level of monetary resources available for instruction in general education programming in H-ITM and L-ITM school districts. Hypothesis 1, stated in the null form, is restated here.

H.1 There is no difference between the mean per pupil expenditure for the basic instructional programs in Michigan school districts with a High Instructional Time in the Mainstream rating and Michigan school districts with a Low Instructional Time in the Mainstream rating.

The findings of the test of H.1 are presented in Table 5.6.

Table 5.6
TEST OF SAMPLE MEANS OF THE PER PUPIL EXPENDITURE FOR BASIC INSTRUCTIONAL PROGRAMS IN H-ITM AND L-ITM DISTRICTS

ITM RATE	NUMBER OF CASES	MEAN	STANDARD DEVIATION	T VALUE	2 TAIL PROB.
H-ITM	30	5370.7	3993.7		
L-ITM	30	6335.7	3744.2	.97	.338

The results indicate the mean per pupil expenditure for the basic instructional programs in districts with a H-ITM rating does not vary significantly from the mean per pupil expenditure in districts with a L-ITM rating. Therefore, Hypothesis 1 is not rejected.

Findings for Test of Hypothesis 2: The second district level hypothesis tested speculates on a difference between the level of monetary resources available for special education instructional programs in H-ITM and L-ITM school districts. Hypothesis 2 is restated here.

H.2 There is no difference between the mean per pupil expenditure for the added needs instructional programs in Michigan school districts with a High Instructional Time in the Mainstream rating and Michigan school districts with a Low Instructional Time in the Mainstream rating.

The findings of the test of H.2 are presented in Table 5.7.

Table 5.7
TEST OF SAMPLE MEANS OF THE PER PUPIL EXPENDITURE FOR ADDED NEEDS INSTRUCTIONAL PROGRAMS IN H-ITM AND L-ITM DISTRICTS

ITM RATE	NUMBER OF CASES	MEAN	STANDARD DEVIATION	T VALUE	2 TAIL PROB.
H-ITM	30	429.6	469.5		
L-ITM	30	592.4	669.2	1.09	.280

The results indicate the mean per pupil expenditure for the added needs instructional programs in Michigan school districts with a H-ITM rating and Michigan school districts with a L-ITM rating does not vary significantly. Therefore, Hypothesis 2 is not rejected.

Findings for Test of Hypothesis 3: It was speculated that general education systems with large classes would be less receptive to mainstreamed students, while systems with smaller classes might be more receptive to mainstreaming students. The third district level hypothesis tested speculates that district teacher/pupil ratios in the H-ITM districts are not significantly different than the teacher/pupil ratios in the L-ITM school districts. Hypothesis 3 is restated here.

H.3 There is no difference between the mean teacher/pupil ratio in Michigan school districts with a High Instructional Time in the Mainstream rating and Michigan school districts with a Low Instructional Time in the Mainstream rating.

The findings for the test of H.3 are presented in Table 5.8.

Table 5.8
TEST OF SAMPLE MEANS OF THE TEACHER/PUPIL RATIO IN H-ITM AND L-ITM SCHOOL DISTRICTS

ITM RATE	NUMBER OF CASES	MEAN	STANDARD DEVIATION	T VALUE	2 TAIL PROB.
H-ITM	30	23.03	3.40		
L-ITM	30	22.67	2.71	.46	.64

The results indicate the teacher/pupil ratio in H-ITM and L-ITM districts does not vary significantly. Therefore, Hypothesis 3 is not rejected.

Additional analyses were conducted to test the mean teacher/pupil ratios for the surveyed elementary and middle school buildings in H-ITM and L-ITM districts. The ratios were determined from the principals' responses on the questionnaires. The findings for the test of means for the teacher/pupil ratio in the elementary school buildings surveyed are presented in Table 5.9 and the findings for the test of means for the teacher/pupil ratio in the middle school buildings are presented in Table 5.10.

The results indicate there is not a significant difference between the teacher/pupil ratios in either the

elementary or middle school buildings surveyed in H-ITM and L-ITM districts.

Table 5.9
TEST OF SAMPLE MEANS OF THE TEACHER/PUPIL RATIO IN ELEMENTARY SCHOOL BUILDINGS IN H-ITM AND L-ITM DISTRICTS

ITM RATE	NUMBER OF CASES	MEAN	STANDARD DEVIATION	T VALUE	2 TAIL PROB.
H-ITM	14	24.36	1.22		
L-ITM	21	24.67	3.73	.35	.727

Table 5.10 provides a comparison for the middle school teacher/pupil ratios in the surveyed buildings.

Table 5.10
TEST OF SAMPLE MEANS OF THE TEACHER/PUPIL RATIO IN MIDDLE SCHOOL BUILDINGS IN H-ITM AND L-ITM DISTRICTS

ITM RATE	NUMBER OF CASES	MEAN	STANDARD DEVIATION	T VALUE	2 TAIL PROB.
H-ITM	5	22.2	3.70		
L-ITM	5	17.8	7.12	1.23	.255

The T-test analyses of sample means of teacher/pupil ratios in both the elementary and middle school buildings surveyed indicate the ratios do not vary significantly. These findings are similar to the findings of the T-test analysis of sample means for the district level teacher/pupil ratios.

A third teacher/pupil ratio was explored. The mean special education teacher/pupil ratios (caseload vs. FTE) in the surveyed elementary and middle school buildings were also examined. The ratios were determined from teacher responses on the questionnaires. The findings for the test of mean special education teacher/pupil ratio in elementary schools is presented in Table 5.11. For comparison, the findings for the test of means of the special education teacher/pupil ratio in middle schools is shown in Table 5.12.

Table 5.11
TEST OF SAMPLE MEANS OF THE SPECIAL EDUCATION TEACHER/PUPIL RATIO IN ELEMENTARY BUILDINGS IN H-ITM AND L-ITM DISTRICTS

ITM RATE	NUMBER OF CASES	MEAN	STANDARD DEVIATION	T VALUE	2 TAIL PROB.
H-ITM	15	15.07	3.39		
L-ITM	20	12.50	3.50	2.17	.037 *

* significant at alpha level .05

Table 5.12
TEST OF SAMPLE MEANS OF THE SPECIAL EDUCATION TEACHER/PUPIL RATIO IN MIDDLE SCHOOLS IN H-ITM AND L-ITM DISTRICTS

ITM RATE	NUMBER OF CASES	MEAN	STANDARD DEVIATION	T VALUE	2 TAIL PROB.
H-ITM	6	13.50	2.74		
L-ITM	7	15.29	3.09	1.09	.298

As can be seen in Tables 5.11 and 5.12, special education teacher/pupil ratios in the elementary buildings in H-ITM districts vary significantly from the ratios in elementary buildings in L-ITM districts. However, a significant difference between the special education teacher/pupil ratios in H-ITM and L-ITM districts does not exist for the middle school population.

One additional analysis, centering around the issue of whether class size influences mainstreaming practices, was explored. It was speculated that teacher associations may have contract language that influences the number of students mainstreamed into general education programming. Therefore, building principals at both the elementary and middle school level were asked, "Is there any contract language in the teacher's contract that allows for weighting special education students placed in a general education classroom or otherwise allows for a reduction of the teacher/pupil ratio in classrooms where mainstreaming occurs?" The results of a chi-square test of the responses of elementary principals are reported in Table 5.13, followed by the results of a Fisher's exact test analysis of responses from middle school principals in Table 5.14.

Analyses regarding the presence or absence of a `weighting formula' for mainstreaming handicapped students in either elementary or middle school buildings suggest that no relationship exists between contract language

regarding weighting mainstreamed students and high or low mainstreaming rates.

Table 5.13
CHI-SQUARE ANALYSIS OF CONTRACT LANGUAGE REGARDING WEIGHTING MAINSTREAMED STUDENTS IN ELEMENTARY BUILDINGS IN H-ITM AND L-ITM DISTRICTS

	Contract Language	No Contract Language	Chi-Square
H-ITM	3	11	.899
L-ITM	8	14	

Table 5.14
FISHER'S EXACT TEST ANALYSIS OF CONTRACT LANGUAGE REGARDING WEIGHTING MAINSTREAMED STUDENTS IN MIDDLE SCHOOL BUILDINGS IN H-ITM AND L-ITM DISTRICTS

	Contract Language	No Contract Language	Fisher's Exact
H-ITM	1	4	.777
L-ITM	1	4	

The consideration that principals might intervene in placing mainstreamed students in general education programming independent of contract language requirements was also explored. All elementary and middle school principals were asked, "Are you able to intervene or organize classrooms in any way to reduce the number of regular education students in classrooms where mainstreaming occurs?" In Table 5.15, a chi-square analysis of the responses of elementary principals is presented.

Table 5.15
CHI-SQUARE ANALYSIS OF PRINCIPAL INTERVENTION WHEN MAINSTREAMING MILDLY HANDICAPPED STUDENTS IN ELEMENTARY BUILDINGS IN H-ITM AND L-ITM DISTRICTS

	Intervention	No Intervention	Chi-square
H-ITM	8	6	.904
L-ITM	9	13	

The results suggest that no relationship exists between intervention of the principal to alter or change class size when mainstreaming mildly handicapped students and high or low rates of mainstreaming.

In Table 5.16, the responses from middle school principals regarding intervention when mainstreaming mildly handicapped students are analyzed using the Fisher's exact test.

Table 5.16
FISHER'S EXACT TEST ANALYSIS OF PRINCIPAL INTERVENTION WHEN MAINSTREAMING MILDLY HANDICAPPED STUDENTS IN MIDDLE SCHOOL BUILDINGS IN H-ITM AND L-ITM DISTRICTS

	Intervention	No Intervention	Fisher Exact
H-ITM	3	2	.738
L-ITM	3	2	

Similar to the findings of the analysis of responses of elementary principals regarding intervention actions when mainstreaming mildly handicapped students, the findings of the analysis of responses of middle school

principals indicate no relationship exists between principal intervention and high or low rates of mainstreaming for the middle school population.

The results of the test of Hypothesis 3 and the analysis of issues at the building level that may influence teacher/pupil ratios indicate that the general education teacher/pupil ratio is not related to high and low mainstreaming rates. It should be noted, however, that there was a significant difference between the special education teacher/pupil ratios (caseload) in elementary buildings in H-ITM and L-ITM districts. While the elementary special education teacher/pupil ratio was significantly lower in L-ITM districts, this difference however did not exist for the middle school building population.

Findings of the Test of Hypothesis 4: The final district level hypothesis examined speculates on a difference between the size of H-ITM and L-ITM districts. The hypothesis is restated here.

H.4 There is no difference in the mean size of Michigan school districts with a High Instructional Time in the Mainstream rating and Michigan school districts with a Low Instructional Time in the Mainstream rating.

The findings for the test of H.4 are presented in Table 5.17. These findings indicate that the mean size of H-ITM and L-ITM districts vary significantly with large school districts mainstreaming mildly handicapped

students at a L-ITM rate. Therefore, Hypothesis 4 is rejected.

Table 5.17
TEST OF SAMPLE MEANS OF DISTRICT SIZE IN H-ITM AND L-ITM SCHOOL DISTRICTS

ITM RATE	NUMBER OF CASES	MEAN	STANDARD DEVIATION	T VALUE	2 TAIL PROB.
H-ITM	30	1906.80	1141.9		
L-ITM	30	4676.68	5390.5	2.75	.01*

* significant at alpha level .05

The size of the buildings surveyed was also examined to determine if a difference in size existed at the building level. The findings are presented in Table 5.18.

Table 5.18
TEST OF SAMPLE MEANS OF SIZE OF ELEMENTARY BUILDINGS SURVEYED IN H-ITM AND L-ITM SCHOOL DISTRICTS

ITM RATE	NUMBER OF CASES	MEAN	STANDARD DEVIATION	T VALUE	2 TAIL PROB.
H-ITM	22	378.73	156.559		
L-ITM	34	391.12	117.8268	.34	.737

The findings indicate there is no significant difference in the size of the surveyed elementary buildings within H-ITM and L-ITM districts. Table 5.19 examines the size of the surveyed middle school buildings in the H-ITM and L-ITM districts.

Table 5.19
TEST OF SAMPLE MEANS OF SIZE OF MIDDLE SCHOOL BUILDINGS SURVEYED IN H-ITM AND L-ITM SCHOOL DISTRICTS

ITM RATE	NUMBER OF CASES	MEAN	STANDARD DEVIATION	T VALUE	2 TAIL PROB.
H-ITM	9	517.788	208.38		
L-ITM	10	528.10	267.11	.09	.927

Similar to the findings for the size of the surveyed elementary buildings, the size of the surveyed middle school buildings in the H-ITM and L-ITM districts also does not vary significantly. The findings for the test of Hypothesis 4 and the test of differences for the size of the buildings surveyed indicate that, while the size of the district varies significantly between H-ITM and L-ITM districts, the size of the surveyed elementary and middle school buildings in H-ITM and L-ITM districts does not vary significantly.

Building Level Hypotheses

Findings for the Test of Hypothesis 5: The first building level hypothesis tested speculates on the type of general education class accessed by mainstreamed students in H-ITM and L-ITM school districts. The hypothesis is restated here.

H.5 There is no difference in the types of general education classes accessed by mainstreamed students in schools within districts with a High Instructional Time in the Mainstream rating and

schools within districts with a Low Instructional Time in the Mainstream rating.

To test the hypothesis, special education teachers in the surveyed elementary and middle school buildings were asked to indicate the number of learning disabled, emotionally impaired and educable mentally impaired students mainstreamed into general education classes. A list of seven (+ other) general education classes were provided in the questionnaire. A percentage of mildly handicapped students in each categories who were mainstreamed into different general education classes was determined. The descriptive statistics are provided in Table 5.2 through Table 5.5.

A total of 48 sets of mean attendance rates for seven (+ other) general education classes for the three types of mildly handicapped students was derived from the elementary and middle school teacher questionnaires. A T-test analysis of all sets revealed there was no significant difference for 16 sets of the 24 sets for the elementary population. The 8 sets found to be significant are presented below.

Hypothesis 5 and the Elementary Learning Disabilities Population: The mean attendance rate for learning disabled students mainstreamed into reading and language arts classes is significantly different in elementary buildings in H-ITM and L-ITM. Significantly fewer students from L-ITM districts are mainstreamed into these classes. (See Table 5.20)

Table 5.20
TEST OF SAMPLE MEANS OF THE PERCENT OF LEARNING DISABLED STUDENTS MAINSTREAMED INTO READING CLASSES IN ELEMENTARY BUILDINGS IN H-ITM AND L-ITM DISTRICTS

ITM RATE	NUMBER OF CASES	MEAN	STANDARD DEVIATION	T VALUE	2 TAIL PROB.
H-ITM	15	.33	.290		
L-ITM	17	.14	.174	2.25	.032 *

* significant at alpha level .05

The results for the test of sample means of attendance rates for language arts classes are presented in Table 5.21.

Table 5.21
TEST OF SAMPLE MEANS OF THE PERCENT OF LEARNING DISABLED STUDENTS MAINSTREAMED INTO LANGUAGE ARTS CLASSES IN ELEMENTARY BUILDINGS IN H-ITM AND L-ITM DISTRICTS

ITM RATE	NUMBER OF CASES	MEAN	STANDARD DEVIATION	T VALUE	2 TAIL PROB.
H-ITM	15	.485	.334		
L-ITM	17	.244	.233	2.39	.024 *

* significant at alpha level .05

The learning disabled student was mainstreamed into the other five elementary classes similarly in H-ITM and L-ITM districts.

Hypothesis 5 and the Elementary Emotionally Impaired Population: The emotionally impaired population varied the

most on the differences between attendance rates in elementary buildings in H-ITM and L-ITM districts. There were significantly fewer emotionally impaired students mainstreamed in L-ITM elementary buildings for five of the seven general education classes: reading, math, language arts, social studies, and science. The tests of the mean attendance rates for the five classes are presented in Table 5.22 through Table 5.26.

Table 5.22
TEST OF SAMPLE MEANS OF THE PERCENT OF EMOTIONALLY IMPAIRED STUDENTS MAINSTREAMED IN READING CLASSES IN ELEMENTARY SCHOOLS IN H-ITM AND L-ITM DISTRICTS

ITM RATE	NUMBER OF CASES	MEAN	STANDARD DEVIATION	T VALUE	2 TAIL PROB.
H-ITM	14	.501	.310		
L-ITM	15	.122	.129	4.36	.001 *

* significant at alpha level .05

Table 5.23
TEST OF SAMPLE MEANS OF THE PERCENT OF EMOTIONALLY IMPAIRED STUDENTS MAINSTREAMED INTO MATH CLASSES IN ELEMENTARY SCHOOLS IN H-ITM AND L-ITM DISTRICTS

ITM RATE	NUMBER OF CASES	MEAN	STANDARD DEVIATION	T VALUE	2 TAIL PROB.
H-ITM	14	.599	.331		
L-ITM	15	.212	.285	3.38	.002 *

* significant at alpha level .05

Table 5.24
TEST OF SAMPLE MEANS OF THE PERCENT OF EMOTIONALLY IMPAIRED STUDENTS MAINSTREAMED INTO LANGUAGE ARTS CLASSES IN ELEMENTARY SCHOOLS IN H-ITM AND L-ITM DISTRICTS

ITM RATE	NUMBER OF CASES	MEAN	STANDARD DEVIATION	T VALUE	2 TAIL PROB.
H-ITM	14	.699	.345		
L-ITM	15	.130	.260	4.78	.0001 *

*significant at the alpha level .05

Table 5.25
TEST OF SAMPLE MEANS OF THE PERCENT OF EMOTIONALLY IMPAIRED STUDENTS MAINSTREAMED INTO SOCIAL STUDIES CLASSES IN BUILDINGS IN H-ITM AND L-ITM DISTRICTS

ITM RATE	NUMBER OF CASES	MEAN	STANDARD DEVIATION	T VALUE	2 TAIL PROB.
H-ITM	14	.700	.424		
L-ITM	15	.283	.379	2.79	.009 *

* significant at alpha level .05

Table 5.26
TEST OF SAMPLE MEANS OF THE PERCENT OF EMOTIONALLY IMPAIRED STUDENTS MAINSTREAMED INTO SCIENCE CLASSES IN ELEMENTARY SCHOOLS IN H-ITM AND L-ITM DISTRICTS

ITM RATE	NUMBER OF CASES	MEAN	STANDARD DEVIATION	T VALUE	2 TAIL PROB.
H-ITM	14	.771	.379		
L-ITM	15	.288	.353	3.56	.001 *

significant at alpha level .05

Emotionally impaired students were mainstreamed into the remaining two general education classes, art and gym, similarly in elementary buildings in H-ITM and L-ITM districts.

Hypothesis 5 and the Elementary Educable Mentally Impaired Population: The educable mentally impaired population varied the least in differences between attendance rates in elementary buildings in H-ITM and L-ITM districts. There were significantly fewer educable mentally impaired students mainstreamed into L-ITM elementary buildings for only one of the seven general education classes -- science. The test for the means for the one class is presented in Table 5.27.

Table 5.27
TEST OF SAMPLE MEANS OF THE PERCENT OF EDUCABLE MENTALLY IMPAIRED STUDENTS MAINSTREAMED INTO SCIENCE CLASSES IN ELEMENTARY SCHOOLS IN H-ITM AND L-ITM DISTRICTS

ITM RATE	NUMBER OF CASES	MEAN	STANDARD DEVIATION	T VALUE	2 TAIL PROB.
H-ITM	10	.59	.436		
L-ITM	11	.15	.315	2.56	.019 *

* significant at alpha level .05

Educable mentally impaired students were mainstreamed into the remaining six general education classes similarly in elementary buildings in both H-ITM and L-ITM districts.

Hypothesis 5 and the Middle School Population: The number of significant findings regarding attendance rates for the middle school population was fewer than number of significant findings at the elementary level. Twenty-two of the 24 sets of means were not significant. The two sets found to be significant are discussed below. The emotionally impaired students in the middle school buildings in L-ITM districts were mainstreamed significantly less into social science classes. The findings are presented in Table 5.28.

Table 5.28
TEST OF SAMPLE MEANS OF THE PERCENT OF EMOTIONALLY IMPAIRED STUDENTS MAINSTREAMED INTO SOCIAL SCIENCE CLASSES IN MIDDLE SCHOOLS IN H-ITM AND L-ITM DISTRICTS

ITM RATE	NUMBER OF CASES	MEAN	STANDARD DEVIATION	T VALUE	2 TAIL PROB.
H-ITM	6	.80	.287		
L-ITM	7	.318	.338	2.74	.01 *

* significant at the alpha level .05

Attendance rates for the remaining six classes were not significantly different for emotionally impaired students in middle school levels in H-ITM and L-ITM districts. This finding is considerably different from the findings of the mainstreaming rates for the elementary emotionally impaired population.

The final set of means that varied significantly for the middle school population was the set of attendance

rates of the EMI students in science classes. Results of the test of means is presented in Table 5.29.

Table 5.29
TEST OF SAMPLE MEANS OF THE PERCENT OF EDUCABLE MENTALLY IMPAIRED STUDENTS MAINSTREAMED INTO SCIENCE CLASSES IN MIDDLE SCHOOL IN H-ITM AND L-ITM DISTRICTS

ITM RATE	NUMBER OF CASES	MEAN	STANDARD DEVIATION	T VALUE	2 TAIL PROB.
H-ITM	4	.60	.464		
L-ITM	5	0	0	2.95	.022 *

* significant at alpha level .05

The attendance rates for the remaining six classes were not significantly different for the educable mentally impaired population. This finding is consistent with the attendance rates for the elementary building population. The above tests of means for the difference between the type of general education classes accessed by mildly handicapped students in H-ITM and L-ITM districts indicate that Hypothesis 5 is rejected.

Findings for Test of Hypothesis 6: The second building level hypothesis tested speculates on the difference of the number of alternative programs available in the general education programming in buildings in H-ITM and L-ITM districts. The hypothesis was tested from data gathered on the principals' questionnaires. The alternative programs were defined as remedial reading programming, remedial math

programming, Headstart programs, bilingual programs, instructional aides, and instructional volunteers. A seventh option, transition rooms, was listed on the elementary questionnaire. Hypothesis 6 is restated here.

H.6 There is no difference in the number of `alternative programs' available in the general education programming in schools within districts with a High Instructional Time in the Mainstream rating and schools within districts with a Low Instructional Time in the Mainstream rating.

The findings for the test of Hypothesis 6, presented in Table 5.30, indicate there is no difference in the number of alternative programs available in the elementary buildings in H-ITM and L-ITM districts. The test of means regarding the number of alternative programs for the middle school population was also examined and the results are presented in Table 5.31. Table 5.30 and Table 5.31 indicate the mean number of `alternative programs' available in elementary and middle schools in H-ITM and L-ITM districts does not vary significantly. These results indicate that Hypothesis 6 should not be rejected.

Table 5.30
TEST OF SAMPLE MEANS OF THE NUMBER OF `ALTERNATIVE PROGRAMS' IN ELEMENTARY BUILDINGS IN H-ITM AND L-ITM SCHOOL DISTRICTS.

ITM RATE	NUMBER OF CASES	MEAN	STANDARD DEVIATION	T VALUE	2 TAIL PROB.
H-ITM	14	3.36	1.22		
L-ITM	22	3.77	1.57	.84	.406

Table 5.31
TEST OF SAMPLE MEANS OF THE NUMBER OF `ALTERNATIVE PROGRAMS' IN MIDDLE SCHOOLS WITHIN H-ITM AND L-ITM SCHOOL DISTRICTS.

ITM RATE	NUMBER OF CASES	MEAN	STANDARD DEVIATION	T VALUE	2 TAIL PROB.
H-ITM	5	2.6	1.52		
L-ITM	5	4.0	.71	1.87	.098

Findings for Test of Hypothesis 7: The third building level hypothesis tested speculates on a difference in the type of `alternative programs' available in H-ITM and L-ITM districts. The hypothesis is restated here.

H.7 There is no difference in the type of `alternative programs' in the general education programming available in schools within districts with a High Instructional Time in the Mainstream rating and schools within districts with a Low Instructional Time in the Mainstream rating.

Six types of alternative programs were listed on the elementary principal's questionnaire and five types of alternative program were listed on the middle school principal's questionnaire. Both questionnaires provided an additional option entitled `Other.' The principals were asked to indicate whether the alternative programs listed were available in the school. The results of the findings for the test of Hypothesis 7 are presented in Table 5.32 for the elementary population and Table 5.33 for the middle school population.

Table 5.32
CHI-SQUARE TEST OF TYPE OF `ALTERNATIVE PROGRAMS' AVAILABLE IN ELEMENTARY SCHOOLS IN H-ITM AND L-ITM DISTRICTS

ALTER-NATIVE PROGRAMS	H-ITM DISTRICTS AVAIL-ABLE	NOT AVAIL.	L-ITM DISTRICTS AVAIL-ABLE	NOT AVAIL	CHI-SQUARE
REMEDIAL READING	13	1	16	6	.2911
REMEDIAL MATH	2	12	11	11	.0689
HEAD START	0	14	4	18	.2508
BILING. PROGRAM	3	11	3	19	.8785
INSTRUC. AIDES	11	3	21	1	.3042
VOLUNT. AIDES	11	3	14	8	.5638
TRANS. ROOMS	5	11	9	11	.7071

The results indicate no relationship exists between the types of `alternative programs' available in the elementary buildings and high or low mainstreaming rates.

Table 5.33 presents the findings of the analysis for the middle school population. The results of the testing for a relationship between mainstreaming rates and availability of `alternative programming' at the middle school level, similar to the findings of the analysis for the elementary population, indicate no relationship existed. Therefore, Hypothesis 7 is not rejected.

Table 5.33
FISHER'S EXACT TEST OF THE TYPE OF `ALTERNATIVE PROGRAMS' AVAILABLE IN MIDDLE SCHOOLS IN H-ITM AND L-ITM DISTRICTS

ALTER-NATIVE PROGRAMS	H-ITM DISTRICTS AVAIL-ABLE	NOT AVAIL.	L-ITM DISTRICTS AVAIL-ABLE	NOT AVAIL.	FISHER EXACT
REMEDIAL READING	3	2	4	1	.50
REMEDIAL MATH	2	3	5	0	.50
BILING. PROGRAM	1	4	2	3	.50
INSTRUCT. AIDES	3	2	4	1	.50
VOLUNT. AIDES	2	3	4	1	.50

Findings for the Test of Hypothesis 8: The last building level hypothesis speculates on the difference between the number of referrals received in schools in districts with a H-ITM rating and districts with a L-ITM rating. The hypothesis is restated here.

H.8 There is no difference in the number of special education referrals received in schools within districts with a High Instruction Time in the Mainstream rating and schools within districts with a Low Instructional Time in the Mainstream rating.

The findings for the test of H.8, presented in Table 5.34, indicate there is no difference in the number of referrals received in the elementary schools in H-ITM and L-ITM districts. The test of sample means of the number of referrals received in the middle school population is shown in Table 5.35.

Table 5.34
TEST OF SAMPLE MEANS OF THE NUMBER OF SPECIAL EDUCATION REFERRALS RECEIVED IN ELEMENTARY SCHOOLS IN H-ITM AND L-ITM DISTRICTS

ITM RATE	NUMBER OF CASES	MEAN	STANDARD DEVIATION	T VALUE	2 TAIL PROB.
H-ITM	13	19.70	18.12		
L-ITM	18	10.94	9.9	1.58	.133

Table 5.35
TEST OF SAMPLE MEANS OF THE NUMBER OF SPECIAL EDUCATION REFERRALS RECEIVED IN MIDDLE SCHOOL IN H-ITM AND L-ITM DISTRICTS.

ITM RATE	NUMBER OF CASES	MEAN	STANDARD DEVIATION	T VALUE	2 TAIL PROB.
H-ITM	5	9.8	8.52		
L-ITM	4	9.5	7.55	.05	.95

The results of the test of means of the number of middle school referrals indicate, similar to the analysis for the elementary buildings, the number of referrals received in the middle school buildings does not vary significantly. Therefore Hypothesis 8 is not rejected.

Review of Findings

Eight hypotheses designed to explore a major research question speculating on a relationship between characteristics of an educational system and mainstreaming rates reported by educators in the system were tested. Four

district level hypotheses were tested using existing data on two research groups of thirty Michigan school districts which demonstrated similar identification practices but contrasting mainstreaming practices. All sixty districts identified their mildly handicapped population within a mid-identification range. Thirty districts mainstreamed their identified mildly handicapped population at a H-ITM rate while the remaining thirty districts mainstreamed their identified mildly handicapped population at a L-ITM rate.

Additionally, four building level hypotheses were tested using data collected from a cross-sectional survey of all elementary and middle school buildings in 19 school districts selected from the research groups. The 19 districts represented nine H-ITM districts and 10 L-ITM districts. Several issues relating to the eight hypotheses representing system characteristics were also examined. Findings from the tests of district, building and related issues hypotheses are listed for review.

1. Hypothesis 1 and Hypothesis 2, both speculating on no difference regarding financial resources available for instructional programming in both special and general education in H-ITM and L-ITM districts, were not rejected.

2. Hypotheses 3, speculating on no difference between the districts' general education teacher/pupil ratios in H-ITM and L-ITM districts, was not rejected.

   Additional analysis testing for a significant difference in the general education teacher/pupil ratios in the surveyed elementary and middle

school buildings in H-ITM and L-ITM districts also indicated that no difference in ratios existed.

An examination of the special education teacher/pupil ratios (caseload) did indicate a significant difference in ratios in surveyed elementary buildings. L-ITM districts reported significantly lower special education teacher/pupil ratios than reported in H-ITM districts. However, a difference between the special education teacher/pupil ratio in surveyed middle school buildings in H-ITM and L-ITM districts did not exist.

3. Hypothesis 4, speculating on no difference in the size of H-ITM and L-ITM districts, was rejected. Differences between the mean district size (state aid membership) were established with larger districts mainstreaming at a L-ITM rate.

   There are no differences between H-ITM and L-ITM districts regarding contract language which would incorporate a weighting formula for mainstreaming special education students in general education classes (i.e. 1 special education student = 2 general education students).

   There is no difference in buildings in H-ITM and L-ITM districts surveyed with regards to principal interventions in an attempt to control the number of mainstreamed students in general education classrooms.

4. Hypothesis 5, speculating no difference regarding the general education classes accessed by mainstreamed students existed in H-ITM and L-ITM districts, was rejected. Differences exists between districts and between categories.

5. Hypothesis 6 and Hypothesis 7, speculating on whether (1) the number or (2) the type of 'alternative programs' in the general education programming differed in H-ITM and L-ITM districts, were not rejected.

6. Hypothesis 8, speculating on no difference in the number of referrals received elementary and middle school buildings in H-ITM and L-ITM districts, was not rejected.

The major research question speculated on whether or not there are relationships between characteristics of educational systems, specifically Michigan public educational systems, and rates of mainstreaming of mildly handicapped students as reported by the educators in the district. Eight specific system characteristics, reflected in the eight hypotheses set forth, were examined. The results indicate that there may be a relationship between system characteristics and mainstreaming rates. While it has not been determined that the specific characteristics examined effect changes in mainstreaming rates it has been determined that specific system characteristics do vary in H-ITM and L-ITM districts. Continued examination of system characteristics and mainstreaming rates in school districts may prove to be informative for developing positive influences for equitable and responsible mainstreaming provisions.

CHAPTER VI

Summary, Discussion and Recommendations

Chapter Six is presented in three parts: summary, discussion and recommendations. The summary offers brief comments regarding the problem, methodology, analysis and the findings of the dissertation. The second part, Discussion, is divided into two sections. In the first section entitled The Uncontrolled Identification Variable, implications from the preliminary examination of identification practices across the 528 school districts in Michigan are discussed. While an examination of identification practices was not the primary purpose of the study, the examination proved to be informative beyond expectations in demonstrating the influence identification practices have in providing educational programming to include mainstreaming provisions for handicapped students.

In the second section entitled The Controlled Identification Variable, a discussion focusing on information gathered to develop the proposed Educational Descriptive Profile of Michigan's Mainstreamed Population is presented. The section continues with a discussion of the eight hypotheses set forth which speculate on a correlation between selected educational system

characteristics and Instructional Time in the Mainstream (ITM) ratings. In the third and final part of Chapter VI, recommendations addressed to several audiences within the educational system are offered for consideration.

Summary

The Problem

America's dedication to protect the civil rights of all citizens, young or old, has significantly changed the composition of public school classrooms at one time or another. Implementation of The Education for All Handicapped Children Act in the past decade has produced a mildly handicapped student population who receive their education in both special and general education classes. Understanding the responsibilities special education and general education share in educating these students is one of the most persistent and perplexing issues facing public school education today.

The persistent separateness of the two systems, spawned by separate schools, separate classrooms, separate teacher and administrative training programs, separate student counts, separate research projects and journals, different funding sources, different language constructs, different evaluation models, and different support organizations has resulted in a pernicious "we versus they" attitude detracting from a mutual understanding of responsibilities. Probing questions of who is responsible

for the difficult to teach student are surfacing. Inquiries, developing into a censorship debate, speculate on whether special education has overstepped legal boundaries and, due to classification errors in identification practices, is assuming responsibility to provide services for nonhandicapped but difficult to teach students, or general education has limited it's boundaries and, by ignoring the educational needs of disadvantaged and/or minority students, is relinquishing responsibility to provide remedial services for nonhandicapped but difficult to teach students. The practice of one system judging the appropriateness of the other system's provisions emphasizes the gap that exists between what should otherwise be a unified system for educating American children.

Among the many problems associated with closing the gap in America's dichotomous educational system is (a) a lack of educational descriptors characterizing and defining the generic group of students referred to as the mainstreamed population -- the student link between the two systems; and (b) that there has been no effort to identify system characteristics from either the general or special education systems that may influence the rates of mainstreaming at either the district or individual building levels -- a potential evaluation link between the two systems.

The Questions

Three questions leading to a clearer understanding of the mainstreamed population were addressed in the study: (a) What is the composition of the student population leaving special education classrooms and entering general education classes? (b) What type of general education classes are accessed by the mainstreamed population? (c) What amount of time does the mainstreamed population spend in special education and general education classes?

A fourth question, a major research question generating eight hypotheses for testing, was also examined. The research question speculates on whether or not a relationship exists between system characteristics of an educational organization and mainstreaming rates reported by educators in the organization? Answers to these questions are crucial before program development and evaluation personnel are able to design educational programming which curbs the suspected duplicity of services generated by the "crossing over movement" and develop an evaluation process sensitive to the needs of the mainstreamed students and their nonhandicapped peers.

The Methodology

During the spring of 1985, data provided by the State Department of Education regarding identification and mainstreaming practices of Michigan's 528 school districts were analyzed. The school districts served as the

population of interest for the study. The student population examined was limited to 6-17 year old, mildly handicapped students as represented by students in three special education categories: Learning Disabilities (LD), Emotionally Impaired (EI), and Educable Mentally Impaired (EMI).

Since data from 39 districts could not be extrapolated due to inter-agency reporting, these districts were eliminated from the study. Identification and mainstreaming rates were established for each of the three categories for the remaining 489 Michigan school districts. Each district was assigned one of three identification rates corresponding to a low, middle or high identification range. Additionally, each district was assigned one of two mainstreaming rates -- High Instructional Time in the Mainstream Rate (H-ITM) or Low Instructional Time in the Mainstream Rate (L-ITM). From this analysis, two groups of 30 school districts were found to have similar identification practices but contrasting mainstreaming practices.

The 60 school districts demonstrated similar identification- practices in that all districts identified students within the three special education categories at a rate falling within a mid-identification range. However, 30 school districts mainstreamed these mildly handicapped students at a H-ITM rate, while the other 30 school districts mainstreamed the mildly

handicapped population at a L-ITM rate. Four district level hypotheses, speculating on differences in H-ITM and L-ITM districts regarding monetary resources, teacher/pupil ratios and district size were tested against these two research groups.

Additionally, the population of school districts was grouped into four strata based on district size (State Aid Membership). The percentage of the total number of districts falling within each stratum was used to determine the number of H-ITM districts and L-ITM districts selected from each stratum to test the building level hypotheses. Nine H-ITM districts and 10 L-ITM districts, for a total of 19 districts, were selected and surveyed to test the building level hypotheses. These hypotheses speculated on differences between H-ITM and L-ITM districts regarding the number and the type of alternative programs available in the general education programming, the type of general education classes accessed by mainstreamed students, and the number of referrals for special education services received in elementary and in middle school buildings. District personnel surveyed for the study were principals and special education teachers in 56 elementary schools and 21 middle schools. Information was received from all of the 19 districts.

The Analysis

Data pertaining to the four district level hypotheses were obtained from an examination of existing data provided by the Michigan Department of Special Education Services. Differences between the two research groups were examined using the T-test analysis of group means. Data related to the four building level hypotheses were obtained from a cross-sectional survey of 19 school districts: nine H-ITM and ten L-ITM districts. Three of the four building level hypotheses were tested using the T-test analysis of sample means. The fourth building level hypothesis was tested using a chi-square test analysis for the elementary population and a Fisher's exact test analysis for the middle school population.

The Findings

Of the eight hypotheses tested, three of the four district level hypotheses were not rejected. The findings indicate there is no difference between the amount of per pupil expenditure for instructional costs of either the general education or added needs programs in H-ITM and L-ITM districts. Additionally, there appears to be no difference in the general education teacher/pupil ratios in H-ITM and L-ITM districts. However, a difference in the special education teacher/pupil ratios in H-ITM and L-ITM districts existed for the elementary population only with elementary buildings in L-ITM districts having

a significantly lower special education teacher/pupil ratio. The fourth district level hypothesis speculating that no significant difference exists between the size of H-ITM and L-ITM districts was rejected: large districts appear to mainstream at a L-ITM rate.

Three of the four building level hypotheses also were not rejected. The findings indicate there is no difference between the type and the number of 'alternative programming' available in elementary and middle school buildings in H-ITM and L-ITM districts. Additionally, there is no difference between the number of special education referrals in elementary and middle school buildings in H-ITM and L-ITM districts. The fourth building level hypothesis, speculating that no difference exists between H-ITM and L-ITM districts regarding the type of general education classes accessed by mildly handicapped students, was rejected.

Discussion

The Uncontrolled Identification Variable

In examining Michigan's practices of mainstreaming mildly handicapped (LD, EI and EMI) from special education programs into general education programs in elementary and middle school buildings, two important factors must be reviewed. First, the number of mildly handicapped students mainstreamed into general education classes in any district will vary as the identification practices of the district

vary. Second, a differing percent of mildly handicapped students exist in elementary, middle and high schools. In the 1984-1985 school year, approximately 28% of the State's identified LD student population was in elementary programs (Grades K-5: Age 5-10), with 25% in middle schools (Grades 6-8: Age 11-13), and 40% in high schools (Grade 9-12: Age 14-18). Similarly, 25% of the EI student population was in elementary schools with 29% and 43% in middle and high schools respectively. Twenty-four percent of the EMI student population was in elementary schools, with 22% in middle schools and 41% in high schools.

Typically, a middle school system includes grades 6, 7, and 8 while a junior high school system includes grades 7, 8, and 9. Because there has been a rapid increase in the numbers of middle schools created in recent years (Edmonds & Lezotte, 1982), the middle school grouping was selected over the junior high school grouping for the purposes of discussion and illustration. Also, since special education students generally tend to stay in the educational system longer, the 18 year old student population was included in the high school special education student grouping discussed in order to present a more representative secondary special education population. However, it should be noted that the percent ratios presented above would be considerably different if a junior high school model had been used.

An example of the impact varying identification rates have on the size of elementary and middle school programs, and ultimately the number of mildly handicapped students mainstreamed, follows. In 1984, District A, located in the southern part of the state reported a school population of 2,543 with a teacher/pupil ratio of 24. The District's identification rate for the mildly handicapped population was 11.3% (6.8% LD/ 2.5% EI/ 2.0% EMI) for a total of 287 students. District B, also located in the southern part of the state and approximately 75 miles from District A, reported a student population of 2,575 for a total of 32 more students than District A. District B reported a somewhat lower teacher/pupil ratio of 19. However, District B identified the mildly handicapped population at a rate of 2.6% (1.6% LD/ .5% EI/ .5% EMI), a difference of 8.7% for a total of 67 mildly handicapped students - 220 fewer special education students than in District A.

The wide variation in identification rates in District A and District B has a considerable impact on staffing patterns in the districts. Special education programming provides two types of services for mildly handicapped students: (a) classroom programming with the teacher's caseload being restricted to approximately 15 students, and (b) teacher consultant programming with the consultant's caseload being restricted to approximately 26 students. District A, identifying 11.3% of the population as mildly handicapped, requires approximately 19 special education

classroom teachers (5 elementary, 6 middle, and 8 high school) or 11 teacher consultants (3 elementary, 3 middle, 5 high school) to provide for 287 mildly handicapped students. However, District B, identifying 2.6% of the student population as mildly handicapped requires only 5 classroom teachers (1.2 elementary, 1.3 middle, and 2 high school) or 2.5 teacher consultants (.70 elementary, .70 middle, and 1 high school) to provide for 67 mildly handicapped students. Thus, while the size of the student population is similar in Districts A and B, District A requires approximately 14 more special education teachers or 8 more special education teacher consultants than District B in order to meet the special education teacher/pupil ratio required by law. As a result the special education teaching personnel in District A, based on the reported teacher/pupil ratio for the District, would represent 17% of the District's total teaching personnel. Contrastingly, the special education teaching personnel in District B would represent only three percent of the District's total teaching personnel.

Since District A and B are only two school districts in a pool of Michigan's 528 districts, the example may provide only a glimpse into the greater picture. However, when extensive variation in district identification practices appears to be the rule rather than the exception, as is observed in Michigan, the glimpse may occur more often than expected. The preliminary analysis of

Michigan's district identification rates, as reported in Chapter III indicated that all three of the identification rates for the mildly handicapped categories examined were within a mid-identification range for only 112 Michigan school districts. The remaining districts, 77% of Michigan's total district population, demonstrated varying identification rates for the three categories. Two hundred and three districts reported identification rates for one of three categories outside of the mid-identification range with the identification rates for the remaining two categories within the mid-identification range. One hundred and thirty five districts reported a reverse pattern: identification rates for two of the three categories were outside the mid-identification range with one identification rate within the mid-identification range. The remaining 39 districts reported identification rates for all three categories outside the mid-identification range.

Such a variation in identification practices support the consensus among several professionals that classification practices are, at best, arbitrary and depend predominantly on social attitudes concerning who should be treated and how they should be treated (Ysseldyke & Algozzine, 1982, 1984; Lilly, 1983; Gerber, 1984). Despite specific federal and state guidelines providing legal and educational parameters for identifying students in all the special education categories, identification rates remain

extended over a wide range. Michigan's 1984-1985 identification rates for all three mildly handicapped categories were similar in less than twenty-three percent of the school districts in the State. The combined rates for the three categories ranged between .96% to 49% across the districts. Apparently, Michigan communities do identify mildly handicapping conditions in an seemingly arbitrary manner and obviously some districts choose to support high identification rates.

Since enactment of P.L.94-142 in 1975, both the decision making process and the number of personnel required for assessment of a potentially handicapped student have expanded considerably. Currently the process may include general education teachers, special education teachers, general and special education consultants, therapists, lawyers, parents, administrators, medical personnel, advocates and, in many cases, the students themselves. Support and acceptance of variance in identification rates by the expanded group of community representatives may add insight into the debate as to whether special education categories are "categories of children" or "categories of services" (Stainback & Stainback, 1984; Yesseldyke & Algozzine, 1982, 1984; Lilly, 1983; Algozzine & Korinek, 1985). If in fact the educational programs provided mildly handicapped students are generic, remedial services rather than a group of individualized, emendatory programs developed with a

specific student condition in mind, acceptance of expansive special education programming in communities may serve as a barometer of what the community sees lacking in the general education programming. However, a continuation of support for expansive, generic remedial services under the title of special education programming may continue to mask a failing general education system and prove to be the least cost efficient method of providing remedial services.

Extensive variation in identification practices across the State also bring into focus questions of the civil rights of both general and special education students. When general education students, particularly minority and/or difficult to teach students, are mislabeled and are served in inappropriate educational settings, special education students are squeezed out of crowded special education classrooms in integrated facilities, facilities which serve as a springboard to mainstreamed educational activities and normalization experiences. Obvious civil rights infractions for both populations should force Michigan's monitoring personnel to examine whether the identification practices they support are in the best interest of all students.

The efficiency of the identification process may best be examined with a corresponding examination of referral rates. Yesseldyke & Algozzine (1984) report a three-year trend during which school districts have referred three to six percent of their student population for assessment.

While referrals may come from all areas of the community, obviously teacher referral is high among the school aged population. The ability of general education teachers to identify students requiring special education services is reflected in the high percentage of referred students who eventually are served in special education programs. Approximately 90% to 93% of the students referred by general education personnel are assessed by special education personnel and, of those students assessed, 70% of the students eventually receive services (Yesseldyke & Algozzine, 1984). The ability for general education teachers to accurately identify students in need is a resource that needs to be examined further. This resource may prove valuable for systems interested in developing programs directed at providing alternative programming which leads to preventive special education practices.

Continued high referral and identification rates create major difficulties for school systems (Yesseldyke & Algozzine, 1985). For example, in New York evaluations must be completed within twenty-eight days of referral. Failure to complete an evaluation within the legally specified time period gives parents the right to enroll their child in a private facility for handicapped students with the state responsible for paying the tuition. The cost of the evaluation and the length of time the students wait to receive help seem excessive in light of the fact that teachers within the general educational systems are

able to identify a large portion of failing students prior to the costly, formal assessment.

Identification costs, added to the educational costs for special education programs, have raised community concern nationwide. New York reports that while 12% of the city's student population required special education programming in 1985, the cost consumed 23% of the school system's $4 billion budget (New York Times, 1985). Bringing the example closer to home, one of the 19 districts surveyed for the study reported only the mildly handicapped population since their self contained programs for the severely handicapped population were reported and financed through an intermediate school district. The district's situation allowed for a glimpse at the cost of educating only mildly handicapped students. The district reported a 4.6% identification rate for the three mildly handicapped categories and reported that five percent of the school budget was spent to service these identified students. When the identification rate was examined against the mainstreaming rate for the district, an examination of the F.T.E. indicated five percent of the district's budget was spent on 39 students in the district. It should be noted that since some of the cost of the special education personnel evaluating students in this particular district might be reflected in the intermediate school district budget, the district cost, therefore, may be underestimated!

A preliminary examination of the identification practice, though not the primary intent of the study, has proven to be informative beyond expectations in demonstrating the influence identification practices have in providing educational programming for handicapped students. This section has presented evidence that variation in referral and identification practices across the state and the nation may present crucial problems for future of special education and general education alike. The next section reports on mainstreaming practices when variations in identification practices are controlled.

The Controlled Identification Variable

The Educational Descriptive Profile: Composition. The composition of the mainstreamed population is of concern to general educators since they must plan for the students. The composition is also of interest to the special educator since mainstreaming programming is an important link in the mandated continuum of services leading to educating handicapped students in the least restrictive environment.

Gerber (1984) has indicated that mainstreaming statistics, as reported by educational systems, may imply much greater social and education integration than probably exist. The State Department of Education reported the percentage of mainstreamed mildly impaired students, age 6-17, as 65% LD, 48% EI, and 15% EMI for the 1984-1985 school year. These statistics are established through a

comparison of like-students or students within the same categories. However, when the three categories are pooled together and are viewed as a noncategorical group of mildly handicapped students, students who are most likely to be mainstreamed, the percentages change considerably. When combining the three categories and using a pool of school aged (6-17) mildly handicapped rather than individual categories as a base for comparison, the percentages of school aged LD, EI and EMI students mainstreamed are 41% LD, 11% EI and 2% EMI. Apparently, the mainstreaming reporting using a categorical framework for comparison produce inflated mainstreaming rates.

Another reason the reporting system may be misleading may be due to the inclusion of the Speech and Language Impaired (SLI) student population in the mainstreamed student count. While SLI is technically a special education category, the educational delivery service model providing for SLI students is considerably different than the model providing for students in the other special education categories. SLI students most often receive special education services through an itinerant teacher model, while the remaining special education population receives special education services predominantly through a school based classroom model.

Ninety-seven percent of the school aged SLI students are reported as mainstreamed students. However, these students are assigned to all general education classes

routinely, and special education services are provided through a "pull out" program. These "special education" students are for the most part not participating in the building's special education classroom programs and technically are not mainstreamed students. When adjusting for SLI representation in the total mainstreamed population for the school year 1984-1985, the combined percentage of school aged LD, EI, and EMI students in the public school mainstreamed population is 95% (72% LD, 19% EI, 4% EMI). Thus, while the special education system has 13 legally recognized special education categories (14 when including the speech and language impaired category), only three categories make up 95% of the school aged mainstreamed population with one category, learning disabilities, representing 72% of the total mainstreamed population. Such an inclusiveness of the mainstreamed population adds even more support to Gerber's (1984) implication that less social and educational integration is occurring than is being reported.

As might be expected, the composition of the mainstreamed population changes yearly. The changes occurring over the past three years in Michigan indicate a trend toward an increase in the number of LD students with a corresponding decrease in the number of EMI students (Special Education Services, 1983). Such a trend may support Algozzine and Korinek's (1985) findings that the LD category is growing at a current rate of three percent of

the special education population per year. They project that if the growth continues at the three percent rate, all classified students in high prevalence categories would be classified "learning disabled" by around the year 2001. With the current high percentage of learning disabled students in mainstreaming programs today, Michigan's educational programs may may reach that prediction even earlier.

General Education Classes Accessed by Mainstream Students.

The mainstreamed population accesses general education programming through all the following courses: reading, math, language arts, social studies, science, art, and gym. The general education classes least often accessed by the mildly handicapped students in this study were reading and language arts classes, and the general education classes most often accessed by the mildly handicapped are gym and art. Access to different classes varied depending on the special education label of the student as well as whether or not the students were in H-ITM and L-ITM districts. While emotionally impaired students were mainstreamed into all the elementary and middle school general education classes, there were significantly fewer EI students were mainstreamed into five of seven general education classes in L-ITM districts. Again, while educable mentally impaired students were mainstreamed into all of the elementary and middle school general education

classes, significantly fewer EMI students were mainstreamed into science classes in L-ITM districts. It should be remembered, however, that students in the EI/EMI categories are much less representative of the mainstreamed population than students in the learning disabilities category.

Learning disabled students were mainstreamed into five of seven general education classes similarly in H-ITM and L-ITM districts. However, while the number of LD students accessing reading and language arts classes was generally low as compared to the LD attendance rates for the other five classes, the number of LD students accessing reading and language arts classes was significantly lower in L-ITM districts.

The examination of the general education classes accessed by mainstreamed population brings into focus the curriculum of the special education programs. The findings of this study indicate the `arts and crafts' curriculum once associated with special education classrooms appears to have been replaced with a strong academic course of study. While the general education program is providing the mainstreamed student with strong academic classes the special education teachers are concentrating on reading and language art activities for the students remaining in their classes. Lilly (1983) has suggested that special education is functioning in school districts as a reading program and is supplanting remedial programs once provided by the general education programs. The findings in this study,

showing the attendance rates for reading and language arts classes for students in all three categories are lowest attendance rates for all of classes examined, certainly collaborates a portion of Lilly's claim: special education, at least in Michigan, is functioning in school districts as a reading program.

Significant findings related to reduced numbers of learning disabled students mainstreamed for reading and reduced numbers of emotionally impaired students mainstreamed in general suggest that L-ITM districts have the most difficulty in mainstreaming (1) students with reading problems and (2) students with behavior problems. While the difficulty of teaching any student with either or both of these conditions is obvious, it should be remembered that H-ITM districts have been more successful than L-ITM districts in providing a less restrictive and more normalized educational environment in meeting the reading and language needs of <u>all</u> students to include the behavior problem students. It appears there are groups of educators who are more able than others to provide successful mainstreaming experiences in various general education classes to a wider population of special education students. These educators and successful programs need to be investigated further for insight into effective practices. As Sansone & Zigmond (1986) have suggested, the need to understand mainstreaming experiences of handicapped students derives from a commitment to the

concept of "opportunity" as a critical variable in achievement.

A better understanding of the type of general education programming accessed by the mainstreamed population, particularly the learning disabled student population, has important implications for teacher training programs. The prospective special education teacher has need of a teacher training program that provides a strong teaching of reading curriculum and stresses management techniques for behavior problem students. Traditional method courses in special education teacher training programs concentrating on the teaching of social studies, math, gym or art might be better exchanged for courses of teaching reading, particularly teaching of reading in the content areas.

This study has provided evidence of an existing demand to provide remedial reading in schools today. While the issue of who should provide remedial reading remains a policy debate for the field of education, results of this study indicate that special education has been responsible for teaching remedial reading to large groups of students. However, since the mildly handicapped population is comprised predominantly of learning disabled students, a category suspected of including nonhandicapped but difficult to teach students who are routinely mislabeled and serviced through special education programming (Yesseldyke & Algozzine, 1982, 1984), special educators

need to closely examine their identification practices as well as their role in continuing to provide reading and language arts classes separate from the general education curriculum.

Instructional Time in the Mainstream. Elementary, mildly handicapped students spend a median time of three hours in general education programming. It would follow that if emotionally impaired students in L-ITM districts are mainstreamed in fewer numbers into five of seven general education classes, the amount of time those students spend out of the special education room would also be significantly reduced. The data confirm the assumption that emotionally impaired students spend two or more hours less in the mainstream than their counterparts in the other two categories.

The amount of mainstreamed time for middle school, mildly handicapped students in the three categories generally follows the time patterns established at the elementary level. However, there is a slight increase, approximately one hour, in the total amount of time the learning disabled and emotionally impaired students are mainstreamed when moved from elementary to middle school buildings. Contrastingly, the length of time educable mentally impaired students spend in the mainstream in middle school is less than the mainstreamed time they spent in elementary schools.

Reasons for the differences among types of handicapped students regarding time in the mainstream in elementary and middle school settings can, at this time, only be speculated upon. However, the answers may lie in the evaluation and assessment review process required whenever a handicapped student is moved from one special education program to another, such as from an elementary to a middle school program. Also, programming at elementary and middle school levels differs in that elementary students tend to have one teacher for the instructional day, while middle school students usually have several teachers, often a different teacher per hour. Consequently, a middle school student may have more options for mainstreaming than a second grade student because there may be only one second grade teacher available in the school who may not work well with mainstreamed students and/or who already has his or her negotiated share of mainstreamed students.

Summary: Descriptive Educational Profile of the Mainstreamed Population.

In a report to the U.S. House of Representatives Committee on Education and Labor in 1981, the acting comptroller general stated, "...the findings across studies indicate that the `typical' child participating in special education in public schools is young (a preadolescent), male, and mildly handicapped" (GOA, 1981, p. ii). New information is now available to add to this educational descriptive profile. In Michigan, a typical child

participating in special education programming in the public schools is a (a) speech and language impaired student or (b) learning disabled student. The speech and language impaired student is routinely assigned and educated in the general education program with an itinerant speech and language teacher providing services through a "pull out program" delivery service model. The learning disabled student remains in a general education classroom for approximately three to four hours per day attending math, social studies, science, art and gym classes. Typically, the learning disabled student remains in special education classroom(s) for reading and language arts instruction.

The developed Educational Descriptive Profile of Michigan's mainstreaming population indicates that a much greater educational integration of all handicapped students is reported or implied than may actually exist. After adjusting for the representation of the speech and language impaired population in the school aged mainstreamed population, three of the remaining 13 special education categories recognized in Michigan make up 95% of the mainstreamed population. However of the those three, only one category - learning disabilities - represents 72% of the mainstreamed population. Additionally, predictions have been made that if the learning disabilities category continues to grow as it has in recent years, learning

disabled students will be the only students mainstreamed into general education programming.

Developing a profile of Michigan's mainstreamed population has also offered an opportunity to closely examine the curriculum offered students in both general and special education classrooms. While special education appears to be offering reading and language arts classes, general education offers a wide spectrum of classes including gym, art, and the academic courses of math, social studies, science.

The length of time a special education student spends in general education programming varies depending on the special education category of the student. In general a mildly handicapped special education student in Michigan spends a median time of three hours in the general education programming. Additionally, excluding educable mentally impaired students, the time a mildly handicapped student spends in the general education programming increases as that student moves from an elementary facility to a middle school facility.

System Characteristics Associated with High and Low Mainstreaming Rates

Eight hypotheses, four district level hypotheses and eight building level hypotheses were tested to examine whether differences exist between H-ITM and L-ITM districts on selected system characteristics. Two hypotheses speculating that no difference exists between H-ITM and

L-ITM districts regarding monetary resources available for instructional costs of general and special education programs were tested and not rejected.

A third hypothesis testing for no difference between the district teacher/pupil ratio in H-ITM and L-ITM districts was not rejected. Additional analyses were conducted regarding general education teacher/pupil ratios and special education teacher/pupil ratios at the building level. While the elementary and middle school general education teacher/pupil ratio in the surveyed buildings did not differ in H-ITM and L-ITM districts, the special education teacher/pupil ratio for elementary buildings in H-ITM and L-ITM districts did vary significantly. The findings indicate that L-ITM districts had lower special education teacher/pupil ratios than H-ITM districts.

The fourth district level hypothesis, speculating on no difference between the mean size of the H-ITM and L-ITM districts, was rejected. The average H-ITM school district has 1,906 students, a significantly smaller enrollment than the average L-ITM school district with 4,677 students. The difference in the size of H-ITM and L-ITM can be best appreciated when considering the number of mildly handicapped students interfacing with both the general and special education systems. The L-ITM districts may be referring, evaluating and educating approximately 2.5 times more mildly handicapped students than the H-ITM school districts.

Because large districts are logistically able to group large numbers of handicapped students together, departmentalized special education programs may develop more often in larger districts as a result. A departmentalized program is able to provide students with different levels of instruction for similar course content. However, when different levels of instruction are available, mainstreaming students in order to provide them with appropriate level coursework becomes unnecessary. Thus, departmentalized programs may unintentionally reduce opportunities for eligible students to be mainstreamed. Also, departmentalized programs may be one source adding to the "duplicity of services" debate. Obviously, when a special education class in a large, departmentalized program looks suspiciously like a class in general education programming, the question of why the special education student cannot access the general education class with his/her non-handicapped peers must be asked.

Four building level hypotheses were tested. The first hypothesis speculating on no difference between H-ITM and L-ITM districts regarding the type of general education programming accessed by mildly handicapped students was rejected. The other three building level hypotheses tested were not rejected: there appears to be no difference in the number of special education referrals received in elementary or middle school buildings in H-ITM and L-ITM districts; availability of the different types of

alternative programs in either elementary or middle school building in H-ITM or L-ITM districts did not seem to differ; and, H-ITM and L-ITM districts provided remedial reading, remedial math, bilingual programs, headstart programs, and transitional rooms at similar rates. It should be noted that elementary and middle school buildings in both H-ITM and L-ITM districts did provide a similar number of remedial reading classrooms. This finding may be contrary to thoughts that special education services are supplanting rather than adding to existing services but, at the same time, supportive of the notion that services for special education and general education indicates duplicity of service.

Summary: System Characteristics and ITM Rates.

The eight hypotheses selected to test represented eight system characteristics of educational organizations suspected to be related to mainstreaming rates. The purpose, of course, in finding characteristics that influence mainstreaming rates, H-ITM rates in particular, was the interest of this researcher and teacher. The interest in finding different rates of mainstreaming was prompted also by this researcher's administrative sense of inefficiency in the special education processes governed by set policies. These policies, set over a decade ago in the Education For All Handicapped Children Act, have today shown unexpected effects, some of which may be leading to

continued segregation. The philosophy that drives this researcher's concern is a belief that opportunity is a function of achievement.

H-ITM school districts tend to be those with a average population of approximately 2,000 students. In 1985, there were 127 districts in Michigan with a student population size between 1,500 and 2,5000. These districts tend not to provide any more or any less monetary resources for general or special educational classroom costs than L-ITM districts in the State. A review of the data gathered for this study, however, may indicate that an examination of a suspected difference in monetary resources available in H-ITM and L-ITM districts might not be the question to ask. Questions regarding the reasons behind the high cost of special education programming in general and identification practices in particular may be better questions to ask.

The district general education teacher/pupil ratio did not distinguish H-ITM districts from L-ITM districts or from any other districts in the State. Further analysis suggested that placement of special education students in general education programming according to weighting formula designed by contract language stipulations or interest on the part of the principals also did not distinguish H-ITM districts from L-ITM districts. It does appear, however, that the special education teacher/pupil ratio in elementary buildings in L-ITM districts is a smaller ratio than exists in H-ITM districts. This

difference, however, did not hold true for special education teacher/pupil ratios at the middle school building level.

Elementary and middle school buildings in H-ITM and L-ITM districts did not vary according to the number of special education referrals received. In retrospect, however, the wording on the questionnaire seeking information for this question appears to this researcher to have confounded the findings. Analysis of the responses indicated there may have been confusion on the part of respondents, and the findings should be be viewed skeptically. However, since the overall rate of special education referrals has come under scrutiny recently, continued exploration into this issue along with other identification issues may be the most informative research for understanding the cost efficiency of special education.

While the number and type of alternative programs offered in the H-ITM and L-ITM districts did not vary, the examination produced some evidence that a duplicity of services exists in both elementary and middle schools in L-ITM districts. In general, elementary school buildings in H-ITM districts are able to mainstream significantly more emotionally impaired students into academic coursework. Also H-ITM elementary buildings are able to provide more reading and language arts classes in the general education program particularly for learning disabled students.

Recommendations

The recommendations drawn from this research have potential for application to a variety of educational issues specifically, policy development, evaluation and research. The recommendations are addressed to audiences within both the special education and general education systems.

Policy Development

Public policy for handicapped students underwent a major transformation between 1970 and 1980 with the passage of P.L. 94-142 in 1975 being a focal point of the unprecedented changes. Continuous evaluations of both anticipated and unanticipated effects of promulgated changes suggest that the categorical identification practices and integrated programming provided by Michigan school districts for mildly handicapped students are both arbitrary and inefficient and impair equitable service delivery for both handicapped and nonhandicapped students. Insufficient or fragmented policy guiding programming for the mildly handicapped may be due to a recognized separateness of the general education and special education systems, a separateness that may continue to grow as the general education system moves toward decentralized leadership and evaluation models while the special education system continues to operate within centralized leadership and evaluation models. While the educational

and behavioral characteristics of students labeled slow learners, high risk, hard to teach, poor or minority, or mildly handicapped students become more indistinguishable, the two major educational delivery systems, general and special education, become more divided. The need to develop new policies governing cooperative educational services and provisions between the systems is imperative to insure equal education opportunities for all students.

Professional educators and school board members are responsible for the task of educating the community's youth. However, either group would be hard pressed to identify or define public policy that specifically addresses the needs of high risk students alone. Michigan's identification practices, governed by a categorical model, has effected a change of the number of special education categories, However, there seems to be no expected concomitant differentiation in programming for students in the different categories -- particularly the categories of LD, EI, and EMI. There is a growing body of evidence that indicates that local policy can have significant impact on student achievement. Local school board members need to become aware of the number and type of student failures that are outside special education criteria but, due to a vacuum of appropriate and immediate services available, become, over time, failures that do require special education placement. Policy statements and leadership efforts from boards of education which recognize

and provide new identification processes and alternative educational programming for the pluralistic and heterogeneous student population in public schools today are imperative. Experimentation in dismantling the categorical identification model which contributes to a "search for pathology" mindset may lead to providing categories of services rather than locating categories of children.

General education leaders and professionals should begin to explore experimental identification and educational models of high risk students that allow for early identification and educational intervention within the mainstream setting. A model where School Team Meetings, organized at the building level and incorporating master teacher leadership, may be a starting point for general education to identify and curb environment and teacher influenced learning disabilities and problems.

Special education leaders and professionals are encouraged to develop policy to guide mainstreaming provisions. Educating special education students in a mainstream setting has been the focus and guiding principle in policy change over the history of special education. Yet, the process of evaluating the extent special education students are mainstreamed into the general education system is limited. Local policy should support the development of evaluation models designed to specifically identify the

quality and quantity of mainstreaming provisions at the district and building levels. In order to curb the capricious and arbitrary identification model, special education personnel are encouraged to experiment with setting quotas on the number of high risk students provided for through special education programs.

Evaluation

Merge General and Special Education Evaluation Models: A separateness of general and special education systems has developed over time. The ramifications of the patterns developed from this separateness are not completely understood. However, it appears that evaluation processes have taken decidedly different foci. While special education continues to defer to efficacy studies for determining effective programming, it should be remembered that such studies have focused on individual classrooms as the unit of analysis. General education evaluation measures have, however, taken on a wider evaluation spectrum and have moved beyond the thinking that individual classrooms alone account for effective education.

Effective school evaluation measures have become concerned with an environment that extends beyond the effects of a single classroom. Special education evaluation should follow this lead. It is recommended that mainstreaming rates should be identified for each school district and included in evaluation reports. It is also

recommended that in Michigan, MEAP scores, a strong source of verification of effective schools, should be compared with mainstreaming rates of schools. The comparison may dispel any lingering community fears that mainstreaming handicapped students into general education classes might result in reduced effective programming for general education students. Further, the comparison may also begin to close the separateness of the systems' evaluation process by a demonstration that special education and general education goals are compatible.

Establish Database for Evaluation Model: A design for understanding and evaluating identification and mainstreaming practices has been developed in this study and may begin an evaluation process that is understandable and acceptable to both special and general educators. This study has demonstrated that when matched on similar identification practices, there are schools available that are more successful in mainstreaming higher numbers of mildly handicapped students than other schools. This knowledge should be tapped by program evaluators. Both H-ITM and L-ITM districts should be examined to build an understanding of providing mainstreaming provisions in the continuum of services required to provide a least restrictive environment for eligible handicapped students.

Since existing data used in the methodology of this study are available for examining district identification

and mainstreaming practices over a three year period of time, examination of these data would provide information for trends that may be developing. Particular attention should be given to districts that are continually identifying high numbers of special education students as well as districts that continue to mainstream mildly handicapped students at a L-ITM rate. It is recommended that a replication of the portion of this study which used existing data to determine district identification and mainstreaming practices should be conducted with data that spans a three year period of time.

Such a study would be inexpensive but would provide valuable information to individual districts seeking to extend their evaluation procedures regarding identification and mainstreaming practices beyond a monitoring and compliance design. Establishing the identification and mainstreaming trends that have developed to date may provide useful in determining the effectiveness of intervention programming developed to change identification and mainstreaming rates in the future.

Research

Of all the factors contributing to the continued separateness of the general and special education systems, teacher training programs may be the most influential factor in setting teacher attitudes toward and acceptance of separating educational provisions for handicapped and

nonhandicapped students. While some training programs are experimenting with providing teaching experiences in a heterogeneous setting, most teacher certification programs have separate curricula for general and special education teacher candidates. Furthermore, many of these certification programs and curricula are located in separate departments within the universities and colleges.

The division of the programs teaches prospective educators there are at least two types of students -- handicapped and nonhandicapped. Furthermore, it suggests that if you choose to work with one type of student, conceptually you become incapable of working effectively with the other type. Attitudinally the division becomes interpreted that special education and general education own separate, specialized methodology that is effective only with specific categories of students whose learning problems are clearly distinguishable and identifiable. At a minimum, training centers should merge the programming for general education teachers and special education teachers in training to work specifically with mildly handicapped students. Research of these departments should grow from the concept of diversity as a norm. Until the student gains or losses from a transfer between systems can be more clearly determined, the research should be directed towards building a delivery system that moves away from a "pull out program" model.

In this century of communication with unlimited technological breakthroughs in media, it is a limited pedagogical framework that continues to support a methodology that provides information, and tests for retention of information, to only those students who read. The purpose of schools is not limited to teaching reading alone, schools are established by the society to teach the ideals, beliefs and knowledge base of society. Yet the educational system persists in dividing and separating students into two groups, readers and nonreaders. However, that a child cannot read should not be interpreted to mean that a child cannot learn.

Separate educational systems with separate curricula have developed around the groups of readers and nonreaders in schools -- special and general education systems. The recognized rapid growth of special education in the past decade provides evidence that today more and more students are being identified that cannot apply the standard decoding process to the printed page. This unprecedented growth should force both general and special educators to reconceptualize program development designed to remediate reading difficulties. Research questions need to focus on the efficiency and efficacy of a continuued acceptance of high identification rates of nonreaders along with a continued development of special education programs to provide remedial reading programs for these students. Also, in fairness to all students, research in both special

and general education need to focus on developing methodology and educational programs designed to transfer information through media other than printed books alone.

APPENDIX A

May 22, 1985

Kathryn Moran
353 Erickson Hall
Michigan State University
East Lansing, Michigan 48823

Attached is material which is part of a study designed to examine several issues related to mainstreaming in the schools of Michigan. Initially, four hundred and eighty-nine school districts across the State of Michigan were examined on several characteristics. From this population sixty districts were then selected and district administrators were contacted for further information. From this information a final group of schools and special education teachers were selected for the final phase of the study. Your school is one of the schools selected.

We are asking you, as principal, to do two activities.

Activity 1. Please complete the 1984-1985: Administrator Report enclosed and return in the envelope provided.

Activity 2. Please distribute the 1984-1985 Special Education Teacher Report to special education teacher consultants and/or special education classroom teachers in your building who are working with Learning Disabled, Emotionally Impaired, or Educable Mentally Impaired students. The Teacher Report is addressed and ready for distribution. A stamped, return envelope is also provided for each teacher.

The information you and your teachers provide is the final, but vital, link in this study that has been underway for the past six months. Questions regarding the report can be directed to Dr. Ed Birch, Michigan Department of Education, or Kathryn Moran, Michigan State University.

Your assistance in this project is gratefully appreciated.

Cordially,

Kathryn Moran

KM/jw

ADMINISTRATOR'S REPORT: SCHOOL YEAR 1984-1985

ALTERNATIVE PROGRAMMING AVAILABLE

DIRECTIONS: *Please indicate if the following programs or services were available in your school building during the past year (1984-1985).*

a.	Remedial reading programming	yes	no	Number of teachers in the RR program	_____
b.	Remedial math programming	yes	no	Number of teachers in the RM program	_____
c.	Headstart program	yes	no	Number of teachers in the Headstart program	_____
d.	Bilingual program	yes	no	Number of teachers in the bilingual program	_____
e.	Instructional aides (paid)	yes	no	Number of instructional aides in building	_____
f.	Instructional volunteers	yes	no	Number of instructional volunteers	_____
g.	Other alternative programming in your building_____				_____

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1. What was the approximate teacher/pupil ratio in your building this past year? _____

2. Is there any contract language in the teacher's contract that allows for weighting special education students placed in a regular education classroom or otherwise allows for a reduction of the teacher/pupil ratio in classrooms where mainstreaming occurs? YES NO

3. If YES, what are the general provisions?_____

4. Are you able to intervene or organize classrooms in any way to reduce the numbers of regular education students in classrooms where mainstreaming occurs? YES NO

5. If YES, what do you do?_____

   _____

6. Number of special education students

   a. How many special education students attend your school (all categories)? _____

   b. How many of the following types of students are from another district?

      Learning disabled_____ Emotionally impaired_____

      Educable mentally impaired_____

7. How many referrals did you receive this past year (received, not processed)? _____

May 22, 1985

Kathryn Moran
353 Erickson Hall
Michigan State University
East Lansing, Michigan 48823

Dear Special Education Teacher,

Attached is a 1984-1985: Special Education Teacher Report. This Report is part of a study designed to examine several issues related to mainstreaming in the schools of Michigan. Initially, four hundred and eighty-nine school districts across the State of Michigan were examined on several characteristics. From this population, sixty districts were then selected and the special education directors were contacted for further information. From this information a final group of schools and special education teachers were selected. Your school is one of the schools selected.

We are asking you, as a special education consultant and/or classroom teacher, to complete the Report attached. A stamped, return envelope has been provided. You will note the Report requests information only for students in the following categories: Learning Disabled, Emotionally Impaired, and Educable Mentally Impaired.

Your principal has also received the 1984-1985: Administrator Report. The combined information from these reports is the final, but vital, link in this study that has been underway for the past six months. Questions regarding the report can be directed to Dr. Ed Birch, Michigan Department of Special Education, or Kathryn Moran, Michigan State University.

Your assistance in this project is gratefully appreciated.

Cordially,

Kathryn Moran

KM/jw

SPECIAL EDUCATION TEACHER REPORT: SCHOOL YEAR 1984-1985

CODE____

The following tables are designed to obtain mainstreaming information for learning disabled, emotionally impaired, and educable mentally impaired students in special education programs.

Number of Students on Caseload by Category

DIRECTIONS: *Give the number of students currently on your caseload for the three different categories (IEPC eligibility label).*

Current number of LD students on caseload: _____
Current number of EI students on caseload: _____
Current number of EMI students on caseload: _____

Number of Students Mainstreamed for Regular Education Classes

DIRECTIONS: *Give the number of students in the three categories of education classes listed.*

Number LD Students Mainstreamed for:		Number EI Students Mainstreamed for:		Number EMI Students Mainstreamed for:	
a. Reading	_____	a. Reading	_____	a. Reading	_____
b. Math	_____	b. Math	_____	b. Math	_____
c. Language arts	_____	c. Language arts	_____	c. Language arts	_____
d. Social studies	_____	d. Social studies	_____	d. Social studies	_____
e. Science	_____	e. Science	_____	e. Science	_____
f. Art	_____	f. Art	_____	f. Art	_____
g. Gym	_____	g. Gym	_____	g. Gym	_____
h. Other	_____	h. Other	_____	h. Other	_____

Number of Students Mainstreamed for Different Lengths of Time per Day for Any Regular Education Activity

DIRECTIONS: *Next to each period of time listed, indicate total number of students mainstreamed per day into the general education program for the length of time listed.*

Number LD Students Mainstreamed per Day		Number EI Students Mainstreamed per Day		Number EMI Students Mainstreamed per Day	
No mainstreaming	_____	No mainstreaming	_____	No mainstreaming	_____
1 hour or less	_____	1 hour or less	_____	1 hour or less	_____
1 to 2 hours	_____	1 to 2 hours	_____	1 to 2 hours	_____
2 to 3 hours	_____	2 to 3 hours	_____	2 to 3 hours	_____
3 to 4 hours	_____	3 to 4 hours	_____	3 to 4 hours	_____
4 hours or more	_____	4 hours or more	_____	4 hours or more	_____

Circle the grades represented in your class: K 1 2 3 4 5 6 7 8 9

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