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# Attitudes of Iowa educators toward alternative approaches to meeting the needs of students with mild learning or behavior problems within general education classrooms

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ATTITUDES OF IOWA EDUCATORS TOWARD ALTERNATIVE APPROACHES  
TO MEETING THE NEEDS OF STUDENTS WITH MILD LEARNING OR  
BEHAVIOR PROBLEMS WITHIN GENERAL EDUCATION CLASSROOMS

*Iowa State University*

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Attitudes of Iowa educators toward alternative  
approaches to meeting the needs of students  
with mild learning or behavior problems  
within general education classrooms

by

Shirley Katherine Curl

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## TABLE OF CONTENTS

	Page
CHAPTER I. INTRODUCTION	1
Statement of the Problem	7
Purposes of the Study	9
Definition of Terms	11
Delimitations	13
Organization of the Study	14
Summary	15
CHAPTER II. REVIEW OF LITERATURE AND RELATED RESEARCH	17
Public Law 94-142 The Education For All Handicapped Children Act	18
Iowa's Statutes Pertaining to Special Education for Mildly Handicapped Students	24
Summary	27
The Burgeoning Numbers of Special Education Students	29
Alternative Program Models	41
Summary	57
Studies of Attitudes toward Integration of Mildly Handicapped Students into Regular Classes	60
Breaking Down the Barriers Between Special Education and General Education	71
Summary	75

CHAPTER III. METHODS AND PROCEDURES	78
Development of the Survey Instrument	79
The Pilot Study	82
Selection of Subjects	83
Collection of the Data	90
Treatment of the Data	92
CHAPTER IV. FINDINGS	93
Demographic and Other Data	96
Attitudes toward Meeting the Needs of Students with Mild Learning or Behavior Problems in General Education Classrooms	99
Other Findings	143
Summary	149
CHAPTER V. SUMMARY, DISCUSSION CONCLUSIONS, AND RECOMMENDATIONS	152
Summary	152
Discussion	159
Limitations	160
Conclusions	160
Recommendations for Future Study	163
LIST OF REFERENCES	165
APPENDIX A. LETTER ACCOMPANYING THE SURVEY	177
APPENDIX B. SURVEY INSTRUMENT	179
APPENDIX C. PANEL OF EXPERTS	190
APPENDIX D. QUESTIONS USED FOR DEVELOPING THE SURVEY INSTRUMENT	192

APPENDIX E. BREAKDOWN OF RESPONSES BY SURVEY ITEMS	199
Descriptive Analysis of Individual Survey Items	200
APPENDIX F. DATA SUMMARIES	237
APPENDIX G. FORMULAS FOR CALCULATING GROUP ATTITUDES TOWARD MAJOR AREAS OF INTEREST	263
APPENDIX H. FORMULAS FOR CALCULATING GROUP ATTITUDES TOWARD MODELS	266
ACKNOWLEDGEMENTS	269

## LIST OF TABLES

	Page
Table 1. Population breakdown of school building personnel in districts of 7500 or more students	86
Table 2. Population breakdown of school building personnel in districts of 2500 to 7499 students	87
Table 3. Population breakdown of school building personnel in districts of 1000 to 2499 students	88
Table 4. Population breakdown of school building personnel in districts of 600 to 999 students	89
Table 5. Population breakdown of school building personnel in districts of 599 or less students	90
Table 6. Number and return rate of respondents for each of the personnel categories	94
Table 7. Number and return rate of respondents for each of the five classifications by district size	95
Table 8. Number and return rate of respondents for each of the four classifications by attendance center level served	95
Table 9. Highest degree earned by respondents	97
Table 10. Respondents' approximate number of special education courses completed	98
Table 11. Attitude mean scores and standard deviations for personnel groups concerning the effect on general education classrooms when students with mild learning or behavior problems are served in the regular classroom	102

Table 12.	ANOVA summary table for group perceptions concerning the effect on general education classrooms when students with mild learning or behavior problems are served in general education classrooms	102
Table 13.	Duncan results denoting pairs of groups with attitudes concerning the effect on general education classrooms when students with mild learning or behavior problems are served in general education classrooms significantly different at the .05 level	103
Table 14.	Attitude mean scores and standard deviations of the sample population toward approaches for educating students with mild learning or behavior problems in general education classrooms	104
Table 15.	Attitude mean scores and standard deviations by personnel groups toward the use of consultants for meeting the individual needs of students with mild learning or behavior problems	106
Table 16.	ANOVA summary table for group attitudes toward the use of consultants for meeting the individual needs of students with mild learning or behavior problems	106
Table 17.	Duncan results denoting pairs of groups with attitudes toward the use of consultants for meeting the needs of students with mild learning or behavior problems significantly different at the .05 level	107
Table 18.	Attitude mean scores and standard deviations by personnel groups pertaining to cooperative planning and problem solving between special education and general education teachers for meeting the needs of students with mild learning or behavior problems	108
Table 19.	ANOVA summary for group attitudes toward cooperative planning and problem solving between general and special education teachers for meeting the needs of students with mild learning or behavior problems	108

Table 20.	Attitude mean scores and standard deviations by personnel groups pertaining to the desirability of educating students with mild learning or behavior problems in general education environments	110
Table 21.	ANOVA summary table for group attitudes concerning the desirability of educating students with mild learning or behavior problems in general education environments	111
Table 22.	Duncan results denoting pairs of groups with attitudes toward the desirability of educating students with mild learning or behavior problems in general education environments significantly different at the .05 level	111
Table 23.	Attitude mean scores and standard deviations by personnel groups pertaining to cooperative and team teaching to meet the individual needs of students with mild learning or behavior problems	113
Table 24.	ANOVA summary table for group perceptions about cooperative and team teaching to meet the individual needs of students with mild learning or behavior problems	113
Table 25.	Duncan results denoting pairs of groups with attitudes toward cooperative and team teaching to meet the individual needs of students with mild learning or behavior problems significantly different at the .05 level	114
Table 26.	Attitude mean scores by personnel categories toward approaches for meeting the needs of students with mild learning or behavior problems in general education classrooms	115
Table 27.	Two-way ANOVA summary for group attitudes toward the desirability of educating students with mild learning or behavior problems in general education environments when respondents were classified by personnel categories and district size	116

Table 28.	Two-way ANOVA summary for group attitudes toward the desirability of educating students with mild learning or behavior problems in general education environments when respondents were classified by personnel categories and level served	117
Table 29.	Group attitudes concerning the desirability of educating students with mild learning or behavior problems in general education classrooms by personnel categories and attendance center levels	118
Table 30.	Two-way ANOVA summary for group attitudes toward cooperative and team teaching to meet the individual needs of students with mild learning or behavior problems when the respondents were classified by personnel categories and district size	119
Table 31.	Two-way ANOVA summary for group attitudes toward cooperative and team teaching to meet the individual needs of students with mild learning or behavior problems when the respondents were classified by personnel categories and level served	120
Table 32.	Two-way ANOVA summary for group attitudes concerning the effect on general education pupils when students with mild learning or behavior problems are served in general education classrooms when respondents were classified by personnel categories and district size	121
Table 33.	Group attitudes concerning the effect on general education pupils when students with mild learning or behavior problems are served in general education classrooms by personnel categories and district size	122
Table 34.	Two-way ANOVA summary for group attitudes concerning the effect on general education pupils when students with mild learning or behavior problems are served in general education classrooms when respondents were classified by personnel categories and level served	123

Table 35. Two-way ANOVA summary for group attitudes toward cooperative planning and problem solving between special education and general education teachers for meeting the needs of students with mild learning or behavior problems when respondents were classified by personnel categories and district size	124
Table 36. Two-way ANOVA summary for group attitudes toward cooperative planning and problem solving between special education and general education teachers for meeting the needs of students with mild learning or behavior problems when respondents were classified by personnel categories and level served	125
Table 37. Two-way ANOVA summary for group attitudes toward the use of consultants for meeting the needs of students with mild learning or behavior problems when respondents were classified by personnel categories and district size	126
Table 38. Two-way ANOVA summary for group attitudes toward the use of consultants for meeting the needs of students with mild learning or behavior problems when respondents were classified by personnel categories and level served	127
Table 39. Attitude mean scores and standard deviations toward service delivery models	130
Table 40. Group attitude mean scores and standard deviations of personnel toward the Consulting Teacher Model	131
Table 41. ANOVA summary for group attitudes toward the Consulting Teacher Model	131
Table 42. Duncan results showing pairs of groups with attitudes significantly different at the .05 level toward the Consulting Teacher Model	132
Table 43. Group attitude mean scores and standard deviations of personnel toward the Teacher Assistance Team model	133



Table 44.	ANOVA summary table for group attitudes toward the Teacher Assistance Team model	133
Table 45.	Duncan results showing pairs of groups with attitudes significantly different at the .05 level toward the Teacher Assistance Team model	134
Table 46.	Group attitude mean scores and standard deviations toward the Adaptive Learning Environment Model	135
Table 47.	ANOVA summary for group attitudes toward the Adaptive Learning Environment Model	135
Table 48.	Duncan results showing pairs of groups with attitudes significantly different at the .05 level toward the Adaptive Learning Environment Model	136
Table 49.	Group attitude mean scores and standard deviations toward the Student Services Specialist model	137
Table 50.	ANOVA summary for group attitudes toward the Student Services Specialist model	137
Table 51.	Duncan results showing pairs of groups with attitudes significantly different at the .05 level toward the Student Services Specialist model	138
Table 52.	A summary table of attitude mean scores of personnel categories toward service delivery models	139
Table 53.	ANOVA summary table comparing service delivery models	140
Table 54.	ANOVA summary table comparing the Teacher Assistance Team with the Student Services Specialist model	140
Table 55.	ANOVA summary table comparing the Consulting Teacher Model with the Adaptive Learning Environment Model	141

Table 56. ANOVA summary table comparing the Teacher Assistance Team with the Adaptive Learning Environment Model	142
Table 57. ANOVA summary table comparing the Student Services Specialist model with the Adaptive Learning Environment Model	142
Table 58. ANOVA summary table comparing the Consulting Teacher Model with the Teacher Assistance Team	143

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CHAPTER I.  
INTRODUCTION

Prior to the enactment of the Education for All Handicapped Children Act (Public Law 94-142) by the federal government in November of 1975, school districts were permitted, but not required, to provide special education programs for handicapped students. The passage of Public Law 94-142 mandated for all students the right to an education in the "least restrictive environment." The inclusion of the least restrictive environment principle in Public Law 94-142 is based on the right of handicapped students to be educated with nonhandicapped students to the maximum extent appropriate.

Before the September 1, 1978 date established by Congress for compliance with Public Law 94-142, the Iowa Legislature passed Senate File 1163 requiring school districts to make special education programs available for all students identified as educationally handicapped. The changes in the Iowa Code became effective on July 1, 1975.

Like Senate File 1163, Public Law 94-142 explicitly directs teachers to teach students who in the very recent past would have been excluded from regular

classes (47). Implicitly, Public Law 94-142 expects teachers to provide an appropriate education to students based upon an assessment of their needs.

As a result of state and federal legislation, there has been an incredible increase in the number of handicapped students served in special education programs. Burgett (13) reported that approximately 27,480 students were served in special education programs in Iowa in 1975-76. By the 1985-86 school year, an estimated 48,000 were being served in special education programs in Iowa. The cost of Iowa special education programs escalated from 59 million dollars in 1975-76 to an estimated 200 million dollars in 1985-86. This tremendous increase in the number of special education students and the concomitant costs are a source of concern for policymakers in Iowa as well as other states.

As school districts face the problems which emanate from trying to serve more special education students with less money, the special educators must consider alternative approaches in meeting the needs of children with individual differences. Several such approaches already exist. Wang and Birch (102) described a program which modified the classroom environment in an attempt to meet the needs of general and special education students within regular classrooms. In this program,

special education staff were moved into the mainstream along with special education students. The special educators provided diagnostic services, offered the intensive instruction needed by some students and consulted with general education teachers and parents as needed. Approximately 15% of the students in the program were classified as educable mentally retarded, learning disabled or socially and emotionally disturbed and had been formerly in self-contained special education classes on a full-time basis. Data collected throughout the school year indicated the following positive outcomes:

1. Achievement gains for reading and math were at or above the expected one year gain for both general education and special education students. This contrasted with an average gain of six months for special education students with similar classifications who were in self-contained special education programs.
2. Positive changes occurred in classroom interactions related to instruction between teachers and students.
3. There were essentially no differences in the classroom behaviors of the general education and special education students.

As a result of these program outcomes,

approximately 30% of the mainstreamed handicapped students were recommended by teachers and principals for removal from the "handicapped" classification at the end of the school year. Wang and Reynolds (103) found the average rate for removal of the handicapped label for students with similar classifications in self-contained special education classes was less than 3%. Despite the success of this program, it was discontinued. The decision to discontinue the program was based on a state regulation that excludes full-time mainstreaming of special education students from eligibility for state funding. This decision exemplified a conflict between the principle that special education students should be placed in an appropriate and least restrictive environment and current funding policies that discourage implementation of the principle.

Madeline Will, the Assistant Secretary of Education for the Office of Special Education and Rehabilitative Services issued a challenge to special education administrators, and committed the federal Office of Special Education and Rehabilitative Services to break down the barriers between special education and regular education and the barriers to full integration of persons with disabilities into a heterogeneous society. (107) Will also advised that partnerships are needed between the Office of Special Education and Rehabilitative

Services with government at every level, and with the private sector, and the community of disabled citizens (107). Will noted the need to change from her belief that "Regular education and special education have evolved into somewhat artificially compartmentalized service delivery systems" (p. 13).

Some children, however, do not fit into either the general or special education delivery systems. A sizeable number of children in our nation's schools have not been served adequately in regular classrooms but do not meet the federal or state requirements for being labeled handicapped. They include students who are slow learners, students who experience learning difficulties as a result of environmental disadvantages, and students who have behavioral problems but are not seen as handicapped. For many children whose learning needs have not been accommodated in general education, special education has emerged as the only option. Handicapped children are often assigned to special education classes in a way which reinforces the barriers between special education and general education. A related concern is that increasing numbers of handicapped children have been educated outside of the regular classroom. Studies have suggested that a significant percentage of the children served in the special learning disability category are not handicapped.



There is a burgeoning belief that children with mild learning or behavior problems can be, and in fact must be, effectively served within the structure of general education by combinations of regular and special education teachers.

The present system of educating students with mild learning or behavior problems in special education resource rooms has contributed to the development of barriers between special education and general education. Teachers, students, and programs have been separated into two distinct groups, special education and general education. Instead of labeling teachers, students, and programs, we should base each child's program on his or her specific needs, interests, and capabilities. Students with mild learning or behavior problems need to be educated in general education classrooms. Many discrete programs to address specific needs have been created on the assumption that they don't interact with each other. What is needed is a coordinated program for serving the needs of students with mild learning or behavior problems. This could be accomplished through a collaborative approach between general education and special education.

### Statement of the Problem

Graden, Casey and Christenson (40) recently pointed out that numerous researchers have focused on significant problems in current assessment, decision-making, and delivery of special education services to students with mild learning or behavior problems. Haring, Stern and Cruickshank (43) noted that success in mainstreaming handicapped students into regular classes is dependent upon the attitudes of teachers and administrators toward mainstreaming. Many other writers have echoed this viewpoint. These include Fink (29), Higgs (47), Hosiak (48), Jones, et al. (52), and Solomon (92).

Various educators influence the special education program. The superintendent plays a key role in the education of students with mild learning or behavior problems because he or she has an influence on decisions made at the district level. These decisions, which may be related to attitudes, include those pertaining to student placement or service delivery systems for students with mild learning or behavior problems. The principal, as the leader of the building team, has considerable influence on the attitudes of general and special education teachers. Because special education teachers act as consultants for general education

teachers, their attitudes are critical.

Some studies pertaining to attitudes for educating handicapped children and toward mainstreaming have been conducted. There appear to be differences in attitudes which may affect program functioning. A study by Gickling and Theobald (35) for example, strongly demonstrated the need for attitude change among general education teachers. Nearly half (48.9%) of the 230 general education teachers surveyed agreed that under normal conditions the general education teacher feels imposed upon by being asked to help special education teachers.

Although there is some knowledge concerning the attitudes about administrators and teachers toward handicapped children and mainstreaming, we need to know more. Changes which have occurred in the last few years, such as the press for student achievement, emphasis on the basic skills, and technological advancements intensify the need for new knowledge about attitudes. These and other changes may have altered teachers' attitudes toward special education services and the children served by them. Superintendents and principals, faced by demands for accountability with limited dollars may also have altered their attitudes about special education programs and the students served by them. Because of a need to develop and determine

delivery systems and because the role and viewpoints of teachers and administrators are important for meeting the needs of students with mild learning or behavior problems within general education classrooms, there was a need to survey them to determine their present attitudes.

The attitudes of the persons implementing an education program influence the success of the program. The success of a plan to mesh general education with special education is contingent upon the attitudes of both special and general educators. It was, therefore, important to consider the attitudes of administrators and teachers in both programs in order to determine their preference and readiness for program implementation.

#### Purposes of the Study

The purposes of this study were:

1. To assess the attitudes of a random sample of Iowa administrators, special education resource teachers, and general education teachers toward the concept of meeting the needs of students with mild learning or behavior problems within general education.
2. To assess the attitudes of administrators, special

education resource teachers and general education teachers toward use of the following four different approaches for providing effective programs to students with mild learning or behavior problems within general education:

- a. Provide inservice to general education teachers on dealing with students with mild learning or behavior problems within the regular classroom.
- b. Provide team teaching between the special education teacher and the general education teacher for the benefit of all students.
- c. Provide direct services to identified special education students.
- d. Provide consultation services to the general education teacher to assist in modifying the learning environment and materials.

These four approaches were selected because they have the greatest potential for allowing integration of students into the general education program and for promoting cooperation between special educators and general educators. These approaches also represent a more cost-effective method than educating students with mild learning or behavior problems in special education resource rooms or self-contained special education classrooms.

Another alternative is to place students with mild

learning or behavior problems in the regular classroom and to assign the responsibility for their educational welfare to the classroom teacher. However, due to the unique instructional needs of these students and the high pupil-teacher ratio, both the teacher and the student will encounter frustration which is likely to jeopardize classroom success.

#### Definition of Terms

In this study, special education refers to instructional programs and services necessary to educate children who are handicapped in obtaining an education. Children handicapped in obtaining an education means persons under twenty-one years of age, including children under five who are handicapped in obtaining an education because of physical, mental, emotional, communication or learning disability, or who are chronically disruptive, as specified in Chapter 281, Iowa Code, 1984 and as defined in the Iowa Administrative Code (Rules of Special Education, 1984).

Special education resource teachers are defined as instructors of an educational program for children requiring special education who are enrolled in a regular classroom program for most of the school day but who require special education instruction in specific

skill areas on a part-time basis. The special education resource teacher provides for ongoing consultation with the student's regular classroom teachers.

For the purpose of this study least restrictive environment means that to the maximum extent appropriate, handicapped children are educated with children who are not handicapped. Mainstreaming is defined as the conscientious effort to place handicapped children into the least restrictive educational setting which is appropriate to meet their individual needs.

General education refers to instructional programs and services necessary to educate children who are not handicapped in obtaining an education. Regular classroom teacher refers to one who teaches students in a general education (regular) classroom. For the purpose of this study, mildly handicapped students are those with mild learning problems and/or mild behavior problems. They are students with impairments that are sufficiently mild so that generally normal functioning is possible when appropriate medical, educational, or other special services are provided. The definition of students with mild learning problems and students with mild behavior problems is: students for whom additional or modified educational services are necessary; and who are currently served in general education classes with special education resource program support but require

modifications to meet their learning needs. This definition includes students identified as mildly mentally disabled, mildly learning disabled, and mildly behaviorally disordered, and students who have not been so identified but exhibit similar educational needs.

Attitudes are defined as predispositions to react to certain persons, objects, situations, ideas, etc., in a particular manner. They are not always consciously held as are beliefs nor readily verbalized as are opinions. They are characterized as either affective or evaluative.

#### Delimitations

The following delimitations mark this study:

1. The study was limited to a stratified random sample of superintendents, principals, special education resource teachers, and general education teachers in Iowa.
2. The study was primarily concerned with the attitudes of superintendents, principals, special education resource teachers, and general education teachers toward meeting the needs of students with mild learning or behavior problems within the general education environment.
3. The time frame of the data collected in this study



was limited to the period of time used to complete the survey.

### Organization of the Study

This report contains five chapters. The first chapter introduces the topic by presenting background information, the need for the study, a statement of the problem, the purposes of the study, and delimitations. The second chapter contains a survey of related literature including a section on the Education for All Handicapped Children Act (Public Law 94-142), a section on Iowa statutes pertaining to special education program delivery, and descriptions of four special education delivery models, the burgeoning numbers of students, a description of four special education service delivery models, studies concerning attitudes toward integrating students with mild learning or behavior problems into the regular classroom and mainstreaming, and on breaking down the barriers between general education and special education.

The third chapter presents the methodology and procedures. Chapter four is a presentation of the findings of the study. Conclusions and recommendations are presented in Chapter five along with a discussion of the findings and limitations of the study.

### Summary

An increase in the number of special education resource rooms has resulted from state and federal legislation which bases the amount of dollars received by a district on the number of students identified for special education services. As increased numbers of students with mild learning problems or behavior problems have been placed in resource rooms, special education costs have greatly increased.

Iowa administrators and teachers have expressed concern about slow learners identified as handicapped, lack of alternatives and individualization within general education, inconsistencies in the identification of pupils, and the failure of school districts to comply with the least restrictive environment provisions of Public Law 94-142.

This study was designed to measure the attitudes of four groups toward meeting the individualized needs of students with mild learning or behavior problems within the general education environment. This study was also conducted to provide data for decisions in considering four different models for reintegrating special education resource pupils into the general education program. The groups surveyed were those whose support

or lack of support is likely to influence the future directions of these special education delivery systems in Iowa.

CHAPTER II.  
REVIEW OF THE LITERATURE AND RELATED RESEARCH

The review of literature is organized into six sections. The first section reports the major provisions of the federally mandated Education for All Handicapped Children Act of 1975 and the intent of Congress in passing that legislation. The second section reviews the main provisions of Iowa's statutes pertaining to the special education of mildly handicapped students. The third section discusses the burgeoning number of students who are served in special education programs. Section four describes program models designed to break down the barriers between special education and general education. Studies on attitudes toward educating mildly handicapped students in the regular classroom and mainstreaming are presented and discussed along with their methodologies in section five. Section six describes studies on breaking down the barriers between special education and general education. Summaries are provided at the end of sections two, four, and six.

Public Law 94-142 The Education For All  
Handicapped Children Act

This section includes the major provisions of P.L. 94-142 and the intent of Congress in passing that legislation. The passage of Public Law 94-142, The Education for All Handicapped Children Act (100) mandated that, wherever appropriate, handicapped students be educated with other students who are not handicapped. Public Law 94-142 has placed demands on the knowledge and the expectation that teachers will work with students who would have been excluded from regular classes in the very recent past. Implicitly, it expects them to work effectively with these students.

As school systems attempt to comply with the provisions of Public Law 94-142, teachers are expected to integrate handicapped students into the general education environment. Will (107) stated that the 1977 regulations issued by the Department of Education require the placement of a handicapped child in the regular educational environment of the public school which the child would attend if not handicapped, unless the nature or severity of the child's handicap is such that appropriate goals can not be achieved even with the use of supplementary aides and services. The P.L. 94-

142 regulation 300.56(b) mandates that justifications for placement outside the general education environment must be developed and maintained by local school systems, subject to review by monitoring staff of the State Education Agency.

Major provisions of P.L. 94-142

P.L. 94-142 is divided into the following 4 major provisions.

Part A of P.L. 94-142 stated that the purpose of the Act is to assure that "a free appropriate public education is made available to all handicapped children." The education should emphasize special and related services to meet the unique needs of handicapped students, and to assure that the rights of handicapped students and their parents or guardians are protected.

Part B of P.L. 94-142 establishes that participating states must submit an annual program plan to the federal government in order to be eligible to receive federal funds. The program plan must include the following provisions: assurance of full educational opportunity for all handicapped students; public participation in the development of the plan; data requirements; personnel and facilities needed to achieve full educational opportunity; establishment of

priorities; identification, location, and evaluation of handicapped children; confidentiality of student records and information; development of individualized education programs; assurance of procedural safeguards; least restrictive environment; personnel development; and compliance monitoring activities. Part B of P.L. 94-142 also describes the exact methodology for calculating excess costs, the fiscal commitment expected from applicant agencies, and requirements for utilization of P.L. 94-142 funds.

Part C of the Act establishes deadlines for insuring the availability of a free appropriate public education. The educational program for handicapped children from ages 3 to 18 was to be made available by September 1, 1978, and it was to be made available for young people between 18 and 21 no later than September 1, 1980. Part C of the Act also establishes priorities for the use of P.L. 94-142 funds. Children defined as first priority are those for whom no educational program is being provided. Children defined as second priority are those for whom an inadequate educational program is provided. Also described in Part C are the necessary components of Individualized Education Plans (IEPs) and the requirements for IEP meetings. Individual Education Programs must include the child's present level of

performance, goals and objectives, services to be provided, and at least an annual review. State education agencies are responsible for assuring that IEPs are developed and implemented. IEP meetings must include specific content, student evaluation, and opportunities for parental participation. Part C also outlines the procedures for developing and implementing a comprehensive system of personnel development. These procedures are required in the state's annual program plan.

Part D of P.L. 94-142 describes the procedural safeguards and due process procedures for handicapped children and their parents or guardians. It guarantees parents or surrogate parents rights to: review the child's records; an independent educational evaluation at public expense under certain circumstances; prior notice before initiating or changing the identification, diagnosis, or placement of the child; informed consent before preplacement diagnosis and initial special education placement; and an impartial due process hearing.



Intent of Congress

The February 1981 report by the Comptroller General explicitly stated the intent of Congress in passing P.L. 94-142.

The definition of handicapped children clearly refers only to children whose handicap will require special education and related services . . . does not include children who may be slow learners

. . . we are instructing the states that their principal objective should be directed at assisting these children who are the most severely handicapped.

The definition of handicapped children clearly refers only to children whose handicaps will require special education and related services and not to children whose learning problems are caused by environmental, cultural, or economic disadvantages. (21, p. 31)

These statements clearly indicated that the Congressional intent of P.L. 94-142 was to provide specific services (special education and related services) to a discrete and limited population.

Two reports by the Comptroller General of the United States entitled "Unanswered Questions on Educating Handicapped Children in Local Public Schools" (21) and "Disparities Still Exist in Who Gets Special Education" (20) raise a number of crucial questions that need to be answered. Edgar and Hayden (26) focused on two of these questions: 1) Who are the children who require special education services in our schools, and 2) How many such children are there? As long as these

questions remain unresolved, considerable time and money will be spent on redundant assessments, extensive child-find procedures, due process hearings, and other activities which are nonproductive in helping handicapped children to acquire needed skills.

Changes in terminology have contributed to the confusion concerning which children require special education services. In 1979, Prehm and McDonald (79) used interchangeably the terms "exceptional children" and "handicapped children". Thus, they moved from the concept of children who need certain types of services (categories of services) to a concept of children with certain handicapping conditions (categories of disabilities). Lilly (62) noted that categorizing children by handicapping condition makes little sense for those children defined as mildly handicapped. As an alternative, she suggested the categorization of services that are beneficial to children who have difficulty learning.

Iowa's Statutes Pertaining to Special Education  
for Mildly Handicapped Students

Chapter 281 Education of Children Requiring  
Special Education

Section 281.1 of this chapter establishes a division of special education within the Department of Public Instruction and entrusts it with the responsibilities of promotion, direction, and supervision of the education of children identified as requiring special education in the schools under the authority of the Department of Public Instruction.

Section 281.2 (17) stipulates that "children requiring special education" include those from birth to twenty-one "who are handicapped in obtaining an education because of physical, mental, communication or learning disabilities or who are behaviorally disordered as defined by the rules of the state board of public instruction" (p. 329). Described next is Iowa's policy pertaining to special education which includes the following major concepts: 1) to require school districts to provide special education opportunities as an integral part of public education; 2) to discourage separate facilities and programs and to require special education children to attend regular classes to the maximum extent possible; 3) to require a level of

education for handicapped children commensurate with the education provided to nonhandicapped children whenever possible; 4) to permit cooperation between local school districts, private agencies, and area education agencies in order to provide cost-effective special education programs; and 5) to require that special education funds be utilized only for special education services and programs.

Section 281.3 lists the duties and powers of the division of special education at the Iowa Department of Public Instruction which include: 1) to assist in the organization of special education schools, classes, and facilities; 2) to adopt rules to carry out the responsibilities; 3) to supervise the special education system; 4) to adopt service delivery systems; 5) to prescribe special education curricula and assessment procedures; 6) to cooperate with other state and local agencies responsible for the health and welfare of children requiring special education; 7) to investigate the needs, methods, and costs of special education; 8) to establish employment and performance standards of special education support personnel; 9) to provide inservice training to special educators; 10) to approve the acquisition and use of special education facilities.

Section 281.6 declares that it is the duty of the child's parents or guardians to enroll the child for special education instructional services. This section also allows the parents or guardians, the child, or school district officials to review decisions on the grounds that the child has been or is about to be: 1) denied entry or continuance in an appropriate special education program; 2) placed in an inappropriate special education program; 3) denied educational services because no suitable educational program or related services are maintained; 4) provided with an insufficient amount of special education services to satisfy the law's requirements; 5) assigned to a special education program when the child is not handicapped.

Section 281.7 of the Code of Iowa states that the school districts shall provide examinations for children before approving special education placement. The examinations shall be prescribed by the division of special education of the Iowa Department of Public Instruction. In case of disagreement or appeal, the final decision shall be made by the state board of public instruction, which may obtain the advice of medical and educational authorities.

Section 281.11 defines the content of special education program plans which must be submitted to the

Department of Public Instruction by each Area Education Agency. The content includes assurances that the most appropriate agency will provide the special education services, that qualified special education personnel will be employed, that the instruction will provide for a natural and normal progression, and that all revenue generated for special education will be expended for the actual delivery of special education programs and services.

#### Summary

The purpose of P.L. 94-142 was to identify special education students who were not previously served and provide special programs for them. The federal government became the major source for funding special education programs. This was accomplished through P.L. 94-142 by a formula for reimbursing state and local education agencies for the added financial burden of funding special education programs for students. As the federal government increased its financial responsibility, it also assumed a responsibility for compliance monitoring.

As a result of P.L. 94-142, special programming has been increased nationwide to meet the varying special

programming needs of handicapped students. For the most part, this has had a positive effect on providing equitable educational opportunities across the country. Because of the formula utilized to provide funding to local school districts, it became advantageous for local education agencies to identify and place students in special education programs. Now the federal government is critically examining whether placement of students in special education programs is appropriate to their needs. The cost factor may not be the only concern in providing special programs for students who may be able to function in a less restrictive environment. There is growing concern that many students placed in special education programs have become overly dependent on the special attention and instructional assistance provided in those programs. A student placed in a special education program may become convinced that without special treatment, he or she would be unable to succeed in school.

Section 281 of the Iowa Code included statutes pertaining to special education. It mandates special education services for children from birth to twenty-one. Like P.L. 94-142, Iowa's policies pertaining to special education require that students be educated in the least restrictive environment and that they receive

educational opportunities that enable them to achieve to the best of their abilities. Like P.L. 94-142, the Iowa Code stipulates that special education funds be utilized only for special education services and programs.

#### The Burgeoning Numbers of Special Education Students

The number of students have increased in many states including Iowa. Algozzine, Ysseldyke, and Christenson (5) calculated the number of students referred and placed in special education programs in a sample of school districts during the 1977-78, 1978-79, and 1979-80 school years. They found that 4-5% of the students were referred and evaluated and 3% were placed in special education programs. Wide variation was found in data supplied by individual school districts, with some of them placing as many as 21% of their school population in special education programs.

Algozzine and his colleagues (5) conducted a postcard survey of a national sample of school district directors of special education requesting demographic and referral/placement information. Respondents were asked to indicate their state, the number of students in the school district and the type of community



represented such as urban, suburban, or rural. Three questions were asked to obtain referral/placement information: (a) How many students were referred for psycho/education evaluation? (b) How many referred students were evaluated? and (c) How many referred students received special education services? Directors were requested to provide data for the academic years 1977-78, 1978-79, and 1979-80. For each director's responses, the number of students referred, evaluated, and placed was divided by the total district population to yield three incidence figures for the 1977-78, 1978-79, and 1979-80 school years. The average incidence reported by the 97 directors was obtained for the total sample; data were also broken down by community type and geographic region. Results of the study indicated that approximately 4 to 5% of the school district population was referred and evaluated during the target years. The incidence (number of referred students placed) was consistently 3% per year with only minor variation in data broken down by communities and geographic regions. Large variations, however, were apparent across data reported by individual districts.

The U.S. Department of Education's Second Annual Report to Congress on the Implementation of Public Law 94-142 (100) indicated that during the 1979-80 school

year, over 3.8 million handicapped children from the ages of three through twenty-one were receiving special education and related services. This figure indicated that special education and related services were being provided to more than 9.5 percent of the children enrolled in schools. This increase occurred at the same time that public school enrollments as a whole in the United States declined by an estimated 6.2 percent or by almost 2.78 million children.

Algozzine and Korinek (2) cited figures from the U.S. Department of Education indicating that during the 1982-83 school year, approximately 4.3 million students received special education services paid for partly by federal monies provided as a result of compliance with P.L. 94-142. Since October, 1976 when states began reporting the data, the number served has increased each year. By 1982-83, approximately 11% of the school aged population was served in a special education program.

Federal legislation stipulates who qualifies for special education services. P.L. 94-142 (99) lists categories of handicapped persons: mentally retarded, hard of hearing, deaf, speech impaired, visually handicapped, seriously emotionally disturbed, orthopedically impaired, other health impaired children, or children with specific learning disabilities. Some

categories have quantifiable criteria: moderately retarded, severely/profoundly retarded, orthopedically impaired, health impaired, multiply handicapped, hearing impaired, and vision impaired. Edgar and Hayden (26) defined the quantifiable categories as those in which diagnosis is possible and for which the conditions are fixed over time. Most of these categories have quantifiable physical conditions that are not amenable to amelioration. It is believed by Edgar and Hayden that "children in these categories are clearly handicapped, are the target population specified in P.L. 94-142 and represent the population on which the intent of the law is based" (p. 529).

In contrast, the categories of emotional disturbance, learning disabilities, and mild retardation are nonquantifiable conditions which are considered judgmental categories because school administration and teacher judgments play a major role in assigning students to them (26). Unlike the categories with quantifiable criteria, there is a great variance between districts in the ways children are categorized. This variance among districts is due to flexible eligibility criteria for these conditions in the different states and to the biases of individual diagnosticians.

Newkirk, Block and Shrybman (74) reviewed the categorical definitions used by the various states. They found that the nonquantifiable or "soft" categories have the widest range of criteria from state to state. Studies have been conducted to support this. In a study of eleven school districts from three states, the actual number of children receiving special education services was recorded by age and handicapping condition during the 1979-80 school year. By presenting the data in three major age categories (preschool, ages 3-5; elementary, ages 6-12; secondary, ages 13-20) it was possible to note conditions that varied by age and conditions that remained consistent by age. Results of the study revealed that the nonquantifiable categories had a range of 3.5% to 7.4% across the eleven districts, and these categories accounted for approximately 80% of all children served in special education programs.

One condition difficult to quantify is mild retardation. Patrick and Reschly (75) noted that the prevalence of mild retardation in public schools is more closely related to per capita income, educational level, and literacy rates than to the definition of retardation by I.Q. scores. In the case of mild retardation, a "soft category", there are many opportunities for

educators to make judgements about what is "wrong" with the child.

After students are labeled mentally retarded and placed in special education, few ever return to general education. In a recent study by Edgar and Maddox (27), the records of all the students who were served by special education programs between 1976 and 1982 were reviewed. Of the 1,356 cases, 69 (4%) were returned to regular education and remained there without special education assistance.

Data from a study by Ysseldyke, Algozzine, and Richey (110) showed that there is a tendency for children from minority groups to be over referred. In this study, educators were requested to estimate the percentage of children with various types of learning or behavior problems and the percentage of children with handicapping conditions. The estimates were consistently much higher than accepted prevalence figures and were most high for children who were poor or from a minority group.

Emotional disturbance is another handicapping condition difficult to quantify. The federal definition (26) contains three criteria: 1) The child must exhibit one or more of the following characteristics: inability to learn which is not due to deficits in intelligence,

sensory or health functions; inability to build or maintain satisfactory interpersonal relationships; inappropriate behavior or feelings; unhappiness or depression, physical symptoms, or fears; 2) These conditions must adversely affect educational performance, and 3) The child is not socially maladjusted. Obviously, these criteria are judgmental and basically nonquantifiable. Edgar and Hayden (26) claimed that it is almost impossible to distinguish between emotionally disturbed, mildly retarded, and learning disabled children. Other researchers concur that these three groups represent essentially the same population.

Another category difficult to define is learning disabilities. Low achievement is the only quantifiable criterion of learning disabilities. If we used this criterion, 20-30% of all school-aged children could be classified as learning disabled. Since P.L. 94-142 was enacted, the percentage of all handicapping conditions has increased slightly (16%) and the category of learning disabilities has increased by 119% (26). Ever since the term learning disabilities was coined, there has been debate on whether learning disabilities actually exist. Phipps (77) maintained that there are significant differences in learning disabled children

that justify separating their education from that of emotionally disturbed or mildly retarded children. Becker (7), Hallahan and Kauffman (42) disagreed with this, claiming that there are no discrete differences to justify separate differential treatment for children labeled as learning disabled, mildly mentally retarded, emotionally disturbed, and slow learners.

Gerber (33) stated that students with learning and behavior problems appear to be in danger of inappropriate placement and inequitable treatment due to variability in identification and referral procedures across states and local districts. He pointed out that particular attention was given to data pertaining to students identified as learning disabled in the U.S. Department of Education's Sixth Annual Report to Congress on P.L. 94-142. Students identified as learning disabled comprised the largest category of students served in special education in 1981-82 and about 41% in 1982-83. Increasingly, practitioners, researchers, and administrators have viewed learning disabilities as the most ambiguous and suspect category of special education. This was stated in the Sixth Annual Report to Congress:

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 decreases in number of children served in most other categories. Since 1976-77, the learning disabled population has grown by 119 percent. (100, p. 200)

Larsen (56) further acknowledged that large numbers of school children are being identified as learning disabled. Incidence figures from various states range from 3-15% of the total school population. Concern over the continually rising number of students identified as learning disabled has triggered efforts to assure the consistent application of eligibility criteria and to strengthen the capacity of the regular education program to address learning problems. Greenburg (41) advocated developing and implementing placement standards rather than putting a "cap" on the percent or number of children of a particular handicapping condition for which the school or agency can anticipate financial support.

Children typically identified as mildly handicapped all seem to respond to the same instructional variables - small class size, content overlays between teaching activities and learning activities, mastery learning, increased instructional time, pacing, use of motivational techniques, good communication between special education teachers and general education teachers, and mainstreaming. Lilly (62) recently



recommended that general education should assume more responsibility for educating mildly handicapped children.

In an effort to ameliorate the problems of regular education, special education has created some negative outcomes:

- 1) There always will be a group of less capable learners in any classroom. As more children were removed from regular classrooms to special education programs, those who were later identified were more borderline.
- 2) Many mildly handicapped children placed in special education programs never return to the regular classroom and become complacent with the sheltered environment of special education.
- 3) Regular classroom teachers have abdicated their responsibility for educating children with learning and behavior problems. As special education has assumed more responsibility for solving the problems of general education, regular classroom teachers have become less likely and capable to assume these responsibilities.

McKinnon, Wine, Sires, and Bowser (70) maintained that the success of integrating handicapped students into regular classrooms is contingent upon the

coordinated efforts of regular and special education teachers to provide educational programs for the handicapped students. In order to accomplish this, the roles of teachers may need to change. Lakin and Reynolds (54) pointed out that Public Law 94-142 has created an environment in schools which will change the roles of teachers. Roberson (84) emphasized that the implementation of P.L. 94-142 in the public schools necessitates changes in the preparation of teachers. By clear implication P. L. 94-142 calls for both regular classroom teachers and special education teachers to have skills for educating all students including those who are exceptional. Lakin and Reynolds (54) identified ten clusters of general understandings and skills related to the education of all students:

- 1) The ability to select, develop, modify, and evaluate curriculum.
- 2) The ability to teach functional skills in the area of literacy, survival skills, and personal/social development.
- 3) The ability to manage groups of students and individual students in ways that permit high student involvement and self-management.
- 4) The ability to communicate effectively with other

school personnel and educational consultants to increase instructional effectiveness and to improve the understanding of students.

- 5) The ability to work effectively and cooperatively with parents and to encourage parental involvement in the child's education.
- 6) The ability to structure interactions among students which promote a sense of mutual responsibility and an appreciation for the rights and diversity of others.
- 7) The ability to make classroom accommodations that permit students with widely differing levels of attainment to work productively and cooperatively in the same classroom.
- 8) The ability to perform a major role in referral and child study processes and to collect objective data on student social and academic behavior.
- 9) The ability to prescribe individualized academic activities appropriate to each student's academic level, to monitor each student's progress, and to assess on-going classroom instruction.
- 10) The ability to perform according to the contemporary roles, responsibilities, and ethical commitments expected of teachers and knowledge of the regulations and laws governing schools, student and

parental rights, teacher self-protection, and intelligent professional behavior.

With the steadily increasing numbers of students being served in special education programs, it has become necessary for state agencies and local school districts to consider alternative models for providing effective programs to students with mild learning or behavior problems. Four of these models are described in the next section of this chapter.

#### Alternative Program Models

Although there are other approaches for providing services to mildly handicapped students in the general education environment, the review of the literature was limited to the following instructional models being considered by the Iowa Department of Public Instruction for reintegrating students with mild learning or behavior problems into general education programs: Teacher Assistance Team, Student Services Specialist, Adaptive Learning Environment Model, and Consulting Teacher Model.

Chalfant, Pysh, and Moultrie (15) listed five major problems that are usually encountered when trying to

meet the needs of children with mild learning and behavior problems in the regular classroom. First, many regular classroom teachers who were assigned the responsibility for the education of students with mild learning or behavior problems lacked the training, confidence, or experience to individualize for these students. Second, the high cost of supportive special services prohibited the employment of special educators to provide direct services to all children who need individualized help in our schools. This meant that the burden of modifying programming for many special needs children, who were not eligible for special education services, was always placed on the regular classroom teacher. Thus, classroom teachers had no place to turn for immediate help and special education personnel seldom had time to go into a classroom and demonstrate for teachers how to individualize instruction for a handicapped child. Fifth, in many districts, classroom teachers were referring 20% of the pupil population for special education services. Almost half of this 20% referred population did not qualify for special education services and was returned to the regular classroom teacher. This often created resentment toward special education or toward the students who were referred. In response to this, some teachers made fewer

referrals and put forth less effort to individualize instruction for special students.

Due to this situation, it was necessary to create a support system to help teachers handle learning and behavior problems in the classroom. It was decided that, to be effective, any teacher support system had to (a) help teachers understand children's learning and behavior problems, (b) provide immediate and relevant support to teachers who were trying to individualize instruction, (c) improve follow-up and evaluation of efforts to mainstream students, (d) increase attention to referral at the building level; reduce the number of inappropriate referrals, and (e) utilize special education personnel more effectively.

In order to identify what kinds of assistance were needed to meet the needs of handicapped children, the Northern Suburban Special Education District conducted a survey of Highland Park District 108. Chalfant, Pysh, and Moultrie (15) described the survey in which the principals of eight buildings were asked to list competency areas which they believed the staff members needed to deal more effectively with the learning and behavior problems of handicapped children. Of the teachers in District 108 (138 teachers) 83% responded to a questionnaire asking what kinds of competencies they felt they would need to

mainstream children in the regular classroom. Teachers and administrators showed considerable agreement with respect to the competencies needed to individualize instruction for children. Priority was given to (a) adaptation of methods and individualization of instruction; (b) behavior management; (c) competencies in dealing with children's attitudes, motivation, and self-concept; (d) improved communication between teachers and parents; (e) familiarization with characteristics of handicapped children; and (f) availability of materials. Although these needs were found in a suburban area, they are the same as those identified in the rural area served by Educational Service Unit No. 9 in Hastings, Nebraska (15).

An analysis of the teacher responses revealed five assumptions which point to a teacher support system where the focus of responsibility, decision-making, and communication rests with the teachers themselves.

- (1) In many situations, a regular classroom teacher can help a child with learning and behavior problems.
- (2) In other instances, a regular classroom teacher, with some assistance, can help a child with learning and behavior problems.
- (3) Teachers learn best by doing.

- (4) There is considerable knowledge and talent among the teachers themselves.
- (5) Teachers can resolve many more problems when working together than by working alone.

#### Teacher Assistance Team

Chalfant, Pysh and Moultrie (15) developed the Teacher Assistance Team (TAT), a building level system to provide assistance to teachers in meeting the needs of students in their classrooms. This model is based on the belief that general education teachers have the skills and knowledge to teach many students with learning or behavior problems through a collegial problem-solving process.

Chalfant, Pysh, and Moultrie (15) described how the system worked to provide support for general education teachers. A teacher who is having difficulty teaching a child with learning or behavior problems submits a summary of observations of the child which include a description of the performance desired of the child; a list of the student's strengths and weaknesses; a description of what the teacher has done to resolve the problem; and any relevant background information and test results. To ensure that it includes the necessary



information, the team coordinator reviews the referral and alerts the team members to read the referral, analyze problem areas, and consider possible recommendations for the Teacher Assistance Team meeting. After reviewing the referral, the coordinator may find it necessary to obtain additional information from the teacher or to clarify certain statements.

The Teacher Assistance Team meeting lasts for thirty minutes and includes the following procedures:

- (a) to reach consensus about the nature of the problem;
- (b) to negotiate one or two objectives with the regular teacher; objectives should be in terms of the behaviors the child should achieve;
- (c) to brainstorm alternatives;
- (d) to select the methods the referring teacher would like to try; the team defines the methods;
- (e) to fix responsibility for carrying out the recommendations (who, what, when, where, why, how); and
- (f) to establish a follow-up plan for continued support and evaluation.

The Teacher Assistance Team has advantages for administrators, regular classroom teachers, special education programs, students, and parents. For administrators, the Teacher Assistance Team focuses staff members on positive, constructive problem solving; utilizes staff members more effectively; improves staff

communications and skills; saves time and money by reducing referrals to special education; and is cost-effective. Regular teachers acquire new strategies for dealing with children who have special needs, receive support for individualizing instruction, receive prompt assistance for dealing with individual and immediate classroom concerns, learn interventions appropriate to other children in the class, and share competencies with other teachers in the building. For special education programs, Teacher Assistance Teams reduce inappropriate referrals, provide support for mainstreamed handicapped students, and allow special education to utilize resources primarily for the truly handicapped students. For students and parents, Teacher Assistance Teams are an alternative for slow learning children who are not eligible for special education services, and initiate immediate intervention for them. Often parents are included in the planning before the child is referred to special education. In some instances, students are given the opportunity to be on the team and to take responsibility for their own learning and behavior.

#### Student Services Specialist model

The Charlotte-Mecklenburg Schools (16) have reorganized the delivery of psychological services by

creating a new position titled Student Services Specialist. This position combines many of the traditional functions of the school guidance counselor, social worker, and psychologist. The goal is to provide a full range of interdisciplinary integrated services and involves the employment of a person who is dually certificated as either a school psychologist/social worker or school psychologist/counselor. Services include consultation to teachers, parents, and administrators; psychoeducational assessment; individual and group counseling; behavior management; developmental classroom guidance; and liaison with home, school, and community. The aim of the Student Services Specialist program is to provide a comprehensive, preventive early identification, and early intervention model of service delivery.

Below are the procedures for service delivery of the Student Services Specialist Model. Referrals are initiated by the student, teachers, administrators, or parents submitting a request for assistance form to the service provider. This form provides a brief description of the problem as well as a collaborative plan of action decided on by the person making the request and the service provider. Referrals for diagnosis are presented at the school based committee

meetings. The secondary school psychologist and the elementary student services specialist are standing members of this committee and have direct input about the appropriateness of the referral and the action to be taken or services to be offered. Psychological services include consultation, direct interventions, assessment, and liaison with out-of-school agencies. Psychologists are also involved in staff inservice, PTA presentations, and parent education groups.

#### Adaptive Learning Environment Model

In response to a national survey that showed overrepresentation of minority children and males in special education, the National Academy of Science Panel on Selection and Placement of Students in Programs for the Mentally Retarded was established to make recommendations for formulating policies that would prohibit discrimination against minority students. The NAS Panel explored two key issues: the validity of referral and assessment procedures, and the quality of instruction received. In exploring the validity of referral and assessment procedures, the Panel recommended assessment of the learning environment and assessment of each student's functional needs. According to Wang and Reynolds

This recommendation assumes that special education should be an option only when satisfactory instruction cannot be achieved in the regular classroom environment with the use of supplementary aids and services. Thus, systematic analysis of the learning environment and the nature and quality of instruction is expected to precede any special education referrals. According to the Panel's recommendations, such referrals are to occur only after the adequacy of the learning environment, and the failure of an individual student to learn in regular class settings using alternate instructional approaches, have been documented. (103, p. 498)

The NAS Panel contended that diagnosis should identify the instructional processes that are most effective for individual students. They saw little reason for the categorical classifications that distinguish mildly retarded students from other students with academic difficulties, such as learning disabled students, Chapter I students, or slow learners.

Recognizing that a basic problem for all students is that general education programs have been insufficiently adaptive, the NAS Panel recommended that both general education and special education make a concerted effort to be adaptive to the diverse needs of each individual. The NAS Panel came close to saying that solving the problems in special education requires restructuring the nation's general education programs.

Wang and Birch (102) described the Adaptive Learning Environment Model as a full-time mainstreaming program for exceptional students which supports:

- (a) early identification of learning problems through a diagnostic prescriptive monitoring system.
- (b) delabeling of mainstreamed exceptional students and description of learning needs in instructional terms.
- (c) individually designed educational plans that accomodate each student's instructional strengths and needs.
- (d) teaching of self-management skills that enable students to take increased responsibility for their learning.

The Adaptive Learning Environment Model is designed to provide instruction that meets the needs of general and special education students in regular classrooms by modifying conditions in the classroom environment. The model combines individualized instruction in the basic skills with a classroom management system that provides a flexible organizational structure for adapting instruction to differences in the way students learn.

Consulting Teacher Model

As school districts face the problem of serving more special education students with limited resources, they must move in new directions to provide appropriate educational services to all students in the least restrictive environment. Graden, Casey, and Bonstrom (39) stated that federal, state, and local funding cannot continue to support the increasingly larger numbers of students being labeled as handicapped each year. Special educators cannot continue to rely on inadequate tests and definitions to label students as handicapped. School psychologists and other educational diagnosticians cannot continue their overreliance on educationally irrelevant testing procedures. To address these issues, there is a trend toward indirect special education services which have the potential for helping teachers teach more effectively and helping students learn to the best of their ability in the least restrictive environment.

Graden, Casey, and Christenson (40) described the Consulting Teacher Model as a series of procedures for problem solving and intervention prior to the referral process. Resources traditionally used to test and place large numbers of students are redirected toward providing assistance for students and their teachers in

the regular classroom. The purpose of the Consulting Teacher Model is to implement and evaluate intervention strategies in the regular classroom before a student is formally referred for special education placement. A major goal is to identify successful interventions to help students remain in the regular classroom, the least restrictive environment.

The Consulting Teacher Model is based on the principle of prevention. It focuses on preventing inappropriate placements in special education and on preventing future student problems by increasing the skill and knowledge of general education teachers to intervene effectively with diverse groups of students. The Consulting Teacher Model assesses and analyzes the factors that affect student learning and behavior difficulties. It provides indirect services to the referred student through assistance to the classroom teacher, thereby helping greater numbers of students with existing resources. Rather than to diagnose and place, the Consulting Teacher Model uses existing resources to teach and intervene.

McKenzie, Egner, Knight, Perelman, Schneider, and Garvin (69) described the roles of consulting teachers as similar to resource teachers, except that consulting teachers have no direct classroom responsibilities.



They do not bring a handicapped child into their classroom for diagnosis and educational programming and then return him to his or her original classroom with a diagnosis and appropriate techniques and materials to assist the child's classroom teacher. Diagnosis and remediation procedures are accomplished by the child's teacher in his or her own classroom with the help of the consulting teacher. Another difference is that principles of behavior modification for handicapped children are applied in the general education classroom.

Graden, Casey, and Christenson (40) delineated the six stages in the prereferral intervention process. The first stage is the request for consultation from the assigned consultant, who can be the school psychologist, special education teacher, school social worker or other school person. The referral for consultation process can occur in at least two ways. In one approach, the referring teacher requests problem solving assistance from a building consultant. Another approach is for the building team to screen all initial referrals for group problem solving and then assign a consultant to assist in follow-up consultation. Variations between these two approaches are also possible.

The second stage in the prereferral intervention process is consultation. After the specific area of

concern is identified and defined, possible interventions are explored, implemented, and evaluated. If the first intervention plan derived from consultation is not successful, the next phase is to observe the student and specific characteristics of the classroom to assist in further intervention planning. Observation provides objective documentation and additional data for referral problems specified in the consultation stage.

The end result of both the consultation and observation stages are intervention plans. These plans provide data on the effect of alternative instructional and behavioral strategies in attaining a match between the student and the instructional/teaching environment. Intervention plans include the behavior to be changed, the criterion for success, the alternative strategies to be implemented, the roles/responsibilities of those implementing the plan, the methods for collecting data to monitor progress, and the procedures for evaluation.

During the fourth stage, a conference is held with a "Child Review Team" to share information and make a decision. The team is a shared problem solving team as opposed to a formal special education decision-making team. The team can include various school resource people but must have regular education teachers as resources to their fellow classroom teachers and to

broaden the special education focus that is typically present on decision-making teams.

If appropriate, a formal referral is made for psychoeducational evaluation of the student. At this stage, the student enters the formal child study process with due process regulations. During the final stages, a formal program meeting is held to determine appropriate services.

In implementing the Consulting Teacher Model of service delivery, the consultant is viewed as a resource to the classroom teacher with equal power between the two. The final decision regarding selection of interventions must lie with the classroom teacher in order for the teacher to have ownership of the interventions.

Although the Consulting Teacher Model provides indirect services to the student, Curtis and Meyers (22) view the model on a continuum with direct services. For example, a school psychologist provides consultation to a teacher about a student with a behavior problem (indirect service) and also sees the student for counseling to develop behavior change strategies (direct services). Similarly, a special education teacher provides remedial reading support to some students (direct service) while consulting with classroom

teachers about effective reading strategies for the same or other students (indirect service).

Graden, Casey, and Bonstrom (39) emphasized that implementation of the model requires careful planning. Ideally a policy is initiated stating that an intervention must be implemented prior to any formal referral for special education services. Before adopting a strong policy statement, there is a need for administrators to become convinced of the merits of such a model.

#### Summary

In some school districts large numbers of mildly handicapped students have been referred, evaluated, and placed in special education programs. Despite the overall decline of student enrollment in the nation's public schools during the past ten years, there has been a steady increase in the number of students served in special education programs. Although the increased numbers of students could be partially attributed to improved referral, diagnostic, and placement procedures, the quest by educators to meet the special needs of all students has placed an additional burden on special educators. This was compounded by the federal funding

formula which provides revenue to state education agencies on the basis of the number of students served in special education programs.

Prior to the advent of P.L. 94-142, mildly handicapped students were taught in general education classrooms. The burgeoning number of mildly handicapped students that have been identified and placed in special education programs has caused the total number of identified special education students to increase dramatically. Long term solutions must be found to address the problem of students being identified and placed in special education programs. Iowa, as well as other states, has been considering alternative models of service delivery to reintegrate mildly handicapped students into the general education program.

All of the models of service delivery described can be adopted as described or adapted to meet the individual needs of the school district. Parts of several models can exist together at one time. For instance, the Teacher Assistance Team can be a part of the Consulting Teacher Model.

In some ways, the four models of service delivery are similar. The Teacher Assistance Team, Student Services Specialist, Adaptive Learning Environment Model, and the Consulting Teacher Model are designed to

provide indirect services to mildly handicapped students within the regular classroom. However, the models can be combined with direct services such as a resource room program. All four models are designed to improve the screening process, and focus on early intervention. They all put more responsibility for diagnosis and remediation on the regular classroom teacher. They all require more joint decision making, more communication, and more cooperation between special education and general education. They all have the potential for helping regular classroom teachers and special education teachers to deal more effectively with students who have special needs.

The main differences between the four models are in the methods of implementation and procedures, the personnel and specific skills needed, the underlying philosophies, the amount and kinds of data collected, the extent to which intervention strategies are required before referrals are made, and who is primarily responsible for those interventions.

Regardless of which model is used, the most important elements for successful implementation are: individualization in the regular classroom, acceptance of the handicapped child by regular teachers and nonhandicapped peers, a cooperative working relationship

between regular and special education staff members, administrative support for the concept, and related services support to the regular classroom teachers.

#### Studies of Attitudes toward Integration of Mildly Handicapped Students into Regular Classes

Should mildly handicapped children be taught in regular classrooms? In recent years, this question has been the subject of much debate. Williams and Algozzine (1988, p. 63) asserted that "The type of children included in regular classes is an important consideration in mainstreaming programs, for attitudes toward the handicapped sometimes depend on the handicap." Williams and Algozzine found that teachers were more accepting of physically handicapped children and learning disabled children than of disturbed or retarded students.

Williams and Algozzine posited that if teachers hold different attitudes toward children with different handicaps, the effectiveness of mainstreaming may be related to the attitudes of the receiving teachers. They, therefore, conducted a survey to assess the reasons for teachers' attitudes on several aspects of special education and mainstreaming. The first set of

questions asked 267 regular classroom teachers from Pennsylvania to select reasons why they felt able to teach a handicapped child. The second set of questions requested reasons why teachers would not voluntarily mainstream handicapped children. The teachers were instructed to consider each reason separately and to ask themselves whether it had any bearing on their attitude toward physically handicapped, socially/emotionally disturbed, learning disabled, and educable mentally retarded.

In general, teachers felt more able to program for handicapped children because of previous successful experiences with them and because of available support services in their districts to assist teachers. Teachers felt comfortable in programming for the physically handicapped because programming for them was not viewed as different from regular programming.

Reasons given by teachers for unwillingness to include handicapped children in their classes were because these students took too much time from other students and the teachers felt that they lacked the technical abilities necessary to be effective.

Williams and Algozzine concluded

Having classroom teachers work with experienced special education teachers would appear to be one way of helping teachers make mainstreaming effective.



Regardless of the method used, the attitudes of the regular classroom teachers should be considered important in mainstreaming. (108, p. 67)

Larivee and Cook (55) used an attitude scale to investigate the effects of grade level taught, classroom size, school size, type of school, teacher perception of success, level of administrative support, and availability of supportive services. Teacher attitude toward mainstreaming was not found to be influenced by classroom size, school size, and type of school community. The finding that teacher attitude was not related to type of school setting did not lend support to the generally accepted notion that teachers in urban communities exhibit more negative attitudes. No apparent differences in attitude toward mainstreaming were found among teachers in urban, rural, or suburban communities. Grade level taught was found to have a fairly strong relationship to teacher attitude with attitude becoming more negative as the grade level ascended.

A regression study of the remaining three variables indicated that when the effect of teacher perception or degree of success with the exceptional child was controlled for, the relationship of the remaining variables to teacher attitude toward mainstreaming is minimal. Therefore, it seemed reasonable to conclude

that teacher perception of success in dealing with the special-needs child is the single most important variable of the seven variables considered. The correlation of this variable with variables such as level of administrative support and availability of resource services indicate that these variables contribute to a teacher's self-perception of success.

The significant effect of administrative support on teacher attitude reaffirms the well known importance of the school principal in fostering a positive learning environment for both teachers and students. The finding that availability of supportive services positively influenced teacher attitude toward mainstreaming indicates that teachers are generally accepting of special students if the teacher can rely on the necessary support from other personnel. (55, p. 321)

Liebfried (61) emphasized the importance of the principal in demonstrating a positive attitude in support of a special education program. She divided the principal's role in managing special education programs into four major tasks.

- 1) To promote acceptance of handicapped students.
- 2) To promote total staff involvement in the special education program.
- 3) To support the parents of handicapped students.
- 4) To keep the community informed of special education needs.

Liebfried (61) stated that effective principals who understand their role as instructional leaders will greatly influence the cooperative interaction among handicapped and nonhandicapped students, as well as among regular education teachers and special education teachers. To promote social integration, she suggested that principals formulate working teams made up of regular and special education teachers.

Trebias, McCormick, and Cooper (98) conducted a survey to determine the most prevalent problems of K-12 teachers when special education students are placed in regular classrooms as observed by special education teachers. In priority order, the concerns were communications, scheduling, curriculum, attitudes, and student social behavior. The survey revealed that both special educators and regular educators see a need for change in attitudes among their colleagues. Special educators believe regular educators must treat students as individuals and work with special educators in planning lessons and adjusting assignments for handicapped students. The survey also revealed that some regular educators simply refuse to take over functions once assigned to the special educator. Special educators frequently "screened" regular classroom teachers to find cooperative team members.

When these efforts were successful, a change of attitude was observed. The regular classroom teacher came to realize that the special educator was increasing his or her teaching load, not "dumping problem children" into regular classrooms. Special educators served as strong support personnel by providing continued assistance, program planning, and evaluation of the mainstreamed student.

Reynolds, Martin-Reynolds, and Mark (82) pointed out that most regular classroom teachers have had little exposure to handicapped children and to techniques for working with them. They tended to be less accepting of mainstreaming than special educators.

Reynolds et al. (82) conducted a study to examine elementary teacher attitudes toward mainstreaming educable mentally retarded (EMR) children on the basis of teacher age, academic training, teaching experience, grade level, and prior teaching experience with mainstreamed EMR children. The population in the study consisted of 768 teachers of grades K-6 in a nine-county area of Northwestern, Ohio. Of the 768 teachers contacted, 673 responded (86.7%). For this study, the principal research tool was divided into two parts: a Mainstreaming Opinionnaire, comprised of 28 statements of attitudes on a four-point Likert-type scale, and a

Teacher Preparation and Experience Questionnaire requesting demographic data. Results of the study indicated that teachers tended to agree (61.4%) that EMR students are educationally more like regular students than they are different and that they benefit from mainstreaming by being exposed to a variety of teachers (72.4%). The elementary teachers tended to agree that EMR teachers make proper choices in selecting students most likely to benefit from mainstreaming (92.1%) and are supportive in tutoring the mainstreamed child (95.8%). However, 58.3% of the teachers disagreed with the statement that elementary teachers have enough training and experience to teach mainstreamed EMR children. Teachers felt that mainstreaming meant extra work for the elementary teacher (81.6%), but indicated a willingness to modify instructional practices in order to accommodate EMR students in their classrooms (60.1%). A majority of teachers perceived mainstreaming as a positive educational practice (62.7%) and supported the concept that mainstreaming will be beneficial for most EMR students (71.5%).

Although some studies claimed that the attitudes of teachers toward mainstreaming were the most significant factor in determining the success of integration, Thomas (97) found the teacher's attitude to integration to be

much less crucial in successful integration than some authorities have suggested. Discussions with school principals revealed that many teachers who were opposed to mainstreaming had effectively integrated handicapped children into their classes. Contrary to other studies, Thomas claimed that many handicapped children can benefit from being placed in the ordinary classroom even when the receiving teacher is not in favor of integration.

In a study by Stephens and Braun (96) regular classroom teachers of children in kindergarten through grade eight were asked to complete a questionnaire concerning their willingness to accept educable mentally handicapped, physically handicapped, and emotionally handicapped students into their classrooms. Data concerning the teachers' training, their prior experiences with exceptional children, and their attitudes toward such children were also collected. The questionnaires were distributed to all K-8 teachers in 10 randomly selected school districts in the Southwest Cook County (Illinois) Cooperative for Special Education. Of the 1034 teachers, 83.66% returned the questionnaires. However, not every teacher responded to all 20 items.

Primary and middle grade teachers were more willing

to integrate handicapped students than were teachers of grades 7 and 8. Of the 795 teachers responding to this question 481 (61%) indicated a willingness to integrate the handicapped and 314 (39%) said they would not be willing to do so. (96, p. 29)

Three predictors of teachers' willingness to integrate handicapped students into their classrooms were found to be confidence in teaching exceptional children; a belief that handicapped children can become useful members of society; and a contention that public schools should educate the handicapped. These predictors represented only 19% of the variance; 81% was unaccounted for in this study. It appeared that sex, age, marital status, size of municipality of residence, number of years since earning bachelor's degree, years of teaching experience, having exceptional children in the family or neighborhood, teaching experience in a school with special education classrooms, and experiences in recommending students for special education evaluations were not significantly related to classroom teachers' attitudes toward integrating handicapped children into the regular classrooms.

In a survey of special education teachers' attitudes towards mainstreaming, Gickling and Theobald (35) found that despite the overwhelming agreement that special self-contained classes restricted and discriminated against handicapped children, there was little support

to do away with these classes for the mildly handicapped. They, as well as other researchers, Bond and Dietrich (9); Williams and Algozzine (108); Trebias, McCormick and Cooper (98); Liebfried (61); Schubert, Landers, and Curtis (89); McKinnon, Wine, Seres, and Bowser (70) stressed the need for improved communication between special and regular educators on issues surrounding the placement of exceptional children.

Gickling and Theobald (35) commented that principals must appreciate the individual differences in competencies and attitudes of teachers. Ward and Others (104) surveyed 100 randomly selected principals in Australia to determine what competencies would be required of regular teachers in an integrated classroom. Below is a list of these competencies in the order in which they were ranked by the principals:

1. A knowledge of teaching techniques specially designed for children with learning problems.
2. A knowledge of psychological, social and physical characteristics.
3. A knowledge of the techniques of assessment and evaluation of teaching procedures.
4. The skills to design curriculum materials.
5. The ability to discuss confidentially the problems of exceptional children with their parents.



In Ward and Others' survey (104) principals were also requested to rank the factors which presented obstacles to the successful integration of the mildly handicapped into regular classes. The factors which presented obstacles against integration are listed below in the order in which principals ranked them:

1. Lack of skills and competencies of regular class teachers.
2. Size of regular classes.
3. Distractible behavior of some of these children.
4. Attitudes of regular class teachers.
5. Disruption of regular class program.
6. Attitudes of other children in class.
7. Attitudes of the "normal" children in the class.

Cartledge, Frew, Zaharias (14) and Ray (81) agreed that placement of handicapped students in regular classrooms provides no guarantee of social acceptance. Mildly handicapped children may be physically integrated into a classroom but be rejected or socially segregated by their nonhandicapped peers.

Ray (81) conducted a study of 708 students in grades 3-6 to determine whether mainstreamed special education children differ significantly from their nonhandicapped peers. Using a teacher instrument, a sociometric instrument, and direct observation of social interaction

to make comparisons, she predicted that handicapped children would be identified as less socially competent than nonhandicapped children on all three measures. Results indicated that only 30.8% of the nonhandicapped children, compared to 58.3% of the handicapped children were identified as experiencing difficulty with social interaction.

#### Breaking Down the Barriers Between Special Education and General Education

Special education and general education have evolved into two distinct service delivery systems. However, many students have not fit clearly into either the special education or the general education delivery system. Will estimated that

10-20% of the children and youth in our nation's schools are not handicapped, but they do have mild or moderate learning and behavior difficulties which interfere with their educational progress. These students are commonly described as 'slow learners', students who exhibit social, conduct, and behavior difficulties; possess low self-esteem; or have problems in understanding or using language. (107, p. 413)

According to Will (106), recent studies have suggested that a significant percentage of the students served in the learning disability category were not handicapped. She stated that special education has

emerged as the only option for many children whose learning needs cannot be accommodated in the regular classroom. A related concern expressed by Will (107) was that an increasing number of children were being educated outside of the general education environment. She strongly suggested that models for serving handicapped children in the regular classroom be replicated.

Stainback and his colleagues (95) claimed that integration of mildly handicapped students into the regular classroom can be successful, if regular classroom teachers are able to adapt instruction to meet a wide range of students' needs. By organizing individualized programming, cooperative activities, and adaptive learning environments in regular classroom settings, general educators can successfully modify or adapt instructional practices to meet a wide range of student needs.

More, importantly, it has been found that when this is done, a variety of students with diverse learning characteristics, including those labeled mildly handicapped, can be academically and socially successful within the mainstream of regular education. (95, p. 145)

Johnson and Johnson (50) stated that when cooperative learning is implemented effectively, positive relationships between handicapped and

nonhandicapped students result. Cooperative learning involves students working together to accomplish shared goals. Students are assigned to small groups and instructed to learn the assigned material and make sure that the other members of the group master the assignment. A criteria-referenced evaluation system is used to ensure that all students are learning. In cooperative learning, students seek outcomes that are beneficial to all members of the group. Students discuss material with each other, help each other to understand it, and encourage each other to work hard. For cooperative learning to be effective, positive interdependence, individual accountability, training in collaborative skills, and processing of how effectively the group is working must occur.

Egloff and Lederer (28) stated that teachers need to employ a wide range of skills in implementing a child's educational program. They further stated that special educators should be available as consultants and should interact frequently with regular classroom teachers to share the responsibility for the educational programs of mildly handicapped students.

Rumble (86) stated that individual student assessments should emphasize the student's learning abilities rather than disabilities, and the teacher

should focus on student strengths rather than weaknesses. Dumas (25) expressed the opinion that good teachers of handicapped students in regular classrooms essentially must do what good teachers have always done and must have the sensitivity to individual problems and needs. He stressed the need for developing positive attitudes rather than transmitting new knowledge.

Stainback et al (95) remarked that unless professional educators forget the labels and the 'special' and 'regular' dichotomy and integrate themselves in professional organizations, personnel preparation programs, and local districts throughout the country, there is little chance of ever achieving normalized integrated school programs for all students.

McNutt (71) favored grouping students by instructional need rather than label. Will (106) emphasized that students should be provided with effective, coordinated, comprehensive services based on individual educational needs rather than eligibility for special programs. She strongly endorsed collaboration between special programs and regular education to collectively contribute skills and resources for carrying out individualized education plans based on individualized needs.

Stainback and his colleagues (95) suggested that "special" consulting and resource personnel go into regular classrooms to help teachers implement individualized, cooperative, and adaptive learning environments. However, most teachers felt that it was difficult to modify or adapt their instruction to meet diverse student needs within the current lockstep structure of regular education. Therefore, special and regular educators must pool their expertise and resources to develop a strong, flexible regular education structure that accomodates for individual students.

Cole (18) cited two benefits which may result from teaching teachers the skills of mainstreaming - increased tolerance for and understanding of diversity among persons, and the functional ability to better individualize instruction to a wide range of individual learning needs, styles and rates. These benefits may enhance teacher effectiveness for all children.

#### Summary

A major goal in the education of mildly handicapped students has been to provide instruction in the least restrictive environment, the regular classroom. To

achieve this goal, it has been necessary to provide teacher support through special education resource rooms. Due to the incentive of federal funding provided by Public Law 94-142, it became advantageous for local and school districts to identify students in specific special education categories rather than to develop instructional strategies within the regular classroom. Now many educators are questioning whether separate special education placement is the most appropriate and least restrictive environment for all of these students with mild learning and behavior problems.

Since special education programs have effectively served the needs of mildly handicapped students, regular classroom teachers have increasingly relied upon them. Effective strategies, therefore, have not been utilized to meet the instructional needs of students with mild learning and behavior problems within the regular classroom.

Due to the burgeoning numbers of students with special instructional needs and limited funding, it has become necessary to explore alternative service delivery systems such as individualized programming, cooperative activities, and adaptive learning environments in regular classroom settings. Numerous researchers have suggested a cooperative approach between general and

special educators in providing instructional programs for students with mild learning or behavior problems. They have determined that general and special educators must share their expertise and resources to develop alternative approaches for meeting the academic and social needs of mildly handicapped students.



CHAPTER III.  
METHODS AND PROCEDURES

The major purposes of this study were:

- 1) To gather data from a random sample of Iowa administrators general education teachers, and special education resource teachers on their attitudes toward meeting the individualized needs of students with mild learning or behavior problems within the general education environment.
- 2) To assess the attitudes of administrators, general education teachers, and special education resource teachers toward the use of the following four different approaches for providing effective programs to students with mild learning or behavior problems within general education.
  - a) Provide inservice to general education teachers on dealing with students with mild learning or behavior problems within the regular classroom.
  - b) Provide cooperation between general education teachers and special education teachers for the benefit of all students.
  - c) Provide direct services to identified special education students.
  - d) Provide consultation services to the general

education teachers to assist in modifying the learning environment and materials.

A survey instrument was developed which contained items that reflected four models appropriate for providing services to students with mild learning or behavior problems within the regular classroom. It also was designed to assess the attitudes of administrators, general education teachers, and special education resource teachers toward meeting the individualized needs of students with mild learning problems in the regular classroom and their attitudes toward meeting the individualized needs of students with mild behavior problems within the regular classroom. The major questions and subquestions that were considered in constructing the survey instrument are shown in Appendix D.

#### Development of the Survey Instrument

The Survey Of Opinions Regarding Educational Services For Students With Mild Learning And Behavior Problems has two parts. The first and major section deals with the respondents' attitudes relative to the following:

- (1) the desirability of educating students with mild learning or behavior problems in general education environments
- (2) cooperative and team teaching to meet the individual needs of students with mild learning or behavior problems
- (3) the effect on general education classrooms when children with mild learning or behavior problems are served in general education classrooms
- (4) cooperative planning and problem solving between special education and general education teachers for meeting the needs of children with mild learning or behavior problems
- (5) the use of consultants for meeting the needs of students with mild learning or behavior problems.

Forty-eight statements requiring responses on a five-point Likert scale were included in the first section of the survey:

SD = Strongly Disagree

D = Disagree

N = No Opinion

A = Agree

SA = Strongly Agree

Below is a sample statement requiring a response on the Likert scale from the Survey Of Opinions For Students With Mild Learning And Behavior Problems:

I support making modifications within the regular class in order to accommodate the individual needs of students with

a) mild learning problems           SD   D   N   A   SA

Four rank-in-order questions were included in the first section of the survey. In these questions, respondents were asked to prioritize a list of choices. Two of them dealt with the expertise of special education resource teachers, consultants, school psychologists, social workers, regular teachers, and administrators. Two of them dealt with the modifications that general education teachers were willing and able to make.

The second part of the survey requested data pertaining to years of experience as a teacher or administrator, the highest degree earned, the number of special education courses completed, and undergraduate and graduate majors and minors.

Before the pilot study was conducted, the first draft of the survey instrument was submitted to a panel

of experts for review and suggestions: (The panel members and their positions are listed in Appendix C).

### The Pilot Study

The pilot study was conducted from January 13 - January 27, 1986. Two superintendents, a secondary principal, a middle school principal, three elementary principals, three secondary special education resource teachers, three middle school special education resource teachers, six elementary special education resource teachers, three secondary regular classroom teachers, three middle school regular classroom teachers, and eight elementary regular classroom teachers were randomly selected for the pilot study. Before the survey and letter of transmittal were mailed, the envelopes were coded to determine the category of personnel returning the survey and to identify the non-respondents for follow-up. The letter of transmittal requested that the respondent submit comments concerning the clarity of instructions and content of the instrument.

Upon return of the questionnaires, suggestions provided by the respondents, the panel of experts, and

the dissertation committee were considered; and several changes were made in the instructions, form, and content of the instrument.

The questionnaires, letters of transmittal, and self-addressed return envelopes were mailed on December 2nd. One week was allowed for return of the survey. All of those who had not returned the survey after one week received a second survey and a reminder to return it within the next week.

#### Selection of Subjects

Iowa school districts were categorized by size according to student population using the following classifications: 1) 7500 or more, 2) 2500 - 7499, 3) 1000 - 2499, 4) 600 - 999, and 5) 599 or less. The number of Iowa superintendents, principals, general education teachers, and special education resource teachers in each of these classifications was calculated and a random sample from each of these groups was selected. The educators selected at random included superintendents; principals of elementary, middle, and secondary schools; general education teachers from elementary, middle and secondary schools; and special

education resource teachers from elementary, middle and secondary schools.

A stratified random sampling procedure was used in order to assure that specific subgroups in the population were represented in the sample in proportion to their numbers in the population itself and to assure that there was a sufficient number of cases for subgroup analysis.

The names and mailing addresses for the superintendents, principals, general education teachers, and special education resource teachers were obtained from the Iowa Department of Public Instruction which utilized information supplied through the Basic Educational Data Survey for the 1984-85 school year.

School personnel surveyed were classified according to the attendance center level of the students served - elementary, middle school, secondary, or K-12. Data related to the level served by each of the personnel categories were obtained from the Management Information Division of the Department of Public Instruction which utilized information supplied through the Basic Educational Data Survey (BEDS) for the 1984-85 school year.

Tables 1-5 illustrate the population of Iowa superintendents, principals, general education teachers,

and special education resource teachers classified by district size and the level of the attendance center that they serve. Table 1 shows the number of superintendents, principals, general education teachers, and special education teachers serving each of the attendance center levels (elementary, middle school, secondary, and K-12) in districts of 7500 or more students. Tables 2, 3, 4, and 5 show the number of superintendents, principals, general education teachers, and special education teachers who serve each of the four levels in districts with populations of 2500-7499, 1000-2499, 600-999, and 599 or less respectively.



Table 1: Population breakdown of school building personnel  
in districts of 7500 or more students

<u>ATTENDANCE CENTER LEVEL</u>	<u>CLASS OF PERSONNEL</u>			
	<u>Supt.</u>	<u>Principals</u>	<u>Gen. Ed. Teachers</u>	<u>Spec. Ed. Teachers</u>
Elementary		163	2978	164
Middle		80	1330	69
Secondary		87	1729	79
K-12	8			
TOTAL	8	330	6037	312

Table 2: Population breakdown of school building personnel in districts of 2500 to 7499 students

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<u>ATTENDANCE CENTER LEVEL</u>	<u>CLASS OF PERSONNEL</u>			
	<u>Supt.</u>	<u>Principals</u>	<u>Gen. Ed. Teachers</u>	<u>Spec. Ed. Teachers</u>
Elementary		134	2249	129
Middle		54	1104	70
Secondary		66	1575	72
K-12	24			
TOTAL	24	254	4928	271

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Table 3: Population breakdown of school building personnel  
in districts of 1000 to 2499 students

<u>ATTENDANCE CENTER LEVEL</u>	<u>CLASS OF PERSONNEL</u>			
	<u>Supt.</u>	<u>Principals</u>	<u>Gen. Ed. Teachers</u>	<u>Spec. Ed. Teachers</u>
Elementary		144	2824	174
Middle		73	1320	86
Secondary		118	2101	97
K-12	72			
TOTAL	72	335	6245	357

Table 4: Population breakdown of school building personnel  
in districts of 600 to 999 students

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<u>ATTENDANCE CENTER LEVEL</u>	<u>CLASS OF PERSONNEL</u>			
	<u>Supt.</u>	<u>Principals</u>	<u>Gen. Ed. Teachers</u>	<u>Spec. Ed. Teachers</u>
Elementary		95	2093	108
Middle		32	391	13
Secondary		106	2126	97
K-12	99			
TOTAL	99	233	4610	218

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Table 5: Population breakdown of school building personnel in districts of 599 or less students

<u>ATTENDANCE CENTER LEVEL</u>	<u>CLASS OF PERSONNEL</u>			
	<u>Supt.</u>	<u>Principals</u>	<u>Gen. Ed. Teachers</u>	<u>Spec. Ed. Teachers</u>
Elementary		100	2692	170
Middle		8	171	6
Secondary		201	3356	144
K-12	232			
TOTAL	232	309	6219	320

#### Collection of the Data

All individuals randomly selected to be surveyed received the questionnaire, a letter of transmittal and a stamped self-addressed envelope for returning the survey. The letter of transmittal explained the purpose of the investigation and provided definitions for "mild learning problems" and "mild behavior problems". As the questionnaires were returned, each one was coded by group, numbered, and checked off against a master list.

The first mailing was sent on February 10, 1986 with a request for return by February 24, 1986. A follow-up letter with another copy of the questionnaire was sent on March 6, 1986 to those from whom no response had been received. A second follow-up letter was sent on April 1, 1986 to those who had not returned the questionnaires by that date. April 15 was set as the cut-off date for return of all questionnaires.

The number of individuals selected to be surveyed was 3312. Of these, 2057 surveys were validly completed. Superintendents returned 168 questionnaires accounting for 8.2 percent of the total number of questionnaires returned; 508 principals returned questionnaires, accounting for 24.7 percent of the total number of questionnaires returned; 867 general education teachers returned questionnaires, accounting for 42.1 percent of the total number of questionnaires returned; and 499 special education teachers returned questionnaires, accounting for 24.3 percent of the total number of questionnaires returned. Fifteen questionnaires were returned without identification coding, which accounted for .7 percent of the total number of questionnaires.

## Treatment of the Data

Data from 2057 surveys were tabulated and analyzed. Data collected were categorized into cells according to (1) present position (2) school district enrollment (3) attendance center level served; i.e., elementary, middle school, secondary, or K-12 (4) total years experience as a teacher or administrator (5) highest degree earned (6) approximate number of special education courses completed (7) undergraduate and graduate majors.

Data were analyzed using parametric statistical treatments. Mean scores were computed for each of the attitude responses by assigning value of +1 to the "strongly disagree" response, a value of +2 to the "disagree" response, a value of +3 to the "undecided" response, a value of +4 to the "agree" response, and a value of +5 to the "strongly agree" response. An analysis of variance was then conducted to determine which groups of respondents were significantly different from one another. If the F-ratio that was obtained indicated significant differences between the means, the Duncan Multiple Range Test was used to determine which of the means differed. The level of significance was set at .05.

CHAPTER IV.  
FINDINGS

The purpose of this study was to examine the attitudes of a random sample of regular and special education personnel in Iowa toward individualizing instruction and modifying the learning environment to meet the needs of students with mild learning or behavior problems. Four major groups were selected for the survey: superintendents, principals, special education resource teachers, and general education teachers.

Respondents in each of these four major groups were selected by sampling across district size and attendance center levels, using student population as the determinant of size; and elementary, middle school, secondary, and K-12 as attendance center levels.

Each individual selected for the survey was asked to respond to a series of forty-eight statements and to rank order four choices. A five-point scale was utilized for assessing their perceptions.

Demographic data and other information concerning the respondent were also collected. Participants supplied number of years of experience as teachers and/or administrators, their highest degree earned, and



the approximate number of special education courses completed at undergraduate and graduate levels combined.

Table 6 shows the number of respondents and return rate for each of the four personnel categories. Superintendents had the highest return rate with 91.3 percent of the sample responding. Principals and special education teachers each returned just under three-fourths of the questionnaires while general education teachers completed almost one-half of their survey instruments.

Table 6: Number and return rate of respondents for each of the personnel categories

NO. IN POP.	PERSONNEL	NO. IN THE SAMPLE	NO. OF RESPONDENTS	RETURN RATE
435	Superintendents	184	168	91.3
1461	Principals	689	508	73.7
28039	Gen. Educ. Teachers	1767	867	49.1
1478	Spec. Educ. Teachers	672	499	74.3
	Missing		15	
31413	TOTAL	3312	2057	62.1

Table 7 shows the number and return rate of respondents for each of the five classifications by district size. The mean return rate for all groups was

62.1 percent. The data show a relatively equal and adequate response from districts of varying sizes. The 15 missing cases are those which were missing the identification coding.

Table 7: Number and return rate of respondents for each of the five classifications by district size

NO. IN POP.	DISTRICT SIZE	NO. IN THE SAMPLE	NO. OF RESPONDENTS	RETURN RATE
7080	0-599 Students	609	401	65.8
5160	600-999 Students	617	398	64.5
7009	1000-2499 Students	729	469	64.3
5477	2500-7499 Students	676	415	61.4
6687	7500 + Students	681	359	52.7
	Missing		15	
31413	TOTAL	3312	2057	62.1

Table 8 shows the number and return rate of respondents for each of the four attendance center levels. Personnel serving K-12 had the highest return rate, followed by elementary, middle school, and secondary. In this study, junior high school was included in the category with middle school.

Table 8: Number and return rate of respondents for each of the four classifications by attendance center level served

NO. IN POP.	LEVEL SERVED	NO. IN THE SAMPLE	NO. OF RESPONDENTS	RETURN RATE
14217	Elementary	1178	765	64.9
4807	Middle School	809	476	58.8
11954	Secondary	1141	633	55.5
435	K-12	184	168	91.3
	Missing		15	
31413	TOTAL	3312	2057	62.1

The analysis of data is divided into four sections:

- 1) Demographic and other data
- 2) Attitudes toward meeting the needs of students with mild learning or behavior problems in general education classrooms
- 3) Attitudes toward alternative service delivery models
- 4) Other findings

#### Demographic and Other Data

Demographic and other information supplied by the respondent were tabulated using the Statistical Package

for the Social Sciences X (SPSSX). Experience of the respondents ranged from a low of one year to a high of 48 years. The average respondent had 16.9 years of experience.

Table 9 reports the education attainment or highest degree earned by respondents. It shows that 48.7 percent of respondents earned a Master's degree; 38.1 percent had earned a Bachelor's degree; 7.6 percent had earned a Specialist; and 4.5 had earned a Doctorate.

Table 9: Highest degree earned by respondents

Degree Earned	No. Of Respondents	Percent
Bachelor's	783	38.1
Master's	1002	48.7
Specialist	157	7.6
Doctoral	92	4.5
	23	1.1 (Missing)
N = 2057		

Table 10 shows the number of special education courses completed. Respondents indicated the approximate number of special education courses

completed at the undergraduate and graduate levels combined. Of those responding to the survey, 31.1 percent completed between one and three special education courses. However, 25.2 percent of the respondents had not completed any special education courses. A substantial percentage, 21% of those responding to the survey, had completed thirteen or more special education courses.

Table 10: Respondents' approximate number of special education courses completed

NO. OF COURSES COMPLETED	NO. IN THE SAMPLE	PERCENT OF SAMPLE
None	578	25.2
1-3	639	31.1
4-6	225	10.9
7-9	85	4.1
10-12	123	6.0
13 +	432	21.0
	35	1.7 (Missing)
N = 2017		

Attitudes toward Meeting the Needs of Students  
with Mild Learning or Behavior Problems in  
General Education Classrooms

A major question addressed by the study was, "What are the attitudes of general education teachers, special education teachers, principals, and superintendents toward meeting individual needs of students with mild learning or behavior problems within general education classrooms?" The attitudes of general and special education teachers are particularly important because they are the ones who work directly with the students. This section presents data regarding attitudinal differences between groups in five areas: 1) attitudes toward the desirability of educating students with mild learning or behavior problems in general education environments; 2) perceptions toward cooperative and team teaching in order to meet the individual needs of students with mild learning or behavior problems; 3) attitudes toward the effect on general education classrooms when students with mild learning or behavior problems are served in general education classrooms; 4) attitudes toward cooperative planning and problem solving between special education teachers and general education teachers for meeting the needs of students with mild learning or behavior problems; and 5)

attitudes toward the use of consultants for meeting the needs of students with mild learning or behavior problems. Appendix G shows the formulas for combining questionnaire items into these five attitudinal areas. Tables include mean scores and standard deviations, ANOVA summaries, and results of the Duncan's Multiple Range Test. A .05 level of significance was selected.

The mean scores were calculated by adding the mean scores for a cluster of questions which addressed each of the five major attitudinal areas. On the Likert scale 5 was considered high in agreement and 1 was considered low in agreement. Some of the survey items were worded negatively, so that a high Likert score indicated a lack of agreement toward the item. These are termed "reversal" items and were included to eliminate response set. In order to ensure that a high score represented agreement or a positive attitude, the mean scores for the "reversal" questions were adjusted.

One area explored was attitudes toward the effect on general education pupils when students with mild learning or behavior problems are served in general education classrooms. A composite of items 10-13 was analyzed. Table 11 shows attitude mean scores and standard deviations for personnel groups. Special education teachers and superintendents were more inclined to report that placement of students with mild

learning or behavior problems in general education classrooms would have an effect on students in general education classrooms than either principals or general education teachers. Table 12 shows an ANOVA summary for group perceptions concerning the effect on general education classrooms when students with mild learning or behavior problems are served in general education classrooms. A significant difference at the .001 level was found between groups. Table 13 shows that attitudinal differences between general education teachers and the other three groups were significant at the .05 level. The Duncan revealed that the general education teachers differed from superintendents, principals, and special education teachers with general education teachers believing that placement of students with mild learning or behavior problems in regular classrooms would have an effect on the general education pupils. Their perceptions are especially important because they are directly responsible for working with the students.



Table 11. Attitude mean scores and standard deviations for personnel groups concerning the effect on general education classrooms when students with mild learning or behavior problems are served in general education classrooms

GROUP	NUMBER	MEAN	STANDARD DEVIATION
Superintendents	166	3.50	.72
Principals	495	3.39	.68
General Education Teachers	849	3.14	.72
Special Education Teachers	488	3.57	.70
TOTAL	1998	3.34	.73

Table 12. ANOVA summary for group perceptions concerning the effect on general education classrooms when students with mild learning or behavior problems are served in general education classrooms

SOURCE	D.F.	SUM OF SQUARES	MEAN SQUARES	F RATIO
Between Groups	3	66.94	22.31	45.04 ***
Within Groups	1994	987.91	.50	
TOTAL	1997	1054.85		

\*\*\*Significant at the .001 level.

Table 13. Duncan results denoting pairs of groups with attitudes concerning the effect on general education classrooms when students with mild learning or behavior problems are served in general education classrooms significantly different at the .05 level

MEAN	GROUP TITLE	GROUP NUMBER	G	G	G	G
			R	R	R	R
			P	P	P	P
3.14	General Education Teachers	3				
3.39	Principals	2	*			
3.50	Superintendents	1	*			
3.57	Special Education Teachers	4	*	*		

Table 14 shows mean scores and standard deviations for the attitudes of the sample population toward approaches for educating students with mild learning or behavior problems in general education classrooms. The sample population were most strongly in support of the use of consultants to meet the needs of students with mild learning or behavior problems (3.96). They also strongly supported the use of cooperative planning and problem solving between general and special education teachers for meeting the needs of students with mild learning or behavior problems (3.82).

Table 14. Attitude mean scores and standard deviations of the sample population toward approaches for educating students with mild learning or behavior problems in general education classrooms

APPROACHES	NUMBER	MEAN	STANDARD DEVIATION
Use of Consultants	1973	3.96	.48
Cooperative Planning and Problem Solving	1948	3.82	.48
General Education Classrooms	1908	3.51	.49
Cooperative and Team Teaching	1990	3.47	.70

The first approach analyzed was attitudes toward the value of using consultants for meeting the individual needs of students with mild learning or behavior problems. A composite analysis of survey items 16-17, and 25c, d, e, and f was made to address this topic. Table 15 shows attitude mean scores and standard deviations by personnel groups toward the use of consultants for meeting the individual needs of students with mild learning or behavior problems. General education teachers, principals, and superintendents were more favorable toward the use of consultants for meeting the needs of students with mild learning or behavior problems than were special education teachers. Table 16 shows an ANOVA summary for group attitudes toward the use of consultants for meeting the individual needs of

students with mild learning or behavior problems. A significant difference at the .001 level was noted. The Duncan results for the four groups shown in Table 17 revealed that special education teachers' attitudes were significantly lower. Special education teachers were less inclined to support the use of consultants for meeting the needs of students with mild learning or behavior problems than were general education teachers, principals, or superintendents. It is noteworthy that general and special education teachers are strongly supportive toward the use of consultants and cooperative planning and problem solving. Their perceptions are extremely important because they are directly responsible for working with the students. The perceptions of the principals are also important because they are responsible for directing and supervising the instructional programs in their buildings.

Table 15. Attitude mean scores and standard deviations by personnel groups toward the use of consultants for meeting the individual needs of students with mild learning or behavior problems

GROUP	NUMBER	MEAN	STANDARD DEVIATION
Superintendents	163	4.01	.43
Principals	492	3.97	.46
General Education Teachers	837	3.99	.50
Special Education Teachers	481	3.89	.50
TOTAL	1973	3.96	.48

Table 16. ANOVA summary table for group attitudes toward the use of consultants for meeting the individual needs of students with mild learning or behavior problems

SOURCE	D.F.	SUM OF SQUARES	MEAN SQUARES	F RATIO
Between Groups	3	3.76	1.25	5.38 ***
Within Groups	1969	458.65	.23	
TOTAL	1972	462.41		

\*\*\*Significant at the .001 level.

Table 17. Duncan results denoting pairs of groups with attitudes toward the use of consultants for meeting the individual needs of students with mild learning or behavior problems significantly different at the .05 level

MEAN	GROUP TITLE	GROUP NUMBER	G	G	G	G
			R	R	R	R
			P	P	P	P
31.09	Special Education Teachers	4				
31.80	Principals	2	*			
31.89	General Education Teachers	3	*			
32.10	Superintendents	1	*			

The second approach addressed was attitudes toward cooperative planning and problem solving between special education and general education teachers for meeting the needs of students with mild learning or behavior problems. A composite analysis of survey items 22-24, 25b, and 26-27 was conducted to provide data pertaining to this topic. Table 18 shows attitude mean scores and standard deviations for personnel groups concerning attitudes toward cooperative planning and problem solving. All personnel groups generally agreed that cooperative planning and problem solving is necessary to meet the needs of students with mild learning or behavior problems. Table 19 shows an ANOVA summary for attitudes toward cooperative planning and problem

solving between general and special education teachers for meeting the needs of students with mild learning or behavior problems. No significant difference was found.

Table 18. Attitude mean scores and standard deviations for personnel groups pertaining to cooperative planning and problem solving between special education and general education teachers for meeting the needs of students with mild learning or behavior problems

GROUP	NUMBER	MEAN	STANDARD DEVIATION
Superintendents	164	3.84	.47
Principals	481	3.82	.46
General Education Teachers	828	3.84	.48
Special Education Teachers	475	3.78	.52
TOTAL	1948	3.82	.48

Table 19. ANOVA summary for group attitudes toward cooperative planning and problem solving between general and special education teachers for meeting the needs of students with mild learning or behavior problems

SOURCE	D.F.	SUM OF SQUARES	MEAN SQUARES	F RATIO
Between Groups	3	1.38	.46	1.97 ***
Within Groups	1944	453.97	.23	
TOTAL	1947	455.34		

The third approach analyzed was the desirability of educating students with mild learning or behavior problems in general education environments. A composite of survey items 1-7 and 14-15 was computed. Table 20 shows attitude mean scores and standard deviations by personnel groups pertaining to attitudes toward educating students with mild learning or behavior problems in the regular classroom. Not surprisingly, general education teachers were least receptive to including students with mild learning or behavior problems in their classrooms (3.39). Special education teachers, principals, and superintendents were much more favorable toward including students with mild learning or behavior problems in regular classrooms than were general education teachers. Superintendents were the most favorable to placing students with mild learning or behavior problems in general education classrooms. Table 21 shows the ANOVA summary for the group attitudes concerning the desirability of educating students in general education environments. A significant difference at the .001 level was found between groups. Table 22 shows that the differences between the general education teachers' perceptions and those of the other groups were significant at the .05 level. General education teachers were least supportive of placement of students with mild learning or behavior problems in



their classrooms. It should be pointed out they are, however, not averse to having them in their classrooms; they were less supportive than special education teachers or administrators. The Duncan revealed significant differences in attitudes between each pair of groups except between principals and special education teachers.

Table 20. Attitude mean scores and standard deviations by personnel groups pertaining to the desirability of educating students with mild learning or behavior problem in general education environments

GROUP	NUMBER	MEAN	STANDARD DEVIATION
Superintendents	162	3.71	.47
Principals	483	3.61	.46
General Education Teachers	812	3.39	.50
Special Education Teachers	451	3.56	.43
TOTAL	1908	3.51	.48

Table 21. ANOVA summary table for group attitudes concerning the desirability of educating students with mild learning or behavior problems in general education environments

SOURCE	D.F.	SUM OF SQUARES	MEAN SQUARES	F RATIO	
Between Groups	3	23.18	7.73	35.09	***
Within Groups	1904	419.17	.22		
TOTAL	1907	442.35			

\*\*\*Significant at the .001 level.

Table 22. Duncan results denoting pairs of groups with attitudes toward the desirability of educating students with mild learning or behavior problems in general education environments significantly different at the .05 level

MEAN	GROUP TITLE	GROUP NUMBER				
			G R P	G R P	G R P	G R P
3.39	General Education Teachers	3				
3.56	Special Education Teachers	4	*			
3.61	Principals	2	*			
3.71	Superintendents	1	*	*	*	

The fourth approach analyzed was perceptions toward cooperative and team teaching to meet the individual

needs of students with mild learning or behavior problems. A composite of items 8, 9, and 25a was analyzed. Table 23 shows attitude mean scores and standard deviations by personnel groups. General education teachers and principals were moderately supportive of cooperative and team teaching. Special education teachers were least receptive to cooperative and team teaching for meeting the needs of students with mild learning or behavior problems, and superintendents were the most receptive. Table 24 shows an ANOVA summary for group perceptions about cooperative and team teaching to meet the individual needs of students with mild learning or behavior problems. A significant difference at the .001 level was found between groups. Table 25 shows the Duncan results for the four groups revealing that the differences occurred between special education teachers and each of the other personnel groups. Special education teachers were much less receptive to cooperative and team teaching for meeting the individual needs of students with learning and behavior problems than any of the other groups surveyed.

Table 23. Attitude mean scores and standard deviations by personnel groups pertaining to cooperative and team teaching to meet the individual needs of students with mild learning or behavior problems

GROUP	NUMBER	MEAN	STANDARD DEVIATION
Superintendents	163	3.63	.73
Principals	494	3.52	.66
General Education Teachers	844	3.51	.66
Special Education Teachers	489	3.27	.75
TOTAL	1990	3.47	.70

Table 24. ANOVA summary table for group perceptions about cooperative and team teaching to meet the individual needs of students with mild learning or behavior problems

SOURCE	D.F.	SUM OF SQUARES	MEAN SQUARES	F RATIO
Between Groups	3	26.91	8.97	18.88 ***
Within Groups	1986	943.53	.48	
TOTAL	1989	970.44		

\*\*\*Significant at the .001 level.

Table 25. Duncan results denoting pairs of groups with attitudes about cooperative and team teaching to meet the individual needs of students with mild learning or behavior problems significantly different at the .05 level

MEAN	GROUP TITLE	GROUP NUMBER	G	G	G	G
			R	R	R	R
			P	P	P	P
3.27	Special Education Teachers	4				
3.51	General Education Teachers	3	*			
3.52	Principals	2	*			
3.63	Superintendents	1	*			

Table 26 shows attitude mean scores for all personnel categories toward the various approaches for meeting the needs of students with mild learning or behavior problems in general education classrooms. All four groups strongly support the use of consultants and cooperative planning and problem solving. General education teachers do not find it desirable to place students with mild learning or behavior problems in their classrooms without the assistance of specially trained personnel. They believe that the learning of regular classroom students will be affected by this placement. Special education teachers are less supportive of cooperative and team teaching as a method

of serving students with mild learning or behavior problems than are the other three groups.

Table 26. Attitude mean scores by personnel categories toward approaches for meeting the needs of students with mild learning or behavior problems in general education classrooms

APPROACHES	GEN. ED. TCHRS.	SP. ED. TCHRS.	PRIN.	SUPT.	TOTAL
Use of Consultants	3.99	3.89	3.97	4.01	3.96
Cooperative Planning and Problem Solving	3.84	3.78	3.82	3.84	3.82
General Education Classrooms	3.39	3.56	3.60	3.71	3.51
Cooperative and Team Teaching	3.51	3.27	3.52	3.63	3.47

It also seemed important to examine if district size and level served affect the attitudes of superintendents, principals, general education teachers, and special education teachers toward methods of meeting the individual needs of students with mild learning or behavior problems within general education classrooms. For each of the five major areas, a Two-Way Analysis of Variance was utilized to analyze data regarding differences between groups classified by district size and level served. A .05 level of significance was set.

Table 27 shows significant differences in attitudes among general education teachers, special education

teachers, principals, and superintendents toward the desirability of educating students with mild learning or behavior problems in general education environments. There were no significant differences when the data were analyzed by district size. There was no significant interaction between personnel and district size. The attitudes of personnel were consistent regardless of district size.

Table 27. Two-way ANOVA summary for group attitudes toward the desirability of educating students with mild learning or behavior problems in general education environments when respondents were classified by personnel categories and district size

SOURCE OF VARIATION	D.F.	SUM OF SQUARES	MEAN SQUARES	F RATIO	
Main Effects	7	24.65	3.52	16.03	***
Personnel	3	22.39	7.46	33.97	***
District Size	4	1.47	.37	1.67	
Interactions	12	2.93	.24	1.11	
Within	1888	414.77	.22		
TOTAL	1907	442.35	.23		

\*\*\*Significant at the .001 level.

Table 28 shows significant differences in attitudes among general education teachers, special education teachers, principals, and superintendents toward the

desirability of educating students with mild learning or behavior problems in general education environments. There are significant differences in attitudes among personnel toward the desirability of educating students with mild learning or behavior problems in general education environments.

Table 28. Two-way ANOVA summary for group attitudes toward the desirability of educating students with mild learning or behavior problems in general education environments when respondents were classified by personnel categories and level served

SOURCE OF VARIATION	D.F.	SUM OF SQUARES	MEAN SQUARES	F RATIO	
Main Effects	4	17.44	4.36	19.93	***
Personnel	2	16.61	8.30	37.96	***
Level	2	1.12	.56	2.56	
Interactions	4	2.29	.57	2.62	*
Within	1737	379.98	.22		
TOTAL	1745	399.71	.23		

\*Significant at the .05 level.

\*\*\*Significant at the .001 level.

Table 29 shows that there was a significant interaction between the personnel categories and the level served at the .05 level. General education teachers were significantly different from principals and special education teachers in their attitudes toward



educating students with mild learning or behavior problems in general education environments. Middle school and secondary general education teachers were less supportive of educating students with mild learning or behavior problems in the regular classroom than elementary general education teachers.

Table 29. Group attitudes concerning the desirability of educating students with mild learning or behavior problems in general education classrooms by personnel categories and attendance center levels

GROUP	ELEM.	MIDDLE SCHOOL	SECOND.	TOTAL SAMPLE
Principals	3.59	3.60	3.62	3.61
General Education Teachers	3.47	3.34	3.34	3.39
Special Education Teachers	3.55	3.56	3.58	3.56
TOTAL SAMPLE	3.52	3.47	3.48	

Table 30 shows significant differences in attitudes toward cooperative and team teaching to meet the individual needs of students with mild learning or behavior problems among the variables for personnel categories and district size. There was no significant interaction between personnel categories and district size. The attitudes of personnel were consistent regardless of district size.

Table 30. Two-way ANOVA summary for group attitudes toward cooperative and team teaching to meet the individual needs of students with mild learning or behavior problems when respondents were classified by personnel categories and district size

SOURCE OF VARIATION	D.F.	SUM OF SQUARES	MEAN SQUARES	F RATIO	
Main Effects	7	35.71	5.10	10.81	***
Personnel	3	28.61	9.54	20.20	***
District Size	4	8.80	2.20	4.66	***
Interactions	12	4.80	.40	.85	
Within	1970	929.92	.47		
TOTAL	1989	970.44	.49		

\*\*\*Significant at the .001 level.

Significant differences in attitudes among personnel categories toward cooperative and team teaching to meet the individual needs of students with mild learning or behavior problems are shown in Table 31. Personnel serving elementary, middle school, secondary, and K-12 students differed in their attitudes toward cooperative and team teaching. There was no significant interaction between personnel categories and attendance center level served. The attitudes of personnel were consistent regardless of the level served.

Table 31. Two-way ANOVA summary for group attitudes toward cooperative and team teaching to meet the individual needs of students with mild learning or behavior problems when respondents were classified by personnel categories and level served

SOURCE OF VARIATION	D.F.	SUM OF SQUARES	MEAN SQUARES	F RATIO	
Main Effects	4	25.99	6.50	13.85	***
Personnel	2	22.69	11.34	24.19	***
Level	2	3.94	1.97	4.20	**
Interactions	4	1.11	.28	.59	
Within	1818	852.60	.47		
TOTAL	1826	879.69	.48		

\*\*Significant at the .01 level.

\*\*\*Significant at the .001 level.

Table 32 shows significant differences in attitudes among personnel categories concerning the effect on general education pupils when students with mild learning or behavior problems are served in general education classrooms. While there was no significant difference in attitude among overall district size categories, there were some significant interactions between district size and specific personnel categories.

Table 32. Two-way ANOVA summary for group attitudes concerning the effect on general education pupils when students with mild learning or behavior problems are served in general education classrooms when respondents were classified by personnel categories and district size

SOURCE OF VARIATION	D.F.	SUM OF SQUARES	MEAN SQUARES	F RATIO	
Main Effects	7	69.27	9.90	20.08	***
Personnel	3	66.64	22.21	45.07	***
District Size	4	2.34	.58	1.19	
Interactions	12	10.69	.89	1.81	*
Within	1978	974.89	.49		
TOTAL	1997	1054.85	.53		

\*Significant at the .05 level.

\*\*\*Significant at the .001 level.

Table 33 shows that superintendents from districts with less than 600 students were less supportive than other superintendents. General education teachers from districts of over 7500 students were less supportive than teachers from smaller schools of placing students with mild learning or behavior problems in general education classrooms.

Table 33. Group attitudes concerning the effect on general education pupils when students with mild learning or behavior problems are served in general education classrooms by personnel categories and district size

GROUP	599 OR LESS	600- 999	1000- 2499	2500- 7499	7500 OR MORE	TOTAL SAMPLE
Superintendents	3.36	3.55	3.58	3.50	3.53	3.50
Principals	3.33	3.30	3.37	3.45	3.51	3.39
General Ed. Teachers	3.16	3.23	3.18	3.13	2.96	3.14
Special Ed. Teachers	3.63	3.61	3.49	3.65	3.50	3.57
TOTAL SAMPLE	3.32	3.37	3.35	3.37	3.27	

Table 34 shows that when students with mild learning or behavior problems are served in general education classrooms, there are attitudinal differences among personnel classified by position and level served concerning the effect on general education pupils. There was no significant interaction between personnel categories and the level served. The attitudes of personnel were consistent regardless of the level served.

Table 34. Two-way ANOVA summary for group attitudes concerning the effect on general education pupils when students with mild learning or behavior problems are served in general education classrooms when respondents were classified by personnel categories and district size

SOURCE OF VARIATION	D.F.	SUM OF SQUARES	MEAN SQUARES	F RATIO	
Main Effects	4	66.30	16.57	33.72	***
Personnel	2	61.64	30.82	62.71	***
Level	2	4.30	2.15	4.38	*
Interactions	4	2.95	.74	1.50	
Within	1823	895.98	.49		
TOTAL	1831	965.22	.53		

\*Significant at the .05 level.

\*\*\*Significant at the .001 level.

Table 35 shows no significant differences in attitudes toward cooperative planning and problem solving between special education and general education teachers for meeting the needs of students with mild learning or behavior problems.

Table 35. Two-way ANOVA summary for group attitudes toward cooperative planning and problem solving between special education and general education teachers for meeting the needs of students with mild learning or behavior problems when respondents were classified by personnel categories and district size

SOURCE OF VARIATION	D.F.	SUM OF SQUARES	MEAN SQUARES	F RATIO
Main Effects	7	3.11	.44	1.90
Personnel	3	1.22	.41	1.74
District Size	4	1.73	.43	1.85
Interactions	12	2.48	.21	.89
Within	1928	449.76	.23	
TOTAL	1947	455.35	.23	

Table 36 shows significant differences in attitudes among personnel categories classified by position and level served toward cooperative planning and problem solving between special education teachers and general education teachers for meeting the needs of students with mild learning or behavior problems. There was no significant interaction between personnel categories and the level served. The attitudes of personnel were consistent regardless of the level served.

Table 36. Two-way ANOVA summary for group attitudes toward cooperative planning and problem solving between special education and general education teachers for meeting the needs of students with mild learning or behavior problems when respondents were classified by personnel categories and level served

SOURCE OF VARIATION	D.F.	SUM OF SQUARES	MEAN SQUARES	F RATIO	
Main Effects	4	22.95	5.74	25.81	***
Personnel	2	1.49	.75	3.35	*
Level	2	21.62	10.81	48.63	***
Interactions	4	1.00	.25	1.12	
Within	1775	394.59	.22		
TOTAL	1783	418.54	.24		

\*Significant at the .05 level.

\*\*\*Significant at the .001 level.

Table 37 shows significant differences in attitudes of personnel toward the use of consultants for meeting the needs of students with mild learning or behavior problems. Significant differences in attitudes toward the use of consultants are also shown for personnel categorized by district size. There was no significant interaction between personnel categories and district size. The attitudes of personnel were consistent regardless of the size of the district.



Table 37. Two-way ANOVA summary for group attitudes toward the use of consultants for meeting the needs of students with mild learning or behavior problems when respondents were classified by personnel categories and district size

SOURCE OF VARIATION	D.F.	SUM OF SQUARES	MEAN SQUARES	F RATIO	
Main Effects	7	6.08	.87	3.73	***
Personnel	3	3.33	1.11	4.77	**
District Size	4	2.32	.58	2.50	*
Interactions	12	1.66	.14	.59	
Within	1953	454.67	.23		
TOTAL	1972	462.41	.23		

\*Significant at the .05 level.

\*\*Significant at the .01 level.

\*\*\*Significant at the .001 level.

Table 38 shows significant differences in attitudes among personnel categories toward the use of consultants for meeting the needs of students with mild learning or behavior problems. Significant differences in attitudes toward the use of consultants were also found for personnel serving elementary, middle school, secondary, and K-12 students. As shown in Table 38, there was no significant interaction between personnel categories and the attendance center level served. The attitudes of

personnel were consistent regardless of the level served.

Table 38. Two-way ANOVA summary for group attitudes toward the use of consultants for meeting the needs of students with mild learning or behavior problems when respondents were classified by personnel categories and level served

SOURCE OF VARIATION	D.F.	SUM OF SQUARES	MEAN SQUARES	F RATIO	
Main Effects	4	13.44	3.36	14.50	***
Personnel	2	3.59	1.80	7.75	***
Level	2	10.16	5.08	21.94	***
Interactions	4	1.37	.34	1.48	
Within	1801	417.16	.23		
TOTAL	1809	431.97	.24		

\*\*\*Significant at the .001 level.

#### Attitudes toward alternative service delivery models

A major purpose of this study was to assess the attitudes of general education teachers, special education resource teachers, and administrators toward the use of different models for providing effective instruction within general education classrooms to students with mild learning or behavior problems. In this study, differences in group attitudes toward each

model were analyzed: Teacher Assistance Team, Student Services Specialist, Adaptive Learning Environment Model, and Consulting Teacher Model. Formulas for calculating group attitudes toward these models are included in Appendix H. Data are shown in tables which include mean scores and standard deviations, ANOVA summaries and results of Duncan's Multiple Range Test. A .05 level of significance was selected.

The mean scores were calculated by adding the Likert scale mean scores for a cluster of questions which addressed each of the four models of service delivery. In the Likert scale, 5 was considered highly supportive and 1 not supportive. Some of the survey items were worded negatively, so that a high Likert score indicated a lack of agreement toward the item. These are termed "reversal" items. In order to ensure that for all of the variables, a high score represented agreement or a positive attitude, the mean scores for the questions were adjusted.

Attitudes toward four service delivery models were examined. The Consulting Teacher Model consists of special education teachers working with general education teachers in an advisory role. The Teacher Assistance Team model consists of teams of teachers providing assistance to regular classroom teachers. The

Adaptive Learning Environment Model requires general education teachers to make modifications within the regular classroom to accommodate individual needs. In the Student Services Specialist model, a person who is dually endorsed as a psychologist/counselor or as a psychologist/social worker is employed to assist teachers in meeting the individual needs of students. Table 39 shows that the respondents were most supportive of the Consulting Teacher Model. The Teacher Assistance Team and the Adaptive Learning Environment Model were perceived as significantly less desirable than the Consulting Teacher Model, however there was at least moderate support for each model. Although there were significant differences in perceptions toward the Teacher Assistance Team and the Adaptive Learning Environment Model, the differences were not of practical significance. The sample population indicated a clear preference for the Consulting Teacher Model, and they were less supportive of the Student Services Specialist Model.

Table 39. Attitude mean scores and standard deviations toward service delivery models

MODEL	NUMBER	MEAN	STANDARD DEVIATION
Consulting Teacher Model	1875	3.73	.41
Teacher Assistance Team	1834	3.67	.42
Adaptive Learning Environment Model	1835	3.65	.42
Student Services Specialist	1946	3.50	.44

Tables 40-43 show the attitudes of the four groups toward the four models. Table 40 shows personnel group attitude mean scores and standard deviations toward the Consulting Teacher Model. Superintendents were more supportive of the Consulting Teacher Model than any other group. Table 41 shows an ANOVA summary table for group attitudes toward the Consulting Teacher Model. A significant difference at the .001 level was found between groups. Table 42 shows the Duncan results for the four groups. Superintendents were significantly more supportive than all other groups. Principals were more supportive of the model than special education teachers.

Table 40. Group attitude mean scores and standard deviations of personnel toward the Consulting Teacher Model

GROUP	NUMBER	MEAN	STANDARD DEVIATION
Superintendents	159	3.84	.38
Principals	473	3.75	.39
General Education Teachers	794	3.73	.40
Special Education Teachers	449	3.68	.43
TOTAL	1875	3.73	.41

Table 41. ANOVA summary table for group attitudes toward the Consulting Teacher Model

SOURCE	D.F.	SUM OF SQUARES	MEAN SQUARES	F RATIO
Between Groups	3	3.19	1.06	6.50 ***
Within Groups	1871	306.01	.16	
TOTAL	1874	309.20		

\*\*\*Significant at the .001 level.

Table 42. Duncan results showing pairs of groups with attitudes significantly different at the .05 level toward the Consulting Teacher Model

MEAN	GROUP TITLE	GROUP NUMBER	G	G	G	G
			R	R	R	R
			P	P	P	P
3.68	Special Education Teachers	4				
3.73	General Education Teachers	3				
3.75	Principals	2	*			
3.84	Superintendents	1	*	*	*	

Table 43 shows personnel group attitude mean scores and standard deviations toward the Teacher Assistance Team model. General education teachers and special education teachers were less favorable toward the Teacher Assistance Team model than were the administrators. Superintendents were most favorable toward the model. Table 44 shows an ANOVA summary for group attitudes toward the Teacher Assistance Team model. A significant difference at the .001 level was found between groups. Table 45 shows the Duncan results for superintendents, principals, general education teachers, and special education teachers. Superintendents were significantly more supportive of the Teacher Assistance Team model than principals and special education teachers who, in turn, were

significantly more supportive than general education teachers.

Table 43. Group attitude mean scores and standard deviations of personnel toward the Teacher Assistance Team model

GROUP	NUMBER	MEAN	STANDARD DEVIATION
Superintendents	158	3.82	.41
Principals	465	3.71	.41
General Education Teachers	778	3.61	.43
Special Education Teachers	433	3.67	.43
TOTAL	1834	3.67	.42

Table 44. ANOVA summary table for group attitudes toward the Teacher Assistance Team model

SOURCE	D.F.	SUM OF SQUARES	MEAN SQUARES	F RATIO
Between Groups	3	7.03	2.34	13.31 ***
Within Groups	1830	322.21	.18	
TOTAL	1833	329.24		

\*\*\*Significant at the .001 level.



Table 45. Duncan results showing pairs of groups with attitudes significantly different at the .05 level toward the Teacher Assistance Team model

MEAN	GROUP TITLE	GROUP NUMBER	G	G	G	G
			R	R	R	R
			P	P	P	P
3.61	General Education Teachers	3				
3.67	Special Education Teachers	4	*			
3.71	Principals	2	*			
3.82	Superintendents	1	*	*	*	

Table 46 shows group attitude mean scores and standard deviations toward the Adaptive Learning Environment Model. General education teachers were the least favorable of the four groups toward the Adaptive Learning Environment Model. Special education teachers and principals were less favorable toward the model than superintendents. Table 47 shows an ANOVA summary table for group attitudes toward the Adaptive Learning Environment Model. A significant difference at the .001 level was found between groups. Table 48 shows the Duncan results for the four groups. Superintendents differed from all other groups. General and special education teachers had similar viewpoints toward the Adaptive Learning Environment Model, and they were

significantly less favorable toward the model than either group of administrators.

Table 46. Group attitude mean scores and standard deviations toward the Adaptive Learning Environment Model

GROUP	NUMBER	MEAN	STANDARD DEVIATION
Superintendents	158	3.80	.40
Principals	466	3.69	.41
General Education Teachers	777	3.60	.42
Special Education Teachers	434	3.64	.43
TOTAL	1835	3.65	.42

Table 47. ANOVA summary table for group attitudes toward the Adaptive Learning Environment Model

SOURCE	D.F.	SUM OF SQUARES	MEAN SQUARES	F RATIO
Between Groups	3	6.05	2.02	11.66 ***
Within Groups	1831	316.89	.17	
TOTAL	1834	322.94		

\*\*\*Significant at the .001 level.

Table 48. Duncan results showing pairs of groups with attitudes significantly different at the .05 level toward the Adaptive Learning Environment Model

MEAN	GROUP TITLE	GROUP NUMBER	G	G	G	G
			R	R	R	R
			P	P	P	P
3.60	General Education Teachers	3				
3.64	Special Education Teachers	4				
3.69	Principals	2	*			
3.80	Superintendents	1	*	*	*	

Group attitude mean scores and standard deviations toward the Student Services Specialist model are shown in Table 49. General education teachers were least favorable toward the Student Services Specialist model. Special education teachers were also less favorable than administrators toward the model. Group attitudes toward the Student Services Specialist model are shown in Table 50. A significant difference at the .001 level was found between groups. The Duncan results are shown in Table 51. General education teachers were significantly less favorably inclined than the other three groups.

Table 49. Group attitude mean scores and standard deviations toward the Student Services Specialist model

GROUP	NUMBER	MEAN	STANDARD DEVIATION
Superintendents	162	3.61	.42
Principals	486	3.56	.43
General Education Teachers	833	3.45	.46
Special Education Teachers	465	3.50	.44
TOTAL	1946	3.50	.44

Table 50. ANOVA summary table for group attitudes toward the Student Services Specialist model

SOURCE	D.F.	SUM OF SQUARES	MEAN SQUARES	F RATIO
Between Groups	3	5.70	1.90	9.78 ***
Within Groups	1942	377.08	.19	
TOTAL	1945	382.78		

\*\*\*Significant at the .001 level.

Table 51. Duncan results showing pairs of groups with attitudes significantly different at the .05 level toward the Student Services Specialist model

MEAN	GROUP TITLE	GROUP NUMBER	G	G	G	G
			R	R	R	R
			P	P	P	P
3.45	General Education Teachers	3				
3.50	Special Education Teachers	4	*			
3.56	Principals	2	*	*		
3.61	Superintendents	1	*	*		

Table 52 shows a summary of the attitude mean scores of personnel categories toward service delivery models. All groups prefer the Consulting Teacher Model over the other models for serving students with mild learning or behavior problems. General education teachers show a stronger preference for the Consulting Teacher Model than for the other three models and considerably less support for the Student Services Specialist Model. Since they are the key to implementation of approaches for educating students with mild learning or behavior problems in the general education classroom, their preference for this model should be given special consideration. Special education teachers are in closer agreement with general education teachers on the Consulting Teacher Model than the other three models.

Table 52. A summary table of attitude mean scores of personnel categories toward service delivery models

MODELS	SUPT.	PRIN.	GEN. ED. TCHRS.	SP. ED. TCHRS.	TOTAL
Consulting Teacher Model	3.84	3.75	3.73	3.68	3.73
Teacher Assistance Team	3.82	3.71	3.61	3.67	3.67
Adaptive Learning Environment Model	3.80	3.69	3.60	3.64	3.65
Student Services Specialist	3.61	3.56	3.45	3.50	3.50

A randomized block design was utilized for Tables 53-58 representing a repeated measures design. Table 53 shows an ANOVA summary table comparing service delivery models. It indicates that there is a significant difference at the .001 level between the models. It was necessary to further analyze the data to determine which models differed.

Table 53. ANOVA summary table comparing service delivery models

SOURCE	D.F.	SUM OF SQUARES	MEAN SQUARES	F RATIO	
Within	5418	170.82	.03		
Between	3	47.16	15.72	498.64	***

\*\*\*Significant at the .001 level.

Table 54 shows an ANOVA summary table comparing the Teacher Assistance Team with the Student Services Specialist Model. There is a significant difference at the .001 level between the Teacher Assistance Team and the Student Services Specialist Model. Analysis of the means (Table 39) reveals that the Teacher Assistance Team is the more preferred model.

Table 54. ANOVA summary table comparing the Teacher Assistance Team with the Student Services Specialist model

SOURCE	D.F.	SUM OF SQUARES	MEAN SQUARES	F RATIO	
Within	1810	97.82	.05		
Between	1	22.24	22.24	411.57	***

\*\*\*Significant at the .001 level.

Table 55 shows an ANOVA summary table comparing the Consulting Teacher Model with the Adaptive Learning

Environment Model. There is a significant difference at the .001 level between these two models. Examination of the means (Table 39) reveals that the Consulting Teacher Model is the more preferred model.

Table 55. ANOVA summary table comparing the Consulting Teacher Model with the Adaptive Learning Environment Model

SOURCE	D.F.	SUM OF SQUARES	MEAN SQUARES	F RATIO	
Within	1846	15.26	.01		
Between	1	6.19	6.19	748.76	***

\*\*\*Significant at the .001 level.

Table 56 shows an ANOVA summary table comparing the Teacher Assistance Team with the Adaptive Learning Environment Model. There is a significant difference at the .001 level between these models. Analysis of the means (Table 39) reveals that the Teacher Assistance Team is the more preferred model.



Table 56. ANOVA summary table comparing the Teacher Assistance Team with the Adaptive Learning Environment Model

SOURCE	D.F.	SUM OF SQUARES	MEAN SQUARES	F RATIO	
Within	1840	1.59	.00		
Between	1	.29	.29	338.94	***

\*\*\*Significant at the .001 level.

Table 57 shows an ANOVA summary table comparing the Student Services Specialist with the Adaptive Learning Environment Model. There is a significant difference at the .001 level between the Student Services Specialist and the Adaptive Learning Environment Model.

Examination of the means (Table 39) reveals that the Adaptive Learning Environment Model is the more preferred of the two.

Table 57. ANOVA summary table comparing the Student Services Specialist model with the Adaptive Learning Environment Model

SOURCE	D.F.	SUM OF SQUARES	MEAN SQUARES	F RATIO	
Within	1810	97.39	.05		
Between	1	17.64	17.64	327.87	***

\*\*\*Significant at the .001 level.

Table 58 shows an ANOVA summary table comparing the Consulting Teacher Model with the Teacher Assistance Team. There is a difference between these two models at the .001 level of significance. Analysis of the means (Table 39) shows that the Consulting Teacher Model is more preferred than the Teacher Assistance Team.

Table 58. ANOVA summary table comparing the Consulting Teacher Model with the Teacher Assistance Team

SOURCE	D.F.	SUM OF SQUARES	MEAN SQUARES	F RATIO	
Within	1845	17.55	.01		
Between	1	3.81	3.81	400.14	***

\*\*\*Significant at the .001 level.

#### Other Findings

##### Perceived obstacles to implementation

In order to determine the attitudes toward educating students with mild learning or behavior problems in general education classrooms, respondents were asked to rank order a list of possible difficulties to accommodating students in the regular classroom. Data pertaining to these rank order questions are listed in Appendix F (Data Summaries 7, 8, and 9). Insufficient time, large classes, and lack of personnel to assist in

the classroom ranked as the three largest obstacles in that order. All four groups viewed insufficient time as an obstacle to meeting the needs of students with mild learning or behavior problems in the regular classroom. However, regular classroom teachers viewed insufficient time as a larger obstacle than any of the groups surveyed. Insufficient time was a larger obstacle to personnel serving elementary than to those serving middle school or secondary.

Large classes were perceived as a larger obstacle to meeting the needs of students with mild behavior problems than to meeting the needs of students with mild learning problems. Teachers viewed large classes as a larger obstacle than superintendents or principals. As the size of the school district increased, large classes were perceived as a greater obstacle. Large classes were seen as a smaller obstacle by respondents serving the secondary than by respondents serving the elementary or middle school levels.

By all four groups, the lack of personnel to assist in the classroom was seen as a larger obstacle when working with students with mild behavior problems than when working with students with mild learning problems. Personnel serving elementary students perceived the lack of personnel to assist in the classroom as a larger

obstacle than those serving middle school, secondary or K-12.

For accommodating students with mild learning or behavior problems, lack of administrative support was ranked as the smallest obstacle. Not surprisingly, superintendents saw it as a smaller obstacle than either general or special education teachers. Personnel serving K-12 students viewed the lack of administrative support as a smaller obstacle than those serving elementary, middle school or secondary.

#### Perceived support to regular teachers

To assist in determining attitudes, respondents were also asked to rank order the personnel who most frequently provide support to regular teachers. Data pertaining to these rank order questions are listed in Appendix F (Data Summaries 4, 5, and 6).

Respondents indicated that special education resource teachers provide the most frequent support to regular teachers for meeting the needs of students with mild learning problems and that they also frequently provide support to regular teachers for meeting the needs of students with mild behavior problems. Special education teachers saw themselves as providing support more frequently to regular teachers than administrators or general education teachers saw them.

The sample population did not perceive special education consultants, psychologists or social workers as providers of support to regular teachers in meeting the needs of students with mild learning or behavior problems. The entire sample ranked social workers the lowest for providing support to regular teachers. Personnel from districts with less than 1000 students perceived social workers as providing support to regular teachers more frequently than did personnel in districts with more than 1000 students. Elementary respondents perceived social workers as providing more frequent support to regular teachers than respondents at the middle school, secondary or K-12 levels.

The sample population ranked regular teachers second to special education teachers as providers of support to regular teachers. There were marked differences of opinion on the frequency of support from administrators to regular teachers. For both mild learning and behavior problems, administrators perceived that they provided more support to regular teachers than was perceived by regular teachers or special education teachers. With the exception of K-12 respondents, as the attendance center level of the respondents increased, the perceived level of support from administrators to regular teachers decreased.

When respondents were requested to rank order a list of personnel according to ability for providing support to regular classroom teachers for meeting the needs of students with mild learning problems, special education teachers and special education consultants ranked first and second respectively. In contrast, when respondents were requested to rank order a list of personnel according to ability for providing support to regular classroom teachers for meeting the needs of students with mild behavior problems, special education teachers ranked first and psychologists ranked second.

Each of the personnel groups surveyed ranked themselves higher than the other groups ranked them on their ability to provide support to regular classroom teachers to meet the needs of students with mild learning or behavior problems. Special education resource teachers ranked themselves higher on their ability to provide support to regular classroom teachers than the administrators or general education teachers ranked them. General education teachers ranked themselves higher on their ability for providing support to other regular classroom teachers than superintendents, principals or special education teachers. Administrators had a higher opinion of their own ability for providing support to regular teachers to

meet the needs of students with mild learning or behavior problems than did teachers.

At all levels, respondents had lower opinions of administrators' ability to provide support to regular classroom teachers in meeting the needs of students with mild learning problems than of students with mild behavior problems. More confidence was placed in special education resource teachers' ability to provide support to regular classroom teachers for meeting the needs of students with mild behavior problems in districts with over 1000 students.

Resource teachers serving middle school or secondary levels were given more credibility than those serving the elementary level for providing support to regular classroom teachers for meeting the needs of students with mild learning or behavior problems. However, elementary respondents had greater confidence than secondary respondents in the ability of special education consultants to provide support to meet the needs of students with mild learning or behavior problems. Special education consultants were ranked higher by special education teachers than regular teachers or administrators on their ability to provide support to regular classroom teachers for meeting the needs of students with mild learning or behavior problems.

### Summary

This chapter has presented the results of a survey of randomly selected regular and special education teachers and administrators in Iowa concerning their attitudes toward individualizing instruction and modifying the learning environment to meet the needs of students with mild learning or behavior problems within the general education environment. Data from 2057 questionnaires were analyzed.

The first section of this chapter presented demographic and other data reported by the respondents. The second section presented a composite analysis of attitudes toward five areas. The two areas which were strongly supported by the sample population were the attitudes toward the use of consultants for meeting the needs of students with mild learning or behavior problems and attitudes toward cooperative planning and problem solving between special education and general education teachers for meeting the needs of students with mild learning or behavior problems. An analysis of attitudes toward alternative service delivery models was presented in section three. The sample population was most supportive of the Consulting Teacher Model. They were moderately supportive of the Teacher Assistance



Team and the Adaptive Learning Environment Model. They indicated a clear preference for the Consulting Teacher Model and were least supportive of the Student Services Specialist model.

General education teachers were especially supportive of the Consulting Teacher Model over the other three approaches. Special education teachers also favored the Consulting Teacher Model over the others. The opinions of general and special education teachers should be closely examined, because they are the ones who work directly with the students.

The three largest obstacles to educating students with mild learning or behavior problems were perceived by the sample population as insufficient time, large classes, and lack of personnel to assist in the classroom in that order. All of the groups surveyed resoundingly agreed that special education teachers should assist general education teachers in individualizing instruction for students with mild learning or behavior problems with special education teachers indicating the strongest support. The sample population did not perceive special education consultants, psychologists or social workers as providers of support to regular teachers in meeting the needs of students with mild learning or behavior problems. Each of the personnel groups surveyed ranked

themselves higher than the other groups ranked them on their ability to provide support for meeting the needs of students with mild learning or behavior problems.

Overall, general education teachers, special education teachers, principals, and superintendents were supportive of educating students with mild learning or behavior problems in general education classrooms. However, there are differences of opinions between various groups toward which approach is best for educating students with mild learning or behavior problems in general education environments.

CHAPTER V.  
SUMMARY, DISCUSSION, CONCLUSIONS, AND RECOMMENDATIONS

Summary

The purposes of this study were to gather data from a random sample of Iowa educators on their attitudes toward meeting the needs of students with mild learning or behavior problems within general education classrooms and to assess their attitudes toward the use of alternative approaches to meeting the needs of those students within the general education environment. For this study, the sample was partitioned by personnel category, district size, and educational level served. The personnel categories were superintendents, principals, general education teachers, and special education teachers. The number of students in the district size categories were 0-599; 600-999; 1000-2499; 2500-7499; and 7500 or more. The attendance center levels were elementary, middle school, secondary, and K-12. Junior high school was included with middle school.

Of the 3312 surveys mailed, 2057 were validly completed, producing a 62.1% return rate. Of the 184 superintendents surveyed, 91.3 percent returned the surveys; 74.3 percent of the 672 special education teachers surveyed and 73.7 percent of the 689 principals

surveyed returned the questionnaires. Slightly less than half of the 1767 general education teachers (49.1 percent) returned the surveys. In districts with less than 600 students, 65.8 percent of the 609 surveys mailed were returned. In districts with 600-999 students, 64.5 percent of the 617 surveys mailed were returned. In districts with 1000-2499 students, 64.3 percent of 729 responded to the survey. In districts with 2500-7499, 676 surveys were mailed and 61.4 percent were returned. Survey instruments sent to districts with over 7500 students numbered 681, and 52.7 percent were returned. At the elementary level, 64.9 percent of 765 surveys were returned. Of the 809 instruments sent to middle schools, 58.8 percent were returned. At the secondary level 1141 instruments were mailed and 55.5 percent were returned. Of the 184 surveys mailed to personnel serving K-12 students, 91.3 percent were returned.

The questionnaire was comprised of forty-eight statements with a Likert scale, four rank order questions, and four questions requesting information concerning the respondents educational experience and training.

Survey items were clustered into five areas. For survey items addressing each specific area, a composite analysis was conducted.

Five major areas were analyzed:

- 1) Attitudes toward the desirability of educating students with mild learning or behavior problems in general education environments.
- 2) Perceptions about cooperative and team teaching to meet the individual needs of students with mild learning or behavior problems.
- 3) Perceptions concerning the effect on general education classrooms when students with mild learning or behavior problems are served in general education classrooms.
- 4) Attitudes toward cooperative planning and problem solving between general and special education teachers for meeting the needs of students with mild learning or behavior problems.
- 5) Attitudes toward the use of consultants for meeting the individual needs of students with mild learning or behavior problems.

A composite analysis was made to study attitudes toward four service delivery models. The models analyzed were Teacher Assistance Team, Adaptive Learning Environment Model, Student Services Specialist, and

Consulting Teacher Model. An item by item analysis was conducted by personnel category, district size, and attendance center level served. An analysis of individual survey items is included in Appendix I. The study of the data was by one and two-way analysis of variance and by the Duncan's Multiple Range Test.

In summarizing the findings, it is important to discuss the degree of support indicated by each of the groups surveyed. For the purposes of this discussion, mean scores ranging from 3.1 to 3.5 are defined as mildly supportive. Mean scores from 3.6 to 4.0 are defined as moderately supportive.

Attitudes concerning the effect of placing students with mild learning or behavior problems in general education classrooms

1. The sample population gave only mild support to the placement of students with mild learning or behavior problems in general education classrooms; indicating that the learning of students in the regular classroom would be affected by their presence.
2. General education teachers were notably less favorable toward the placement of students with mild learning or behavior problems in their classrooms than either special education resource teachers or administrators.

They apparently believe that placement of students with mild learning or behavior problems in their classrooms would have an effect on the other students.

3. Special education resource teachers gave moderate approval to the placement of students with mild learning or behavior problems in the regular classroom, showing more support than any of the other three groups.
4. Principals were mildly supportive of serving students with mild learning or behavior problems in the regular classroom, apparently believing that it would have an effect on other students.
5. Superintendents showed mild support for educating students with mild learning or behavior problems in the regular classroom.

Attitudes toward approaches for meeting the needs of students with mild learning or behavior problems in general education classrooms

1. Overall, the sample population indicated support for the concept of serving students with mild learning or behavior problems in general education environments. General education teachers were less supportive than special education teachers or administrators. They were, however, mildly supportive

of the concept.

2. The sample population were considerably more in favor of either the use of consultants or cooperative planning and problem solving than of cooperative and team teaching or placement in the general education classroom.
3. Special education teachers were considerably less positive about cooperative and team teaching than general education teachers and administrators. Apparently, they have little interest in team teaching with general educators for serving the needs of students with mild learning or behavior problems in the regular classroom.
4. Special education resource teachers showed very little interest in team teaching with general educators but they, like both groups of administrators and general education teachers, were very positive about the use of consultants and also about cooperative planning and problem solving between general and special educators.

#### Attitudes toward service delivery models

1. When attitudes toward four service delivery models were analyzed, the sample population preferred the



Consulting Teacher Model over the other three models. They were moderately favorable toward the Teacher Assistance Team and the Adaptive Learning Environment Model. These two models were significantly more favored than the Student Services Specialist model. There was, however, mild support for the Student Services Specialist model.

2. General education teachers showed a clear preference for the Consulting Teacher Model, apparently recognizing their need for assistance in programming for students with special needs.
3. Special education resource teachers showed no clear preference for the Consulting Teacher Model, the Teacher Assistance Team, and the Adaptive Learning Environment Model. However, they preferred these three models over the Student Services Specialist model.
4. Both administrator groups were least favorable toward the Student Services Specialist model. Generally, administrators were more supportive of all four service delivery models than were the teachers. Possibly, this could be because they are not directly responsible for implementation of the models.

## Discussion

The attitudes of general and special education resource teachers are important because they are directly responsible for implementing approaches for meeting the needs of students with mild learning or behavior problems within the general education environment. Of the groups surveyed, general education teachers were the least receptive toward placement of students with mild learning or behavior problems in their classrooms. However, they indicated a willingness to work with these students if provided with assistance from specially trained personnel. Perhaps, this is the reason they preferred the use of consultants. Special education resource teachers and both administrator groups also favored the use of consultants.

Cooperative planning and problem solving was the second preference for all four groups. Apparently, this indicates a willingness of general and special educators to work together in meeting student needs.

The Consulting Teacher Model was clearly preferred by all four groups. Based upon these results, implementation of this model is most likely to be successful.

### Limitations

The survey portion of this study was limited to Iowa administrators and teachers. Caution must be exercised in generalizing the data beyond Iowa boundaries. Non-educators and higher education personnel were excluded from the survey.

The survey instrument could have been shortened and still generated reliable measures of attitudes within the various categories. The use of a long questionnaire was a limiting factor in that some of those surveyed might have failed to return the survey because of the substantial amount of time required to complete it.

The study was limited to four service delivery models being considered for implementation by the Iowa Department of Education.

### Conclusions

Based on the data collected in the survey, the following conclusions were made:

1. Each of the four personnel categories surveyed preferred the Consulting Teacher Model to any of the other three service delivery models. General

education teachers strongly preferred this model, so attempts to serve students with mild learning or behavior problems in the general education environment would be more likely to succeed if based upon the Consulting Teacher Model.

2. Superintendents are strongly supportive of educating students with mild learning or behavior problems in the general education environment.
3. The study shows differences of opinions between various groups toward approaches for educating students with mild learning or behavior problems within the general education environment. In order to arrive at consensus, coordination between and among agencies for the benefit of children with mild learning or behavior problems needs to be implemented. For instance, universities must cooperate with state departments to develop courses and inservice programs. General educators need to communicate with special educators to better understand individual student needs. To accomplish this, schools need to implement alternative service delivery models. As an intermediate step, schools could modify pull-out programs by utilizing special education teachers in a consultive role.
4. When compared to special education consultants, school

psychologists, social workers, regular classroom teachers, and administrators, special education teachers were perceived by all four groups as providing the most frequent support to regular classroom teachers for meeting the needs of students with both mild learning and behavior problems. They were also perceived by all four groups as having the highest ability for providing support to regular classroom teachers for meeting the needs of students with both mild learning and behavior problems. Alternative service delivery models must be utilized to give special education teachers opportunities to provide support to regular classroom teachers.

5. Of the four groups surveyed, general education teachers were least receptive to including students with mild learning or behavior problems in their classrooms. Therefore, it is necessary to change their attitudes before using approaches involving placement of students with mild learning or behavior problems in general education classrooms.
6. All four groups were supportive of the use of consultants and cooperative planning and problem solving between general and special education teachers for meeting the needs of students with mild learning or behavior problems. Therefore, opportunities must

be provided for special education teachers to function in a consultive role with general education teachers. General and special education teachers must be afforded opportunities for cooperative planning and problem solving to meet the individualized needs of students.

#### Recommendations for Future Study

Based on the results of this study, the following recommendations were made:

1. The parameters of this study were limited by geographic constraints. In order to provide data of greater utility to educational decision-makers, future studies should be structured to strengthen the validity of generalizations by extending the sample to other geographic areas.
2. Other models or combinations of models should be explored for meeting the needs of students with mild learning or behavior problems within the general education environment. Studies are needed to determine which models are best for students.
3. Alternative funding mechanisms should be provided for schools willing to experiment with alternative service delivery models. Programs need to be fully

funded rather than allocated dollars based upon the number of students served.

4. The study should be replicated with additional data from non-educator groups and personnel from higher education.
5. Professional preparation and staff development programs for general and special education teachers should be further researched.
6. The barriers should be further identified and transformed into goals.
7. Effective practices going on in the schools for breaking down the barriers between general and special education should be researched, identified, and disseminated.

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APPENDIX A. LETTER ACCOMPANYING THE SURVEY



## STATE OF IOWA • DEPARTMENT OF PUBLIC INSTRUCTION

GRIMES STATE OFFICE BUILDING • DES MOINES, IOWA 50319-0146

Iowa  
a place to grow

ROBERT D. BENTON, Ed.D., COMMISSIONER  
David H. Bechtel, M.S. Administrative Assistant  
JAMES E. MITCHELL, Ph.D., DEPUTY COMMISSIONER

February 7, 1986

Dear Fellow Educator:

The enclosed survey represents a cooperative effort by the Iowa Department of Public Instruction, Iowa State University, Arrowhead Area Education Agency, and the Mountain Plains Regional Resource Center-Drake University Subcontract. The survey is designed to sample your beliefs about providing educational services to students with mild learning problems and students with mild behavior problems.

The definition of "students with mild learning problems and students with mild behavior problems", for the purposes of this survey, is: students for whom additional or modified educational services are necessary, students who are currently served in regular (general education) classes with special education resource program support, or students in regular (general education) classes without special education resource program support but who require modifications to meet their learning needs. This definition includes students identified as mildly mentally disabled, mildly learning disabled, and mildly behaviorally disordered, and students who have not been so identified but exhibit similar educational needs.

We are particularly interested in your responses. School administrators, regular (general education) teachers, and special education resource teachers are being sampled on a statewide basis. Please take the time to complete the enclosed survey and return it in the enclosed, pre-stamped envelope by February 21, 1986. All responses will be kept confidential and will be combined with the replies of other respondents. Your participation will give direction to state policymakers about addressing the educational needs of students with mild learning problems and students with mild behavior problems.

Thank you for your consideration and time in completing this very important survey. The survey should be returned to Alicia Porter, Arrowhead Area Education Agency, P.O. Box 1399, Fort Dodge, Iowa 50501.

Sincerely,

Shirley Curl, Researcher

Sincerely,

Tom Burgett, Ph.D., Assistant Director  
Fiscal and Statistical Services  
Special Education Division  
Department of Public Instruction

SC:TB:ga  
Enclosure

APPENDIX B. SURVEY INSTRUMENT

**SURVEY OF OPINIONS  
REGARDING EDUCATIONAL SERVICES FOR  
STUDENTS WITH MILD LEARNING AND BEHAVIOR PROBLEMS**

Most items on this survey require you to circle the response that best reflects your opinions about the statement made.

Use the following scale for those items.

SD-Strongly Disagree  
D-Disagree  
N-No Opinion  
A-Agree  
SA-Strongly Agree

1. Special classrooms should be used to meet the individual needs of students with
  - (a) mild learning problems      SD    D    N    A    SA
  - (b) mild behavior problems      SD    D    N    A    SA
  
2. I support making modifications within the regular class in order to accommodate the individual needs of students with
  - (a) mild learning problems      SD    D    N    A    SA
  - (b) mild behavior problems      SD    D    N    A    SA
  
3. Every opportunity to function in the regular classroom setting should be given to students with
  - (a) mild learning problems      SD    D    N    A    SA
  - (b) mild behavior problems      SD    D    N    A    SA
  
4. The regular class can be modified to accommodate students

with

- |                            |    |   |   |   |    |
|----------------------------|----|---|---|---|----|
| (a) mild learning problems | SD | D | N | A | SA |
| (b) mild behavior problems | SD | D | N | A | SA |
5. Regular teachers are responsible for finding the right teaching method to help students with
- |                            |    |   |   |   |    |
|----------------------------|----|---|---|---|----|
| (a) mild learning problems | SD | D | N | A | SA |
| (b) mild behavior problems | SD | D | N | A | SA |
6. Academic skills will be developed more rapidly in a special classroom than in a modified regular classroom by students with
- |                            |    |   |   |   |    |
|----------------------------|----|---|---|---|----|
| (a) mild learning problems | SD | D | N | A | SA |
| (b) mild behavior problems | SD | D | N | A | SA |
7. Appropriate social skills can be developed within the regular classroom by students with
- |                            |    |   |   |   |    |
|----------------------------|----|---|---|---|----|
| (a) mild learning problems | SD | D | N | A | SA |
| (b) mild behavior problems | SD | D | N | A | SA |
8. Regular teachers, if provided an opportunity to consult and work together, can meet the instructional needs of students with
- |                            |    |   |   |   |    |
|----------------------------|----|---|---|---|----|
| (a) mild learning problems | SD | D | N | A | SA |
| (b) mild behavior problems | SD | D | N | A | SA |
9. There is considerable knowledge and talent among regular teachers for working with students with
- |                            |    |   |   |   |    |
|----------------------------|----|---|---|---|----|
| (a) mild learning problems | SD | D | N | A | SA |
| (b) mild behavior problems | SD | D | N | A | SA |



10. Regular teachers can develop effective strategies for dealing with students with
- |                            |    |   |   |   |    |
|----------------------------|----|---|---|---|----|
| (a) mild learning problems | SD | D | N | A | SA |
| (b) mild behavior problems | SD | D | N | A | SA |
11. Regular students lose instructional time if regular classes include student with
- |                            |    |   |   |   |    |
|----------------------------|----|---|---|---|----|
| (a) mild learning problems | SD | D | N | A | SA |
| (b) mild behavior problems | SD | D | N | A | SA |
12. Academic achievement of regular students decreases if regular classes include students with
- |                            |    |   |   |   |    |
|----------------------------|----|---|---|---|----|
| (a) mild learning problems | SD | D | N | A | SA |
| (b) mild behavior problems | SD | D | N | A | SA |
13. Students with mild learning problems are less likely to exhibit behavior problems in the regular class when modifications have been made to accommodate their learning needs
- |  |    |   |   |   |    |
|--|----|---|---|---|----|
|  | SD | D | N | A | SA |
|--|----|---|---|---|----|
14. Regular class placement **with appropriate** modification negatively affects the self-concept of students with
- |                            |    |   |   |   |    |
|----------------------------|----|---|---|---|----|
| (a) mild learning problems | SD | D | N | A | SA |
| (b) mild behavior problems | SD | D | N | A | SA |
15. Regular class placement negatively affects the self-concept of students with
- |                            |    |   |   |   |    |
|----------------------------|----|---|---|---|----|
| (a) mild learning problems | SD | D | N | A | SA |
| (b) mild behavior problems | SD | D | N | A | SA |

16. Special education personnel should assist regular teachers in individualizing instruction for students with

(a) mild learning problems      SD    D    N    A    SA

(b) mild behavior problems      SD    D    N    A    SA

17. Regular teachers, with support from special education resource teachers, can establish learning goals and objectives to meet the needs of students with

(a) mild learning problems      SD    D    N    A    SA

(b) mild behavior problems      SD    D    N    A    SA

18. Rank the following 1-6 by assigning a 1 to personnel who **most frequently** provide support to regular teachers to meet the needs of students with mild learning problems and students with mild behavior problems and a 6 to those who **least frequently** provide support. Consider the personnel categories separately for students with mild learning problems and students with mild behavior problems.

PERSONNEL	MILD LEARNING PROBLEMS	MILD BEHAVIOR PROBLEMS
<u>Special Education Resource Teachers</u>		
<u>Special Education Consultants</u>		
<u>School Psychologists</u>		
<u>School Social Workers</u>		
<u>Regular Teachers</u>		
<u>Administrators</u>		

19. Rank the following 1-6 by assigning a 1 to personnel who are **best able** to provide support to regular teachers to meet the needs of students with mild learning problems and students with mild behavior problems and a 6 to those who are **least able** to provide support. Consider the personnel categories separately for students with mild learning problems and students with mild behavior problems.

PERSONNEL	MILD LEARNING PROBLEMS	MILD BEHAVIOR PROBLEMS
Special Education Resource Teachers		
Special Education Consultants		
School Psychologists		
School Social Workers		
Regular Teachers		
Administrators		

20. The table below lists obstacles that may make it difficult to accommodate students with mild learning problems and students with mild behavior problems in the regular classroom. Consider the obstacles separately for students with **mild learning** problems and students with **mild behavior** problems as indicated on the table. Rank

the obstacles 1-7 by assigning a 1 to the largest obstacle and a 7 to the smallest obstacle.

OBSTACLES	MILD LEARNING PROBLEMS	MILD BEHAVIOR PROBLEMS
Increased Paperwork		
Insufficient Time		
Teacher Lacks Skills Needed to Individualize		
Large Classes		
Curriculum Does Not Lend Itself to Individualization		
Lack of Personnel to Assist in the Classroom		
Lack of Administrative Support		

21. The table below lists types of modifications for which regular teachers may need assistance in order to accommodate students with mild learning problems and students with mild behavior problems. Consider the modifications separately for students with **mild learning problems and students with mild behavior problems** as indicated on the table. Rank the modifications 1-7 by assigning a 1 to the modification for which regular teachers have the **greatest need for assistance** and a 7 to the modification for which the least amount of assistance is needed.

( ) TYPES OF MODIFICATIONS	MILD LEARNING PROBLEMS	MILD BEHAVIOR PROBLEMS
Ways to Modify Materials		
Ways to Group Students		
Ways to Motivate Students		
Ways to Present Content (e.g., Lecture, Use of Visual Aides, Peer Tutoring)		
Ways to Modify the Learning Environment (e.g., Seating Arrangements, Reduction of Distractions)		
Ways to Modify the Learning Objectives		
Ways to Manage Behavior		

Please go back to the table above and put a check mark ( ) to the left of those modifications for which teachers would be most willing to accept assistance.

22. Team Teaching between regular teachers and special education resource teachers should be used to meet the learning needs of students with
- |                            |    |   |   |   |    |
|----------------------------|----|---|---|---|----|
| (a) mild learning problems | SD | D | N | A | SA |
| (b) mild behavior problems | SD | D | N | A | SA |
23. Regular teachers can identify academic deficits of students with

- (a) mild learning problems      SD    D    N    A    SA
- (b) mild behavior problems      SD    D    N    A    SA
24. Regular teachers are willing to try various alternatives to meet the needs of students with
- (a) mild learning problems      SD    D    N    A    SA
- (b) mild behavior problems      SD    D    N    A    SA
25. Regular teachers are willing to accept assistance from:
- (a) regular teachers              SD    D    N    A    SA
- (b) special education  
resource teachers              SD    D    N    A    SA
- (c) special education  
consultants                    SD    D    N    A    SA
- (d) the principal                SD    D    N    A    SA
- (e) school social workers        SD    D    N    A    SA
- (f) school psychologists        SD    D    N    A    SA
26. Cooperative planning between special education resource teachers and regular education teachers is necessary to meet the learning needs of students with
- (a) mild learning problems      SD    D    N    A    SA
- (b) mild behavior problems      SD    D    N    A    SA
27. Frequent communication occurs between special education resource teachers and regular teachers
- SD    D    N    A    SA
-

Directions:

Please complete the following items describing your educational experience/training.

28. Indicate your total years experience as a teachers and/or administrator.

\_\_\_\_\_

29. Please check the category indicating your highest degree earned.

Bachelors\_\_\_ Masters\_\_\_ Specialist\_\_\_ Doctoral\_\_\_

30. Please check the category indicating the approximate number of special education courses completed at the undergraduate and graduate levels combined.

0 ___	4 - 6 ___	10 - 12 ___
1 - 3 ___	7 - 9 ___	13 - more ___

31. Name your undergraduate and graduate major(s) and minor(s). Please be specific (e.g., math, psychology, early childhood education).

**Undergraduate**

Major(s)

Minor(s)

_____	_____
_____	_____

**Graduate**

Major(s)

Minor(s)

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**Return the completed survey to:**  
Alicia Porter  
Arrowhead Area Education Agency  
P.O. Box 1399  
Fort Dodge, Iowa 50501



APPENDIX C. PANEL OF EXPERTS

Ms. Deb Brower	Assistant Administrator Mountain Plains Regional Resource Center Drake University Des Moines, Iowa
Dr. Robert Haele	Administrator Mountain Plains Regional Resource Center Drake University Des Moines, Iowa
Dr. Thomas M. Burgett, Jr.	Director Fiscal and Statistical Services Special Education Division Department of Public Instruction Des Moines, Iowa
Mr. Frederick Krueger	Director of Special Education Area Education Agency #5 Fort Dodge, Iowa
Dr. Tim Keith	Associate Professor, School Psychology University of Iowa Iowa City, Iowa

APPENDIX D. QUESTIONS USED FOR DEVELOPING THE SURVEY  
INSTRUMENT

- I. What are the attitudes of superintendents, principals, general education teachers, and special education teachers on the subject of meeting individual needs of students with mild learning or behavior problems within the general education classroom.
  - A. Do attitudes of superintendents, principals, general education teachers and special education teachers differ about the desirability of educating students with mild learning or behavior problems in general education environments?
  - B. Are there different perceptions about cooperative and team teaching in order to meet the individual needs of students with mild learning or behavior problems among superintendents, principals, general education teachers, and special education teachers?
  - C. Are there different perceptions among superintendents, principals, general education teachers, and special education teachers concerning the effect on general education pupils when students with mild learning or behavior problems are served in general

education classrooms?

D. Do attitudes of superintendents, principals, general education teachers, and special education teachers differ toward cooperative planning and problem solving between special education and general education teachers for meeting the needs of students with mild learning or behavior problems?

E. Do attitudes of superintendents, principals, general education teachers, and special education teachers differ toward the use of consultants for meeting the individual needs of students with mild learning or behavior problems?

II. What are the attitudes of superintendents, principals, general education teachers, and special education teachers classified by district size on the subject of meeting the individual needs of students with mild learning or behavior problems within a general education classroom?

A. Do attitudes of superintendents, principals, general education teachers, and special education teachers classified by district size differ about the desirability of educating

students with mild learning or behavior problems in general education environments?

- B. Are there different perceptions about cooperative and team teaching in order to meet the individual needs of students with mild learning or behavior problems among superintendents, principals, general education teachers, and special education teachers classified by district size?
- C. Are there different perceptions among superintendents, principals, general education teachers, and special education teachers classified by district size concerning the effect on general education pupils when students with mild learning or behavior problems are served in general education classrooms?
- D. Do attitudes of superintendents, principals, general education teachers, and special education teachers classified by district size differ toward cooperative planning and problem solving between special education and general education teachers for meeting the needs of students with mild learning or behavior problems?

E. Do attitudes of superintendents, principals, general education teachers, and special education teachers classified by district size differ toward the use of consultants for meeting the individual needs of students with mild learning or behavior problems?

III. What are the attitudes of principals, general education teachers, and special education teachers classified according to level served (elementary, middle school, or secondary) on the subject of meeting the individual needs of students with mild learning or behavior problems within the general education classroom?

A. Do attitudes of principals, general education teachers and special education teachers classified by level served differ about the desirability of educating students with mild learning or behavior problems in general education environments?

B. Are there different perceptions about cooperative and team teaching in order to meet the individual needs of students with mild learning or behavior problems among principals, general education teachers, and special education teachers classified by level served?

- C. Are there different perceptions among principals, general education teachers, and special education teachers classified by level served concerning the effect on general education pupils when students with mild learning or behavior problems are served in general education classrooms?
- D. Do attitudes of principals, general education teachers, and special education teachers classified by level served differ toward cooperative planning and problem solving between special education and general education teachers for meeting the needs of students with mild learning or behavior problems?
- E. Do attitudes of principals, general education teachers, and special education teachers classified by level served differ toward the use of consultants for meeting the individual needs of students with mild learning or behavior problems?
- IV. Are there differences in perceptions of training when superintendents, principals, general education teachers, and special education teachers are classified by personnel categories,



district size, and level served?

- A. Are there differences in the perceptions toward the quality of training in individualizing instruction among superintendents, principals, general education teachers, and special education teachers?
- B. Are there differences in the perceptions toward the quality of training received in individualizing instruction among superintendents, principals, general education teachers, and special education teachers classified by district size?
- C. Are there differences in the perceptions toward the quality of training received in individualizing instruction among principals, general education teachers, and special education teachers classified by level served?

APPENDIX E. BREAKDOWN OF RESPONSES BY SURVEY ITEMS

### Descriptive Analysis of Individual Survey Items

The data were analyzed using a single classification analysis of variance. Then the means were compared using a Duncan's Multiple Range Test for significant difference. The .05 level was used for significance. Most of the questions on the survey dealt with (1) students with mild learning problems and (2) students with mild behavior problems. In the discussion of data, the first number refers to students with mild learning problems and the second number refers to students with mild behavior problems. When responses from administrators are discussed, the first number refers to responses from superintendents for students with mild learning problems, and the second number refers to responses from superintendents for students with mild behavior problems. The third and fourth numbers refer to the responses from principals for students with mild learning problems and students with mild behavior problems respectively.

In data analyzed by district size, the first number in the parentheses refers to districts of 0-599 students; the second number refers to 600-999 students; the third number refers to 1000-2499 students; the

fourth number refers to 2500-7499 students; and the fifth number refers to 7500 or more students.

In data reported by level served the first, second, third, and fourth numbers in parentheses refers to elementary, middle school, secondary, and K-12 respectively. For the purposes of this study, junior high school students are included with the middle school classification.

Attitudes toward the desirability of educating students with mild learning or behavior problems in general education environments

The first area studied by the survey was attitudes toward the desirability of educating students with mild learning or behavior problems in general education environments. Approaching the area most directly was questionnaire item number 3 in which respondents resoundingly agreed that students should have every opportunity to function in the regular classroom setting. Likert scores of 4.2 and 4.1 on a 5.0 scale showed general agreement. The only score falling below 4.0 was general education teachers who showed some reservation (a 3.8 Likert rating) about placing children with mild behavior problems in the regular classroom. There were little differences in opinions when the

sample was divided on size of district or on the attendance center level served.

For item 1, generally the respondents were neutral regarding the use of special classrooms to meet the needs of students with mild learning or behavior problems. A much greater variability was found between personnel categories. Scores ranged from the disagreement of superintendents (2.3) for special classes of students with mild learning problems to agreement (4.0) for the use of special classrooms. Elementary teachers showed a greater support for the use of special classrooms for students with learning problems (3.5) than they did for students with behavior problems (2.7).

On item 2 respondents showed support for making modifications within the regular class in order to accommodate the individual needs of students with mild learning (3.9) or behavior (3.7) problems. Responses on item 4 indicated they were a little less certain that the modifications could be made. Responses to item 4 also indicated that general education teachers were not in general agreement (3.6 and 3.4) that modifications could be made. In contrast, special educators (4.4 and 4.3) were in agreement that modifications could be made.

On item 5, the sample population (3.0 and 2.9) was neutral on whether to place responsibility for educating students with mild learning and behavior problems with the regular classroom teacher. Administrators (3.4, 3.3, 3.2, 3.1) were neutral for the most part on whether to place responsibility on regular teachers to find appropriate teaching methods. Responses to item 6 showed that the sample population was neutral on whether academic skills can be developed somewhat more rapidly in a special education classroom (3.3 and 3.2) than in a modified regular classroom.

With mean Likert scores of 3.9 for learning problems and 3.7 for behavior problems in item 7, the sample populations were generally in agreement that appropriate social skills can be developed in the regular classroom. Table 12 shows that special education teachers (3.9, 3.7) had less confidence in the ability of regular teachers to develop appropriate social skills than did superintendents (4.1, 3.9) or principals (4.0, 3.8).

Responses to items 14 and 15 indicated that the concept of placement of students with mild learning or behavior problems in the regular classroom was supported by opinions that students' self-concept would not be negatively affected (2.6, 2.6) and especially if

appropriate modifications are made in the regular classroom (2.2, 2.2).

Perceptions about cooperative and team teaching to meet the individual needs of students with mild learning or behavior problems

The second area studied by the survey was perceptions about cooperative and team teaching to meet the individual needs of students with mild learning or mild behavior problems. Item 8, 9, and 25a most closely addressed this area.

For item 8, superintendents (3.8, 3.7) and principals (3.7, 3.6) were barely in agreement. General (3.5, 3.4) and special education teachers (3.3, 3.4) were neutral concerning the statement that teachers can meet the needs of students with mild learning or behavior problems, if provided the opportunity to consult and work together.

When item 8 was analyzed by district size for students with mild learning problems, there was somewhat stronger agreement in districts with from 2500-7499 students (3.7) than in districts with less than 600 students (3.5); districts with from 600-999 students (3.6); or in districts with from 1000-2499 students (3.5). When item 8 was analyzed for students with mild

behavior problems, again there was somewhat stronger agreement in districts from 2500-7499 students (3.6) than in districts with less than 600 students (3.4); districts from 600-999 students (3.5); or in districts from 1000-2499 students (3.4).

When item 8 was analyzed by attendance center level served for students with mild learning problems and students with mild behavior problems, agreement with the statement increased or remained stable as the attendance center level served increased. This was evidenced by Likert scores of (3.5, 3.4) for elementary; (3.5, 3.4) for middle school; (3.6, 3.5) for secondary; and (3.7, 3.5) for K-12.

On item 9, the sample population (3.1, 3.3) gave little credibility to regular classroom teachers holding "considerable knowledge and talent" for working with students with mild learning or behavior problems. Special educators (2.9, 2.8) had greater doubts about the knowledge and talent base of general education teachers than administrators (3.5, 3.4, 3.2, 3.1) or regular teachers had of themselves (3.1, 3.2).

Respondents from districts of at least 2500 pupils believed more strongly in regular teacher skills (3.3, 3.2, 3.3, 3.2) than did those in smaller districts (3.1, 3.0, 3.1, 3.0, 3.2, 3.1).



Those skills were appreciated more by elementary level (3.3, 3.2) educators and general educators (3.5, 3.4) than by middle level (3.1, 3.0) or secondary level (3.1, 3.0) educators.

Item 25a shows that when respondents were asked whether regular teachers were willing to accept assistance from other regular teachers, general education teachers (3.8), superintendents (3.6), and principals (3.6) tended toward agreement. Special education teachers (3.3) were not quite so certain.

When item 25a was analyzed by attendance center level served, significant differences were found. Educators at the elementary (3.8) agreed that regular teachers are willing to accept assistance from other regular teachers. However, educators at the middle school (3.5), secondary (3.5), and K-12 (3.6) levels were not in general agreement about the willingness of regular teachers to accept assistance from other regular teachers.

Perceptions concerning the effect on general education classrooms when students with mild learning or behavior problems are placed in general education classrooms

The third area analyzed by the survey was the perceptions concerning the effect on general education classrooms when students with mild learning or mild

behavior problems were served in those classrooms. Responses to item 11, showed that superintendents (3.8, 3.1), principals (3.0, 3.3), general education teachers (3.4, 3.6), and special education teachers (2.7, 3.1) disagreed on whether regular students lose instructional time if regular classes include students with mild learning problems or mild behavior problems. Superintendents (3.8) agreed that regular students lose instructional time when students with mild learning problems are included in the regular classroom while general education teachers (3.4), principals (3.0) and special education teachers (2.7) were unsure about whether students lose instructional time when students with mild learning problems are included in the regular classroom. Principals (3.3) and general education teachers (3.6) were in stronger agreement than superintendents (3.1) or special education teachers (3.1) that regular students lose instructional time when students with mild behavior problems are included.

Item 11 also showed that the higher the level served by the respondents, the more likely they were to disagree with the statement that regular students lose instructional time if regular classes include students with mild learning problems or mild behavior problems. This was evidenced by Likert scores of (3.2, 3.5) for

elementary; (3.1, 3.4) for middle school; (2.9, 3.3) for secondary; and (2.8, 3.1) for K-12 personnel.

Item 12 showed that respondents tended to disagree with the statement that the academic achievement of regular students decreases if regular classes include students with mild learning problems as indicated by Likert scores of 2.4, 2.5, 2.8, and 2.1 for superintendents, principals, general education teachers, and special education teachers. Special education teachers disagreed more strongly with this statement than general education teachers, principals, or superintendents.

Item 12 showed that as the attendance center level of the students served increased, the personnel surveyed saw less or equal effects on the academic achievement of regular students when regular classes include students with mild learning problems or mild behavior problems. Consideration of students with mild learning problems produced Likert scores of 2.6 for elementary, 2.5 for middle school, and 2.5 for secondary. Consideration of students with mild behavior problems produced Likert scores of 2.9 for elementary, 2.8 for middle school, and 2.8 for secondary.

Item 13 showed that superintendents, principals, and special education teachers generally agreed with the

statement that students with mild learning problems are less likely to exhibit behavior problems in the regular class when modifications have been made to accommodate their learning needs as evidenced by Likert scores of 4.1, 4.0, and 4.2 respectively. With a Likert rating of 3.8, general education teachers were not in general agreement about this statement.

When item 13 was analyzed by attendance center level, a greater number of personnel serving elementary (4.0) and K-12 (3.9) students were in agreement than personnel serving middle or secondary schools (3.9) that there would be fewer behavior problems in the regular class when modifications have been made for students with mild learning problems.

Attitudes toward cooperative planning and problem solving between general and special education teachers for meeting the needs of students with mild learning or behavior problems

The fourth area studied was the attitudes toward cooperative planning and problem solving between general and special education teachers for meeting the needs of children with mild learning or mild behavior problems. On item 20 the respondent was provided with a table listing obstacles that may make it difficult to accommodate students with mild learning problems and

students with mild behavior problems in the regular classroom. The respondents were asked to rank the obstacles 1-7 by assigning a 1 to the largest obstacle and a 7 to the smallest obstacle. The respondents were instructed to consider the obstacles separately for students with mild learning problems and students with mild behavior problems.

Item 20 showed increased paperwork ranked as a larger obstacle for accommodating students with mild learning problems in smaller districts (3.5, 3.9) than in larger districts (4.1). Increased paperwork was viewed as a larger obstacle in districts with less than 600 students (4.1) than in larger districts (4.4, 4.4, 4.5, 4.5). The district sizes were classified according to the following numbers of students: 0-599; 600-999; 1000-2499; 2500-7499; and 7500 or more.

Insufficient time was viewed as an obstacle to meeting the needs of students with learning and behavior problems in the regular classroom by superintendents (2.5, 2.7), principals (2.7, 2.9), general education teachers (2.2, 2.6), and special education teachers (2.6, 3.0). Regular classroom teachers viewed insufficient time as a larger obstacle than any of the other personnel categories surveyed.

An analysis of the rankings by attendance center level served revealed that insufficient time was a larger obstacle to the personnel serving elementary (2.3, 2.6) than to those serving middle school (2.5, 2.9), secondary (2.5, 2.8), or K-12 (2.5, 2.7).

There were significant differences in the degree to which administrators and teachers believed that the lack of ability to individualize was an obstacle to accommodating students with mild learning and behavior problems. In item 20 the lack of ability to individualize was viewed as a greater obstacle by superintendents (3.0, 2.8), principals (3.3, 3.1), and special education teachers (3.4, 3.1) than by general education teachers (4.7, 4.5).

When item 20 was analyzed by district size, the lack of ability to individualize was seen as a smaller obstacle to accommodating students with mild behavior problems in districts of over 7500 students (4.0) than in districts with enrollments of less than 7500 students (3.5, 3.6, 3.8, 3.7).

Item 20 showed that the teachers' lack of ability to individualize was viewed as a greater obstacle to accommodating the needs of students with mild learning and behavior problems as the level served increased. This is shown by rank scores of 4.4 and 4.5 for

elementary, 3.9 and 3.7 for middle school, 3.7 and 3.5 for secondary, and 3.0 and 2.8 for K-12.

Item 20 showed that large classes were perceived as a larger obstacle to meeting the needs of students with mild behavior problems (2.9) than to meeting the needs of students with mild learning problems (3.1). General education teachers (2.8, 2.5) and special education teachers (3.1, 2.9) viewed large classes as a larger obstacle than superintendents (3.8, 3.6) or principals (3.5, 3.2).

Item 10 analyzed by district size showed that as the size of the school district increased, large classes were perceived as a greater obstacle. This is evidenced by average rank scores of 3.7 and 3.4 for districts with 0-599 students, 3.3 and 3.1 for districts with 600-999 students, 3.2 and 2.8 for districts with 1000-2499 students, 2.9 and 2.7 for districts with 2500-7499 students, and 2.6 and 2.4 for districts with over 7500 students.

Item 20 showed that large classes were seen as a smaller obstacle by respondents serving the secondary (3.3, 3.0) or K-12 (3.9, 3.7) level than by those serving the elementary (2.9, 2.7) or middle school (3.0, 2.7) levels.

The lack of personnel to assist in the classroom was seen as a larger obstacle when working with students with behavior problems (3.4) than when working with those with learning problems (3.7). Special education teachers (4.0, 3.6) saw it as a smaller obstacle than general education teachers (3.4, 3.2), principals (3.7, 3.4) or superintendents (3.8, 3.5). All four groups indicated that the lack of personnel to assist in the classroom was a larger obstacle to accommodating students with behavior problems than those with learning problems.

Item 20 showed that personnel serving elementary students (3.5, 3.2) perceived the lack of personnel to assist in the classroom as a larger obstacle than those serving middle school (3.8, 3.5), secondary (4.0, 3.7) or K-12 (3.8, 3.5).

There was a big difference in the way administrators (6.1, 6.2, 6.3, 6.3) and teachers (5.6, 5.3, 5.7, 5.4) viewed the lack of administrative support. Superintendents (6.1, 6.2) and principals (6.3, 6.2) saw it as a smaller obstacle than did general education teachers (5.6, 5.3) or special education teachers (5.7, 5.4).

Personnel serving K-12 students (6.1, 6.2) viewed the lack of administrative support as a smaller obstacle



than those serving elementary (5.8, 5.5), middle school (5.8, 5.6) or secondary (5.9, 5.6).

Item 22 asked those surveyed to respond on a Likert scale to the statement that team teaching between regular teachers and special education resource teachers should be used to meet the learning needs of students with mild learning problems and mild behavior problems. Special education teachers generally agreed most strongly on this item (4.0, 3.9) followed by general education teachers (3.8, 3.7), superintendents (3.7, 3.6) and principals (3.7, 3.6). There was less agreement about team teaching between regular teachers and special education teachers for meeting the needs of students with mild behavior problems than for those with mild learning problems.

Item 22 analyzed by district size showed that personnel serving the elementary level (3.9, 3.8) leaned toward agreement that team teaching between regular teachers and special education teachers should be used. Those serving middle school (3.7, 3.6), secondary (3.8, 3.6) or K-12 (3.7, 3.6) were less inclined to agree. At all attendance center levels, there was less agreement that team teaching between regular and special education teachers should be used for students with mild behavior problems than for students with mild learning problems.

The sample population varied in their agreement with the statement that regular teachers can identify academic deficits of students with mild learning problems, as indicated by Likert scores of 4.0 for superintendents, 3.8 for principals, 3.7 for general education teachers, and 3.6 for special education teachers.

Distinct differences of opinion were noted when the sample was categorized according to the attendance center level served. Elementary respondents (3.8, 3.8) generally were in close agreement regarding regular teachers' ability to identify academic deficits of students with mild learning problems. Middle school (3.6, 3.6) and secondary (3.6, 2.6) respondents leaned towards agreement regarding regular teachers' ability to identify academic deficits of students with mild learning problems, but there was a large difference in their responses concerning teachers' ability to identify academic deficits of students with mild behavior problems. Respondents serving K-12 students (4.0, 3.9) placed the greatest amount of confidence in teachers identifying the academic deficits of students with mild learning problems and students with mild behavior problems.

Item 24 showed marked differences in the opinions expressed by the respondents concerning the willingness of regular education teachers to try various alternatives to meet the needs of students with mild learning problems and students with mild behavior problems. Regular teachers (3.9, 3.8) were in general agreement about the willingness to try various alternatives. Superintendents (3.5, 3.4) and principals (3.5, 3.4) were less sure that regular teachers were willing to try various alternatives. Special education teachers (3.0, 2.9) were neutral about whether regular teachers were willing to try various alternatives to meet the needs of students with mild learning problems and mild behavior problems. Neither administrators or teachers were in general agreement that regular teachers would be willing to try various alternatives with students who have mild behavior problems.

When the sample was classified by level served, the elementary respondents (3.8, 3.7) leaned toward agreement. Middle school (3.5, 3.4) and secondary (3.4, 3.3) respondents were more neutral.

Item 25b of Table 12 showed that superintendents (3.8), principals (3.8), and general education teachers (3.9) agreed that regular teachers are willing to accept assistance from special education resource teachers. In

contrast, special education teachers (3.4) were neutral about whether regular teachers are willing to accept assistance from special education resource teachers.

An analysis of responses by attendance center level served shows that educators serving elementary (3.9) and K-12 (3.8) students agreed that regular teachers are willing to accept assistance from special education teachers. Educators at the middle (3.6) and secondary (3.7) levels also agreed but to a lesser degree.

Item 26 showed that the sample population (3.7) (4.0) generally agreed that cooperative planning between special education resource teachers and regular education teachers is necessary to meet the learning needs of students with mild learning problems and students with mild behavior problems. This is evidenced by Likert scores of 3.8 and 4.1 for superintendents, 3.7 and 4.1 for principals, 3.9 and 4.0 for general education teachers, and 3.3 and 3.8 for special education teachers. Special education teachers (3.3) were neutral on whether cooperative planning is necessary to meet the needs of students with mild learning problems.

When the responses of item 26 were analyzed by district size for students with mild learning problems, the personnel surveyed from the varying sized districts

(3.8, 3.7, 3.7, 3.7, 3.6) agreed that cooperative planning between special education resource teachers and regular education teachers is necessary to meet the learning needs of students with mild learning or mild behavior problems.

An analysis of item 26 by attendance center level served revealed varying levels of agreement for cooperative planning at the four different attendance center levels. This is shown by Likert scores of 3.8 and 4.1 for elementary, 3.6 and 3.9 for middle school, 3.6 and 3.9 for secondary, and 3.8 and 4.1 for K-12 students with mild learning problems and mild behavior problems.

Item 27 showed differences of opinion between superintendents, principals, general education teachers, and special education teachers on whether or not frequent communication occurs between special education resource teachers and regular teachers. Special education teachers (3.8) were in general agreement that frequent communication occurs between special education resource teachers and regular teachers. Ironically, regular teachers (3.3) were more neutral that communication occurs between regular and special educators. With Likert scores of 3.6, the superintendents and principals leaned towards agreement,

but to a smaller degree than special education resource teachers.

An analysis of item 27 by district size revealed an inverse relationship between the level of agreement with the statement and the size of the district in districts with over 600 students. As the size of the district increased, the Likert scores decreased. This is shown by Likert scores of 3.7 for schools with 600-999 students, 3.6 for schools with 1000-2499 students, 3.5 for schools with 2500-7499 students, and 3.4 for schools with over 7500 students.

An analysis of item 27 by attendance center level served resulted in highly significant differences of opinions. This was evidenced by Likert scores of 3.8 for elementary respondents, 3.4 for middle school and secondary respondents, and 3.6 for K-12 respondents. Personnel serving the elementary level generally agreed that frequent communication occurs between special education resource teachers and regular teachers. Personnel serving other levels were more neutral in their responses (3.4) (3.6).

Attitudes toward the use of consultants for meeting the individual needs of students with mild learning or behavior problems

The fifth area analyzed was the attitudes toward the use of consultants for meeting the individual needs of students with mild learning or behavior problems.

On item 16, superintendents (4.2, 4.2), principals (4.3, 4.2), general education teachers (4.2, 4.1), and special education teachers (4.4, 4.3) resoundingly agreed that special education personnel should assist regular teachers in individualizing instruction for students with mild learning or behavior problems. Special education teachers indicated the strongest support.

An analysis of the data for children with learning problems when categorized by district size revealed that there was an inverse relationship between the level of support and the size of the district. There was more support in smaller districts than in larger districts for assistance from special education teachers to regular teachers. Mean Likert scores ranged from 4.3 for respondents from districts with less than 7500 students to 4.2 in districts with over 7500 students.

When the sample was classified by educational level served, elementary (4.3), middle school (4.2), and secondary (4.2) respondents were in agreement that

special education teachers should help regular education teachers to individualize instruction for students with behavior problems.

Item 17 showed that special education teachers (4.4, 4.3) agreed that regular teachers, with support from special education resource teachers, can establish learning goals and objectives to meet the needs of students with mild learning and behavior problems. Superintendents (4.2, 4.1) and principals (4.1, 4.0) also agreed on the ability of regular teachers to teach children with mild learning and behavior problems when support was provided by special education resource teachers. General education teachers (4.0, 3.9) also agreed but to a smaller degree.

An analysis of the sample classified by district size showed variability in opinions concerning the ability of regular teachers to teach children with mild learning problems when support was provided by special education resource teachers. This was evidenced by Likert scores of 4.1 for districts with less than 600 students, 4.2 for districts with 600-999 students, 4.1 for districts with 1000-2499 students, 4.0 for districts with 2500-7499 students, and 3.9 for districts with over 7500 students. There was less variability of opinions by respondents from the various sized districts when



considering the ability of regular teachers to teach children with mild behavior problems as evidenced by Likert scores of 4.0 for districts with less than 600 students, 4.1 for districts with 600-999 students, 4.0 for districts with 1000-2499 and 2500-7499 students, and 3.9 for districts with over 7500 students.

On item 18, the respondents were requested to rank order a list of personnel categories by assigning a 1 to personnel who most frequently provide support to regular teaches to meet the needs of students with mild learning problems and students with mild behavior problems and a 6 to those who least frequently provide support. They were asked to consider the personnel categories separately for students with mild learning problems and students with mild behavior problems.

Respondents indicated that special education resource teachers provide the most frequent support to regular teachers for meeting the needs of students with mild learning problems. This is shown by average rank order scores of 1.8 for superintendents, 1.6 for principals, 1.7 for general education teachers, and 1.3 for special education teachers. Respondents indicated that special education teachers frequently provide support to regular teachers for meeting the needs of students with mild behavior problems as shown by average

rank order scores of 2.5, 2.3, 2.5, and 1.7 for the four categories of personnel. Special education teachers saw themselves as providing support more frequently to regular teachers than did administrators or general education teachers.

When the same item was analyzed by district size, there were significant differences in the perceptions of personnel on the frequency of support provided by the special education teacher to the regular teacher. This was evidenced by average rank order scores of 1.6 for districts of less than 1000 students, 1.5 for districts of 1000-2499 students, 1.6 for districts of 2500-7499 students, and 1.7 for districts of over 7500 students.

Further analysis of item 18 revealed differences in the perceptions of personnel from different size districts on the frequency of support provided by the special education teacher to the regular teacher. Average rank scores of 2.3 in districts with less than 600 students, 2.4 in districts with 600-999 students, 2.1 in districts with 1000-2499 and 2500-7499 students, and 2.3 in districts with over 7500 students were reported.

Item 18 showed that personnel serving different attendance center levels varied significantly in their opinions on the frequency of support from special

education teachers to regular teachers. This was evidenced by Likert scores of 1.7 and 2.5 for elementary respondents, 1.5 and 2.0 for middle school respondents, 1.4 and 2.0 for secondary respondents, and 1.8 and 2.5 for K-12 respondents.

The sample population did not perceive special education consultants as frequent providers of support to regular teachers. This was evidenced by average rank scores of 3.7 and 4.1.

An analysis of the sample population classified by attendance center level served revealed differences of opinions about special education consultants as providers of support to regular teachers in meeting the needs of students with mild learning problems and students with mild behavior problems. This was evidenced by average rank scores of 3.8 and 4.2 for elementary respondents, 3.9 and 4.2 for middle school respondents, 3.6 and 4.0 for secondary respondents, and 3.4 and 3.7 for K-12 respondents.

As shown for item 18, school psychologists received average rankings of 3.8 and 3.7 from the entire sample for the frequency of providing support to regular teachers for meeting the needs of students with mild behavior problems. Personnel serving the elementary level (3.6, 3.5) ranked psychologists higher than

personnel serving the middle school (4.0, 3.9), secondary (4.0, 3.9) or K-12 (3.8, 3.7) levels.

Social workers received average rank order scores of 4.9 and 4.4 from the entire sample for the frequency of providing support to teachers for meeting the needs of students with mild learning or behavior problems. These were the lowest average rank scores for the six categories of personnel in item 18.

Differences were found between the average rank order scores for support from social workers to regular teachers in meeting the needs of students with mild behavior problems in districts of less than 1000 students (4.2, 4.2) and in districts of more than 1000 students (4.4, 4.6, 4.5).

When the data were analyzed by level served, highly significant differences were found between the average rank order scores for support from social workers to regular teachers for meeting the needs of students with mild behavior problems. This is evidenced by a mean rank score of 4.2 for elementary, 4.6 for middle school, 4.5 for secondary, and 4.3 for K-12 respondents.

The sample population ranked regular teachers second to special education teachers in providing support to regular teachers for meeting the needs of students with mild learning problems and students with

mild behavior problems. This is shown by rank order scores of 2.8 and 3.0 for the entire population. General education teachers (2.4, 2.5) ranked themselves higher on providing support to regular teachers than did superintendents (3.3, 3.5), principals (3.3, 3.6) or special education teachers (2.9, 3.3).

There is an inverse relationship between the attendance center level served and the perceived frequency of support from regular teachers for other regular teachers to meet the needs of students. As the attendance center level served increased, the rank order scores decreased. This is shown by average rank order scores of 2.7 and 2.9 for elementary respondents, 2.8 and 3.0 for middle school respondents, 2.9 and 3.1 for secondary respondents, and 3.3 and 3.5 for K-12 respondents.

There were marked differences of opinion on the frequency of support from administrators to regular teachers for meeting the needs of students with mild learning problems and students with mild behavior problems. This was shown by average rank order scores of 3.3 and 2.8 for superintendents, 3.4 and 2.8 for principals, 4.3 and 3.6 for general education teachers, and 4.2 and 3.8 for special education teachers. For both mild learning and mild behavior problems,

administrators perceived that they provided more support to regular teachers than was perceived by regular or special education teachers.

When analyzed by level served, differences were found on the frequency of support from administrators to regular teachers. This is evidenced by average rank order scores of 3.8 and 3.3 for elementary, 4.0 and 3.5 for middle school, 4.2 and 3.5 for secondary, and 3.4 and 3.8 for K-12 respondents. With the exception of K-12 respondents, there was an inverse relationship between the degree of support from administrators and the educational level served. As the attendance center level of the respondents increased, the perceived level of support from administrators to regular teachers decreased.

Item 25c showed that superintendents (4.3), principals (4.4), general education teachers (4.2), and special education teachers (4.5) were in strong agreement that regular teachers are willing to accept assistance from special education consultants. However, general education teachers (4.2) had stronger reservations than did special education teachers or administrators.

An analysis of item 25c by attendance center level served showed that elementary teachers (4.4) were more

inclined to agree that regular teachers are willing to accept assistance from special education consultants than were respondents at the middle school (4.3), secondary (4.3) or K-12 level (4.3).

Item 25d showed that general education teachers (4.2), superintendents (4.2), and principals (4.3) believed that regular teachers are willing to accept assistance from principals. A Likert score of 4.5 for special education teachers indicated that they believed more strongly about the willingness of regular teachers to accept assistance from principals.

An analysis by attendance center level served of the willingness of regular teachers to accept assistance from the principal resulted in significant differences. Elementary (4.4) were in stronger agreement than middle school (4.3), secondary (4.2) or K-12 respondents (4.2) that regular teachers are willing to accept assistance from the principal.

Superintendents (3.8), principals (3.9), general education teachers (4.1), and special education teachers (3.9) agreed that regular teachers are willing to accept assistance from social workers.

When the willingness of regular teachers to accept assistance from social workers was considered by attendance center level served, elementary (4.0)

respondents were in stronger agreement than middle school (3.9), secondary (3.9) or K-12 respondents (3.8).

When respondents considered the willingness of regular teachers to accept assistance from school psychologists (item 25f), superintendents (4.0), principals (4.0), general education teachers (4.2), and special education teachers (3.8) agreed that regular teachers are willing to accept assistance from school psychologists.

When data concerning willingness of regular teachers to accept assistance from school psychologists were considered by level served, the results were quite similar to the willingness of regular teachers to accept assistance from social workers. Elementary respondents (4.2) strongly agreed that regular teachers were willing to accept assistance from school psychologists. Middle school (4.0), secondary (4.0), and K-12 respondents (4.0) also agreed, but less strongly.

A major question addressed by the study was, "Are there differences in perceptions of training when superintendents, principals, special education teachers, and general education teachers are classified by personnel categories, district size, and attendance center level served?" Three areas were addressed by survey item 19. The first was perceptions toward the



quality of training in individualizing instruction among superintendents, principals, general education teachers, and special education teachers.

On item 19, the respondents were requested to rank order a list of personnel categories by assigning a 1 to personnel who are best able to provide support to regular teachers to meet the needs of students with mild learning problems and students with mild behavior problems and a 6 to those who are least able to provide support. They were requested to consider the personnel categories separately for students with mild learning problems and students with mild behavior problems.

Item 19 showed that the sample population ranked special education resource teachers (1.5) and special education consultants (2.8) first and second respectively as the personnel who are best able to provide support to regular teachers to meet the needs of students with mild learning problems. However, the sample population ranked special education resource teachers (2.1) first and psychologists (3.1) second as the personnel who are best able to provide support to regular teachers to meet the needs of students with mild behavior problems.

The category of personnel made a highly significant difference in how the sample perceived special education

resource teachers' ability to provide support to regular teachers to meet the needs of students with mild learning problems and students with mild behavior problems. This is evidenced by average rank order scores of 1.8 and 2.5 for superintendents, 1.5 and 2.2 for principals, 1.5 and 2.3 for general education teachers, and 1.3 and 1.7 for special education teachers. Special education resource teachers ranked themselves higher in their abilities and training than did administrators or general education teachers.

Special education teachers (2.6, 3.0) ranked special education consultants higher on their abilities to meet the needs of students with mild learning problems and students with mild behavior problems than did superintendents (2.7, 3.2), principals (2.8, 3.3) or general education teachers (2.9, 3.6).

Administrators (4.9) ranked the ability and training of social workers for providing support to regular teachers for meeting the needs of students with mild learning problems lower than general (4.6) or special education teachers (4.7). Similar results were found in the way administrators (4.3, 4.2) and teachers (3.9, 4.0) ranked ability and training of social workers for providing support to regular teachers for meeting the needs of students with mild behavior problems.

There were also significant differences in the rank order responses of educators concerning the ability and training of social workers to provide support to regular teachers for meeting the needs of students with mild behavior problems. Elementary (3.9) educators placed more confidence in the abilities and training of social workers than middle school (4.1), secondary (4.1) or K-12 educators (4.3).

Significant differences were found in the perceptions of administrators and teachers concerning the ability and training of regular classroom teachers for providing support to other regular classroom teachers to meet the needs of students with mild learning problems and students with mild behavior problems. General education teachers (3.1, 3.3) ranked themselves higher than superintendents (3.8, 3.9), principals (3.8, 4.1) or special education teachers (3.7, 4.1).

Item 19 showed that there were significant differences in educators' perceptions of administrators' ability and training for providing support to regular classroom teachers for meeting the needs of students with mild learning problems or mild behavior problems. Average rank scores of 4.0 and 3.4 for superintendents, 4.0 and 3.5 for principals, 4.5 and 4.0 for general

education teachers, and 4.7 and 4.5 for special education teachers illustrated that administrators have a much higher opinion of their ability and training for serving students with mild learning or behavior problems than did teachers.

The second area was the perceptions toward the quality of training received in individualizing instruction among superintendents, principals, general education teachers, and special education teachers classified by district size.

Item 19 showed that when the results were analyzed by district size, there was variability in how the sample perceived special education resource teachers' ability to provide support to regular teachers for meeting the needs of students with mild behavior problems as evidenced by average rank order scores of 2.5 in districts with less than 1000 students, 2.1 in districts with 1000-2499 students, 1.9 in districts with 2500-7499 students, and 2.1 in districts with more than 7500 students. In general, special education resource teachers were given more credibility in larger districts than in districts of less than 1000 students.

The sample population classified by district size had varying opinions about the ability and training of social workers for providing support to regular teachers

for meeting the needs of students with mild behavior problems as evidenced by average rank scores of 4.0 in districts of less than 600 students, 3.9 in districts of 600-999 students, 4.1 in districts of 1000-2499 students, 4.3 in districts of 2500-7499 students, and 4.1 in districts with over 7500 students.

The third area was the perceptions toward the quality of training received in individualizing instruction among superintendents, principals, general education teachers, and special education teachers classified by level served.

When the sample was analyzed by level served, there were significant differences in the sample population's perception of special education resource teachers' abilities to provide support to regular teachers for meeting the needs of students with mild learning problems or mild behavior problems. This is evidenced by average rank order scores of 1.7 and 2.5 for elementary, 1.5 and 2.0 for middle school, 1.4 and 2.0 for secondary, and 1.8 and 2.5 for K-12 respondents. With the exception of K-12 respondents, there is a direct relationship between the level of education served and the degree of credibility of the special education resource teacher.

Item 19 showed there is a significant difference in the perception of educators serving different attendance center levels concerning the ability and training of special education consultants to provide support to regular teachers to meet the needs of students with mild learning problems as evidenced by an average rank score of 3.4 for elementary, middle school, and K-12 respondents and an average rank score of 3.5 for secondary respondents.

Analysis of the data by attendance center level served revealed distinct differences in the perception of educators concerning the ability and training of social workers for providing support to regular teachers to meet the needs of students with mild learning problems. Educators serving middle school (4.6) and secondary (4.6) levels gave more credibility to social workers than did those serving elementary (4.8) or K-12 districts (4.9).

Analysis of the data by attendance center level served resulted in significant differences in perceptions concerning the ability and training of regular classroom teachers to provide support to other regular teachers for meeting the needs of students with mild learning problems. Elementary (3.3) respondents had more confidence in regular classroom teachers for

providing support to other regular teachers than middle school (3.6), secondary (3.6) or K-12 respondents (3.8).

When the sample population was classified by the attendance center level served, significant differences were apparent. At all four attendance center levels, respondents had lower opinions of administrators' ability to provide quality support to regular classroom teachers in meeting the needs of students with mild learning problems than of students with mild behavior problems. This is evidenced by rank order scores of 4.3 and 3.9 for elementary, 4.5 and 4.1 for middle school, 4.6 and 4.1 for secondary, and 4.0 and 3.4 for K-12 respondents. Elementary and K-12 respondents had more confidence in administrators for providing support to regular teachers in dealing with students with mild learning and behavior problems than middle school or secondary respondents.

APPENDIX F. DATA SUMMARIES



## ITEM NUMBER AND DESCRIPTION SUMMARY FOR DATA SUMMARIES 1, 2, AND 3

ITEM	DESCRIPTION
1a	Support special education placement-LP
1b	Support special education placement-BP
2a	Support modifications in regular classroom-LP
2b	Support modifications in regular classroom-BP
3a	Provide regular classroom opportunities-LP
3b	Provide regular classroom opportunities-BP
4a	Regular classroom can be modified for LP
4b	Regular classroom can be modified for BP
5a	Regular teachers responsible for LP
5b	Regular teachers responsible for BP
6a	Achievement up in regular classroom for LP
6b	Achievement up in regular classroom for BP
7a	LP social skills improve in regular class
7b	BP social skills improve in regular class
8a	Regular teachers can meet needs for LP
8b	Regular teachers can meet needs for BP
9a	Regular teachers have skills/talent for LP
9b	Regular teachers have skills/talent for BP
10a	Regular teachers have strategies for LP
10b	Regular teachers have strategies for BP
11a	Time lost in regular classroom with LP
11b	Time lost in regular classroom with BP
12a	Regular kids achieve less with LP
12b	Regular kids achieve less with BP
13a	Fewer behavior problems in regular classroom-LP
14a	Modifying regular placement hurts LP self-concept
14b	Modifying regular placement hurts BP self-concept
15a	Regular placement hurts LP self-concept

- 15b Regular placement hurts BP self-concept
  - 16a Special education should help regular education with LP
  - 16b Special education should help regular education with BP
  - 17a Regular education can teach LP with special education help
  - 17b Regular education can teach BP with special education help
  - 22a Should use regular and special education teams for LP
  - 22b Should use regular and special education teams for BP
  - 23a Regular education can identify deficits of LP
  - 23b Regular education can identify deficits of BP
  - 24a Regular education will try alternatives for LP
  - 24b Regular education will try alternatives for BP
  - 25a Help accepted from other regular teachers
  - 25b Help accepted from special education resource teachers
  - 25c Help accepted from special education consultants
  - 25d Help accepted from principals
  - 25e Help accepted from social workers
  - 25f Help accepted from school psychologists
  - 26a Cooperative planning needed for LP
  - 26b Cooperative planning needed for BP
  - 27 Resource and regular educators communicate often
-

DATA SUMMARY 1. MEANS AND STANDARD DEVIATIONS FOR EACH OF THE LIKERT STATEMENTS  
ACCORDING TO PERSONNEL CATEGORIES

ITEM	SUPT X	PRIN. X	GEN. ED X	SPEC. ED. X	ENTIRE POPULATION X	F	SIG.	
1a	2.27 (1.26)	3.19 (1.30)	3.30 (1.22)	3.97 (1.15)	3.38 (1.28)	45.84	0.0000	***
1b	2.76 (1.28)	3.14 (1.31)	3.29 (1.23)	3.86 (1.17)	3.34 (1.28)	35.11	0.0000	***
2a	4.08 (.86)	3.94 (.91)	3.60 (1.04)	4.38 (.80)	3.91 (.99)	57.24	0.0000	***
2b	3.95 (1.01)	3.79 (1.03)	3.38 (1.13)	4.27 (.87)	3.74 (1.10)	60.25	0.0000	***
3a	4.43 (.61)	4.31 (.65)	4.00 (.80)	4.51 (.64)	4.24 (.74)	45.73	0.0000	***
3b	4.32 (.79)	4.24 (.75)	3.81 (.96)	4.41 (.74)	4.10 (.89)	48.33	0.0000	***
4a	3.95 (.99)	3.88 (.82)	3.66 (.91)	4.03 (.95)	3.64 (1.01)	15.38	0.0000	***
4b	3.83 (.98)	3.73 (.94)	3.43 (1.03)	3.87 (.99)	3.64 (1.01)	18.67	0.0000	***
5a	3.41 (1.13)	3.23 (1.13)	2.85 (1.13)	2.82 (1.16)	2.99 (1.16)	17.31	0.0000	***
5b	3.35 (1.16)	3.18 (1.14)	2.78 (1.13)	2.78 (1.16)	2.93 (1.16)	17.47	0.0000	***
6a	2.83 (1.18)	3.21 (1.14)	3.40 (1.11)	3.38 (1.16)	3.30 (1.14)	10.34	0.0000	***
6b	2.82 (1.17)	3.15 (1.13)	3.37 (1.11)	3.26 (1.13)	3.25 (1.13)	9.62	0.0000	***
7a	4.10 (.67)	3.99 (.68)	3.89 (.76)	3.94 (.82)	3.94 (.75)	3.69	.0053	**
7b	3.90 (.85)	3.78 (.88)	3.58 (.95)	3.68 (.98)	3.68 (.94)	6.35	0.0000	***
8a	3.79 (.93)	3.68 (.95)	3.53 (.96)	3.39 (1.15)	3.56 (1.01)	7.51	0.0000	***

8b	3.69 (.97)	3.61 (.98)	3.44 (.99)	3.48 (1.13)	3.48 (1.03)	6.11	0.0000	***
9a	3.47 (1.09)	3.25 (1.06)	3.31 (1.04)	2.91 (1.21)	3.21 (1.11)	13.91	0.0000	***
9b	3.37 (1.14)	3.13 (1.08)	3.21 (1.07)	2.80 (1.18)	3.10 (1.12)	13.33	0.0000	***
10a	3.83 (.85)	3.76 (.82)	3.69 (.82)	3.69 (.95)	3.72 (.86)	1.72	.1429	
10b	3.71 (.91)	3.65 (.89)	3.55 (.91)	3.36 (.96)	3.61 (.92)	1.92	.1040	
11a	3.87 (1.10)	3.06 (1.13)	3.41 (1.12)	2.78 (1.17)	3.13 (1.16)	27.81	0.0000	***
11b	3.13 (1.12)	3.35 (1.13)	3.69 (1.08)	3.13 (1.20)	3.45 (1.15)	24.52	0.0000	***
12a	2.48 (.98)	2.50 (.98)	2.80 (1.09)	2.19 (.94)	2.55 (1.05)	29.09	0.0000	***
12b	2.67 (1.05)	2.78 (1.09)	3.12 (1.16)	2.48 (1.07)	2.84 (1.14)	27.64	0.0000	***
13a	4.10 (.77)	3.98 (.74)	3.75 (.83)	4.25 (.75)	3.96 (.81)	33.80	0.0000	***
14a	2.02 (.85)	2.07 (.79)	2.34 (.83)	1.98 (.85)	2.16 (.84)	19.06	0.0000	***
14b	2.06 (.89)	2.07 (.78)	2.36 (.82)	2.00 (.82)	2.17 (.83)	19.36	0.0000	***
15a	2.30 (.92)	2.58 (1.09)	2.72 (.99)	2.65 (1.14)	2.63 (1.05)	6.29	0.0000	***
15b	2.30 (.90)	2.51 (1.03)	2.63 (.94)	2.62 (1.09)	2.57 (1.00)	4.81	.0007	***
16a	4.25 (.72)	4.27 (.70)	4.19 (.85)	4.42 (.68)	4.27 (.77)	7.89	0.0000	***
16b	4.22 (.76)	4.25 (.74)	4.13 (.91)	4.39 (.71)	4.23 (.82)	8.66	0.0000	***
17a	4.20 (.74)	4.10 (.80)	3.98 (.82)	4.33 (.84)	4.09 (.82)	9.14	0.0000	***
17b	4.10 (.82)	4.04 (.85)	3.88 (.90)	4.18 (.88)	4.01 (.88)	10.14	0.0000	***
22a	3.72 (1.03)	3.69 (1.01)	3.79 (.97)	4.01 (.99)	3.82 (1.00)	7.34	0.0000	***
22b	3.62 (1.06)	3.59 (1.05)	3.68 (1.04)	3.92 (1.01)	3.71 (1.05)	7.26	0.0000	***

\*\*Significant at the .01 level.

\*\*\*Significant at the .001 level.

Data Summary 1 Continued

ITEM	ENTIRE					F	SIG.	
	SUPT X	PRIN. X	GEN. ED X	SPEC. ED. X	POPULATION X			
23a	3.96 (.68)	3.77 (.87)	3.72 (.89)	3.62 (1.01)	3.73 (.91)	4.98	.0005	***
23b	3.88 (.76)	3.71 (.91)	3.67 (.92)	3.51 (1.03)	3.66 (.94)	5.84	.0001	***
24a	3.57 (1.00)	3.56 (.97)	3.89 (.88)	3.08 (1.13)	3.58 (.99)	5.88	0.0000	***
24b	3.46 (1.02)	3.44 (1.04)	3.79 (.88)	2.91 (1.13)	3.46 (1.05)	59.38	0.0000	***
25a	3.84 (.71)	3.68 (.83)	3.91 (.71)	3.33 (.95)	3.70 (.84)	40.83	0.0000	***
25b	4.07 (.54)	4.10 (.47)	4.01 (.63)	3.78 (.73)	3.99 (.63)	19.54	0.0000	***
25c	3.57 (.84)	3.58 (.89)	3.85 (.73)	3.35 (.90)	3.64 (.85)	29.43	0.0000	***
25d	3.81 (.73)	3.78 (.81)	3.93 (.70)	3.40 (.89)	3.75 (.81)	35.71	0.0000	***
25e	4.28 (.79)	4.40 (.64)	4.22 (.71)	4.54 (.63)	4.35 (.69)	18.80	0.0000	***
25f	4.25 (.83)	4.32 (.71)	4.17 (.76)	4.52 (.64)	4.30 (.74)	18.77	0.0000	***
26a	3.84 (.80)	3.92 (.65)	4.07 (.56)	3.88 (.70)	3.97 (.65)	11.01	0.0000	***
26b	3.99 (.60)	4.04 (.65)	4.18 (.52)	3.84 (.81)	4.05 (.66)	23.32	0.0000	***
27	3.56 (1.12)	3.66 (1.07)	3.35 (1.20)	3.80 (1.14)	3.55 (1.16)	13.99	0.0000	***

DATA SUMMARY 2. MEANS AND STANDARD DEVIATIONS FOR EACH OF THE LIKERT STATEMENTS  
ACCORDING TO DISTRICT SIZE

ITEM	0-599 X	600-999 X	1000-2499 X	2500-7499 X	7500+ X	ENTIRE POPULATION X	F	SIG
1a	3.46 (1.24)	3.33 (1.30)	3.39 (1.26)	3.27 (1.30)	3.48 (1.30)	3.38 (1.28)	1.77	.1150
1b	3.40 (1.23)	3.27 (1.28)	3.29 (1.27)	3.26 (1.30)	3.53 (1.30)	3.34 (1.28)	3.30	.0056 **
2a	3.93 (.97)	3.97 (.92)	3.89 (1.00)	3.89 (.99)	3.89 (1.07)	3.91 (.99)	.71	.6193
2b	3.79 (1.08)	3.83 (1.03)	3.70 (1.10)	3.71 (1.10)	3.72 (1.18)	3.74 (1.10)	1.62	.1507
3a	4.23 (.73)	4.25 (.73)	4.27 (.67)	4.25 (.75)	4.19 (.84)	4.24 (.74)	.85	.5116
3b	4.12 (.85)	4.15 (.82)	4.08 (.88)	4.13 (.91)	4.04 (.98)	4.10 (.89)	.81	.5452
4a	3.77 (.91)	3.90 (.85)	3.84 (.90)	3.83 (.92)	3.78 (.99)	3.83 (.91)	1.08	.3693
4b	3.65 (.95)	3.71 (.94)	3.63 (1.03)	3.67 (1.02)	3.56 (1.11)	3.64 (1.01)	.96	.4412
5a	2.95 (1.12)	3.11 (1.11)	3.06 (1.15)	3.03 (1.20)	2.86 (1.18)	2.99 (1.16)	1.45	.2028
5b	2.88 (1.11)	2.96 (1.11)	3.00 (1.16)	2.98 (1.20)	2.78 (1.20)	2.93 (1.16)	1.91	.0896
6a	3.43 (1.09)	3.31 (1.11)	3.27 (1.12)	3.23 (1.16)	3.27 (1.23)	3.30 (1.14)	1.49	.1884
6b	3.36 (1.09)	3.26 (1.08)	3.23 (1.12)	3.14 (1.17)	3.24 (1.20)	3.25 (1.13)	1.51	.1841
7a	3.90 (.77)	3.95 (.70)	4.01 (.69)	3.92 (.78)	3.93 (.82)	3.94 (.75)	1.21	.3023
7b	3.64 (.92)	3.71 (.88)	3.73 (.94)	3.66 (.97)	3.65 (.99)	3.68 (.94)	.64	.6673
8a	3.50 (.99)	3.57 (.98)	3.51 (1.04)	3.72 (.96)	3.48 (1.08)	3.56 (1.01)	2.97	.0111 *
8b	3.45 (.99)	3.53 (.97)	3.43 (1.05)	3.60 (1.01)	3.38 (1.08)	3.48 (1.03)	2.41	.0334 *

9a	3.11 (1.08)	3.11 (1.12)	3.16 (1.10)	3.34 (1.09)	3.34 (1.13)	3.21 (1.11)	3.74	.0023 ***
9b	3.05 (1.06)	3.03 (1.12)	3.06 (1.11)	3.21 (1.13)	3.16 (1.17)	3.10 (1.12)	1.66	.1419
10a	3.65 (.88)	3.69 (.81)	3.75 (.85)	3.80 (.84)	3.70 (.89)	3.72 (.86)	1.69	.1347
10b	3.53 (.92)	3.59 (.86)	3.62 (.94)	3.69 (.91)	3.58 (.95)	3.61 (.92)	1.51	.1822
11a	3.08 (1.15)	3.04 (1.16)	3.14 (1.15)	3.13 (1.12)	3.22 (1.22)	3.13 (1.16)	1.34	.2444
11b	3.40 (1.15)	3.33 (1.15)	3.44 (1.14)	3.42 (1.16)	3.53 (1.16)	3.43 (1.15)	1.34	.2404
12a	2.55 (1.08)	2.52 (.97)	2.52 (1.01)	2.55 (1.06)	2.63 (1.15)	2.55 (1.05)	.52	.7621
12b	2.81 (1.18)	2.80 (1.07)	2.85 (1.12)	2.82 (1.14)	2.92 (1.20)	2.84 (1.14)	.59	.7091
13a	3.89 (.80)	3.99 (.75)	3.98 (.76)	4.00 (.88)	3.91 (.84)	3.96 (.81)	1.16	.3253
14a	2.19 (.82)	2.14 (.84)	2.16 (.85)	2.14 (.83)	2.17 (.88)	2.16 (.84)	1.25	.9377
14b	2.21 (.80)	2.15 (.83)	2.17 (.82)	2.17 (.85)	2.16 (.86)	2.17 (.83)	.28	.9248
15a	2.72 (1.03)	2.61 (1.04)	2.57 (1.02)	2.60 (1.07)	2.68 (1.12)	2.63 (1.05)	1.51	.1830
15b	2.66 (1.00)	2.54 (.98)	2.51 (.96)	2.56 (1.04)	2.60 (1.05)	2.57 (1.00)	1.32	.2544
16a	4.34 (.70)	4.29 (.72)	4.26 (.75)	4.27 (.79)	4.18 (.89)	4.27 (.77)	2.25	.0468 *
16b	4.24 (.80)	4.26 (.78)	4.22 (.82)	4.25 (.81)	4.18 (.88)	4.23 (.82)	.47	.7966
17a	4.13 (.73)	4.19 (.72)	4.12 (.80)	4.04 (.90)	3.95 (.94)	4.09 (.82)	3.83	.0019 ***
17b	4.02 (.83)	4.12 (.78)	4.02 (.88)	3.97 (.93)	3.89 (.97)	4.01 (.88)	2.91	.0127 *
22a	3.90 (.89)	3.76 (.99)	3.80 (1.02)	3.82 (1.03)	3.79 (1.05)	3.82 (1.00)	.98	.4268
22b	3.76 (.94)	3.67 (1.04)	3.70 (1.07)	3.74 (1.06)	3.69 (1.11)	3.71 (1.05)	.38	.8636
23a	3.68 (.89)	3.71 (.88)	3.77 (.89)	3.76 (.93)	3.73 (.94)	3.73 (.91)	.69	.6329

\*Significant at the .05 level.

\*\*Significant at the .01 level.

\*\*\*Significant at the .001 level.

Data Summary 2 Continued

ITEM	0-599 X	600-999 X	1000-2499 X	2500-7499 X	7500+ X	ENTIRE POPULATION X	F	SIG
23b	3.58 (.95)	3.64 (.88)	3.65 (.95)	3.73 (.93)	3.69 (.97)	3.66 (.94)	1.21	.3024
24a	3.69 (.85)	3.62 (.96)	3.60 (1.00)	3.62 (.98)	3.50 (1.01)	3.58 (.99)	.73	.5975
24b	3.51 (1.03)	3.51 (1.06)	3.45 (1.06)	3.46 (1.05)	3.36 (1.06)	3.46 (1.05)	1.00	.4149
25a	3.79 (.78)	3.74 (.84)	3.66 (.82)	3.70 (.86)	3.62 (.91)	3.70 (.84)	2.00	.0763
25b	4.01 (.67)	3.97 (.61)	3.99 (.59)	3.97 (.62)	3.97 (.69)	3.98 (.63)	.36	.8732
25c	3.67 (.82)	3.69 (.84)	3.59 (.84)	3.63 (.87)	3.61 (.86)	3.64 (.85)	.74	.5971
25d	3.78 (.79)	3.79 (.80)	3.69 (.82)	3.75 (.81)	3.75 (.81)	3.75 (.81)	.80	.4281
25e	4.39 (.65)	4.38 (.66)	4.36 (.66)	4.33 (.71)	4.26 (.78)	4.35 (.69)	1.86	.0989
25f	4.34 (.70)	4.35 (.71)	4.31 (.71)	4.30 (.75)	4.19 (.83)	4.30 (.74)	2.06	.0681
26a	3.92 (.67)	3.92 (.65)	3.97 (.63)	3.98 (.70)	4.04 (.57)	3.97 (.65)	2.22	.0496 *
26b	4.10 (.57)	4.06 (.66)	4.02 (.64)	4.06 (.65)	3.99 (.76)	4.05 (.66)	1.27	.2726
27	3.66 (1.12)	3.69 (1.12)	3.56 (1.13)	3.46 (1.17)	3.38 (1.24)	3.55 (1.16)	4.28	.0007 ***



DATA SUMMARY 3. MEANS AND STANDARD DEVIATIONS FOR EACH OF THE LIKERT STATEMENTS  
 ACCORDING TO ATTENDANCE CENTER LEVEL SERVED

ITEM	ELEM. X	MIDDLE/ J. HIGH X	SECONDARY X	GENERAL X	ENTIRE POPULATION X	F	SIG.	
1a	3.46 (1.28)	3.48 (1.25)	3.41 (1.25)	2.69 (1.25)	3.38 (1.28)	13.94	0.0000	***
1b	2.67 (1.35)	3.41 (1.28)	3.32 (1.25)	2.76 (1.28)	3.34 (1.28)	11.81	0.0000	***
2a	3.98 (.97)	3.84 (1.03)	3.85 (1.01)	4.08 (1.86)	3.91 (.99)	3.69	.0053	**
2b	3.88 (1.03)	3.62 (1.13)	3.63 (1.13)	3.95 (1.01)	3.74 (1.10)	8.77	0.0000	***
3a	4.26 (.71)	4.20 (.76)	4.19 (.79)	4.43 (.61)	4.24 (.74)	4.36	.0016	***
3b	4.13 (.85)	4.05 (.93)	4.05 (.92)	4.32 (.79)	4.10 (.89)	3.82	.0042	***
4a	3.81 (.92)	3.81 (.93)	3.82 (.90)	3.95 (.91)	3.83 (.92)	.88	.4791	
4b	3.67 (.99)	3.59 (1.04)	3.60 (1.01)	3.83 (.80)	3.64 (1.01)	2.04	.0853	
5a	2.93 (1.17)	2.95 (1.14)	2.97 (1.13)	3.41 (1.13)	2.99 (1.16)	6.32	0.0000	***
5b	2.86 (1.17)	2.91 (1.13)	2.90 (1.13)	3.35 (1.16)	2.93 (1.16)	6.32	0.0000	***
6a	3.40 (1.13)	3.40 (1.14)	3.24 (1.11)	2.83 (1.18)	3.30 (1.14)	10.15	0.0000	***
6b	3.25 (1.13)	3.34 (.13)	3.17 (1.09)	2.82 (1.17)	3.25 (1.13)	8.87	0.0000	***
7a	4.01 (.70)	3.86 (.82)	3.89 (.77)	4.10 (.67)	3.94 (.75)	5.51	.0002	***
7b	3.73 (.90)	3.58 (1.00)	3.64 (.95)	3.90 (.85)	3.68 (.94)	4.89	.0006	***
8a	3.47 (1.30)	3.54 (1.03)	3.61 (.95)	3.79 (.92)	3.55 (1.01)	4.32	.0018	***
8b	3.41 (1.06)	3.47 (1.06)	3.52 (.98)	3.69 (.97)	3.48 (1.03)	2.74	.0271	*

9a	3.33 (1.08)	3.10 (1.12)	3.07 (1.11)	3.47 (1.09)	3.20 (1.11)	8.67	0.0000	***
9b	3.22 (1.10)	2.97 (1.13)	2.99 (1.10)	3.37 (1.14)	3.10 (1.12)	7.74	0.0000	***
10a	3.71 (.87)	3.66 (.88)	3.75 (.81)	3.83 (.85)	3.72 (.86)	1.76	.1340	
10b	3.61 (.92)	3.54 (.93)	3.63 (.88)	3.71 (.92)	3.61 (.92)	1.33	.2580	
11a	3.27 (1.14)	3.16 (1.18)	2.99 (.17)	2.87 (1.10)	3.13 (1.16)	7.27	0.0000	***
11b	3.57 (1.11)	3.44 (1.16)	3.32 (1.18)	3.13 (1.12)	3.43 (1.15)	7.21	0.0000	***
12a	2.65 (1.06)	2.55 (1.09)	2.46 (1.02)	2.48 (.98)	2.55 (1.05)	2.85	.0228	*
12b	2.93 (1.13)	2.82 (1.17)	2.79 (1.15)	2.67 (1.05)	2.84 (1.14)	2.44	.0452	*
13a	4.00 (.80)	3.91 (.85)	3.90 (.78)	4.10 (.77)	3.96 (.81)	3.27	.0110	***
14a	2.11 (.82)	2.23 (.88)	2.20 (.84)	2.02 (.85)	2.16 (.84)	2.82	.0239	*
14b	2.13 (.82)	2.22 (.85)	2.22 (.82)	2.06 (.89)	2.17 (.83)	2.26	.0601	
15a	2.77 (1.10)	2.64 (1.07)	2.54 (.99)	2.30 (.92)	2.63 (1.05)	9.40	0.0000	**
15b	2.71 (1.06)	2.55 (1.01)	2.49 (.93)	2.30 (.90)	2.57 (1.00)	8.46	0.0000	***
16a	4.32 (.72)	4.23 (.82)	4.24 (.79)	4.25 (.72)	4.27 (.77)	2.30	.0571	
16b	4.30 (.74)	4.20 (.85)	4.17 (.89)	4.22 (.76)	4.23 (.82)	2.62	.0331	*
17a	4.07 (.83)	4.05 (.87)	4.11 (.79)	4.20 (.74)	4.09 (.82)	1.33	.2556	
17b	4.01 (.87)	3.99 (.93)	3.99 (.88)	4.10 (.82)	4.01 (.88)	.54	.7088	
22a	3.89 (.98)	3.79 (1.02)	3.77 (.99)	3.72 (1.03)	3.82 (1.00)	1.78	.1294	
22b	3.80 (1.02)	3.72 (1.07)	3.62 (1.05)	3.62 (1.06)	3.71 (1.05)	2.61	.0339	*
23a	3.84 (.86)	3.65 (.96)	3.59 (.94)	3.96 (.68)	3.73 (.91)	10.81	0.0000	***

\*Significant at the .05 level.  
\*\*Significant at the .01 level.  
\*\*\*Significant at the .001 level.

Data Summary 3 Continued

ITEM	MIDDLE/ ELEM. J. HIGH		SECONDARY GENERAL POPULATION		ENTIRE	F	SIG.	
	X	X	X	X	X			
23b	3.79 (.87)	3.57 (1.01)	3.50 (.96)	3.88 (.76)	3.66 (.94)	11.77	0.0000	***
24a	3.76 (.95)	3.48 (1.03)	3.45 (.99)	3.57 (1.00)	3.58 (.99)	10.43	0.0000	***
24b	3.69 (.99)	3.36 (1.08)	3.26 (1.08)	3.46 (1.02)	3.46 (1.05)	15.97	0.0000	***
25a	3.83 (.81)	3.56 (.95)	3.62 (.80)	3.84 (.71)	3.70 (.84)	10.91	0.0000	***
25b	4.09 (.56)	3.92 (.69)	3.88 (.64)	4.07 (.54)	3.98 (.63)	12.81	0.0000	***
25c	3.80 (.81)	3.54 (.89)	3.53 (.83)	3.57 (.84)	3.64 (.85)	12.04	0.0000	***
25d	3.89 (.79)	3.63 (.86)	3.66 (.78)	3.81 (.73)	3.75 (.81)	10.93	0.0000	***
25e	4.42 (.68)	4.34 (.65)	4.28 (.71)	4.28 (.79)	4.35 (.69)	4.23	.0020	***
25f	4.39 (.71)	4.28 (.68)	4.22 (.78)	4.25 (.83)	4.30 (.74)	4.83	.0007	***
26a	4.05 (.64)	3.92 (.66)	3.94 (.60)	3.84 (.80)	3.97 (.65)	5.96	.0001	***
26b	4.15 (.62)	3.96 (.72)	4.01 (.65)	3.99 (.60)	4.05 (.66)	7.44	0.0000	***
27	3.79 (1.06)	3.37 (1.22)	3.39 (1.19)	3.58 (1.12)	3.55 (1.16)	14.94	0.0000	***

ITEM NUMBER AND DESCRIPTION SUMMARY FOR DATA SUMMARIES 4, 5,  
AND 6

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ITEM	DESCRIPTION
18a	Support from special education teachers for LP
18a+	Support from special education teachers for BP
18b	Support from special education consultants for LP
18b+	Support from special education consultants for BP
18c	Support from school psychologists for LP
18c+	Support from school psychologists for BP
18d	Support from social workers for LP
18d+	Support from social workers for BP
18e	Support from regular teachers for LP
18e+	Support from regular teachers for BP
18f	Support from administrators for LP
18f+	Support from administrators for BP
19a	Ability/training in LP - special education teachers
19a+	Ability/training in BP - special education teachers
19b	Ability/training in LP - special education consultants
19b+	Ability/training in BP - special education consultants
19c	Ability/training in LP - school psychologists
19c+	Ability/training in BP - school psychologists
19d	Ability/training in LP - social workers
19d+	Ability/training in BP - social workers
19e	Ability/training in LP - regular teachers
19e+	Ability/training in BP - regular teachers
19f	Ability/training in LP - administrators
19f+	Ability/training in BP - administrators

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DATA SUMMARY 4. PERSONNEL CATEGORY RANK-ORDER DATA ON THE FREQUENCY AND QUALITY OF SUPPORT TO REGULAR TEACHERS IN MEETING THE NEEDS OF STUDENTS WITH MILD LEARNING OR BEHAVIOR PROBLEMS

ITEM	SUPT. X	PRIN. X	GEN. ED. TEACHERS X	SPEC. ED. TEACHERS X	ENTIRE POPULATION X	F	SIG.	
18a	1.83 (1.24)	1.63 (1.15)	1.73 (1.17)	1.29 (1.84)	1.61 (1.11)	14.89	0.0000	***
18a+	2.53 (1.62)	2.28 (1.52)	2.48 (1.62)	1.70 (1.20)	2.25 (1.53)	23.01	0.0000	***
18b	3.37 (1.47)	3.67 (1.53)	3.89 (1.45)	3.60 (1.37)	3.72 (1.47)	6.27	.0001	***
18b+	3.69 (1.54)	3.04 (1.60)	4.29 (1.48)	3.95 (1.48)	4.09 (1.53)	7.37	0.0000	***
18c	3.77 (1.45)	3.77 (1.33)	3.82 (1.41)	3.99 (1.29)	3.84 (1.37)	2.00	.0915	
18c+	3.68 (1.53)	3.66 (1.46)	3.62 (1.50)	3.77 (1.50)	3.67 (1.50)	1.04	.3829	
18d	4.99 (1.20)	4.99 (1.23)	4.81 (1.23)	4.87 (1.23)	4.88 (1.23)	2.02	.0898	
18d+	4.34 (1.50)	4.42 (1.49)	4.41 (1.45)	4.34 (1.48)	4.39 (1.47)	.34	.8511	
18e	3.32 (1.70)	3.32 (1.66)	2.43 (1.47)	2.93 (1.44)	2.85 (1.58)	31.52	0.0000	***
18e+	3.52 (1.78)	3.57 (1.72)	2.51 (1.60)	3.28 (1.61)	3.04 (1.71)	40.67	0.0000	***
18f	3.36 (1.66)	3.39 (1.50)	4.28 (1.56)	4.26 (1.50)	3.97 (1.59)	37.17	0.0000	***
18f+	2.82 (1.77)	2.78 (1.59)	3.66 (1.76)	3.85 (1.72)	3.41 (1.76)	34.02	0.0000	***
19a	1.81 (1.14)	1.54 (1.02)	1.52 (1.00)	1.34 (.87)	1.51 (.99)	8.09	0.0000	***
19a+	2.51 (1.58)	2.24 (1.53)	2.34 (1.59)	1.70 (1.17)	2.17 (1.51)	17.41	0.0000	***
19b	2.74 (1.47)	2.85 (1.45)	2.93 (1.44)	2.65 (1.25)	2.82 (1.40)	3.83	.0042	***

19b+	3.26 (1.63)	3.30 (1.60)	3.57 (1.61)	3.04 (1.71)	3.35 (1.57)	9.15	0.0000	***
19c	3.39 (1.45)	3.32 (1.37)	3.47 (1.36)	3.51 (1.33)	3.44 (1.36)	1.41	.2282	
19c+	3.23 (1.61)	3.17 (1.56)	3.00 (1.55)	3.17 (1.54)	3.10 (1.55)	2.16	.0712	
19d	4.92 (1.23)	4.95 (1.22)	4.59 (1.30)	4.67 (1.22)	4.73 (1.26)	7.73	0.0000	*
19d+	4.26 (1.54)	4.22 (1.56)	3.95 (1.54)	4.01 (1.47)	4.06 (1.53)	3.48	.0077	**
19e	3.80 (1.67)	3.87 (1.53)	3.19 (1.57)	3.72 (1.44)	3.54 (1.57)	19.60	0.0000	***
19e+	3.93 (1.78)	4.14 (1.61)	3.34 (1.70)	4.15 (1.53)	3.79 (1.69)	27.41	0.0000	***
19f	3.96 (1.57)	4.10 (1.42)	4.56 (1.50)	4.71 (1.36)	4.43 (1.48)	16.95	0.0000	***
19f+	3.40 (1.71)	3.55 (1.66)	4.02 (1.78)	4.53 (1.50)	3.97 (1.72)	26.10	0.0000	***

\*Significant at the .05 level.  
\*\*Significant at the .01 level.  
\*\*\*Significant at the .001 level.

DATA SUMMARY 5. DISTRICT SIZE RANK-ORDER DATA ON THE FREQUENCY AND QUALITY OF SUPPORT TO REGULAR TEACHERS IN MEETING THE NEEDS OF STUDENTS WITH MILD LEARNING OR BEHAVIOR PROBLEMS

ITEM	ENTIRE POPULATION						F	SIG.
	0-599 X	600-999 X	1000-2499 X	2500-7499 X	7500+ X			
18a	1.64 (1.15)	1.64 (1.18)	1.46 (.97)	1.60 (1.10)	1.73 (1.18)	1.61 (1.11)	2.91	.0128 *
18a+	2.34 (1.60)	2.39 (1.60)	2.12 (1.48)	2.06 (1.40)	2.34 (1.56)	2.25 (1.53)	3.70	.0025 ***
18b	3.60 (1.45)	3.66 (1.45)	3.85 (1.46)	3.74 (1.44)	3.72 (1.53)	3.72 (1.47)	1.49	.1910
18b+	4.01 (1.49)	4.13 (1.54)	4.12 (1.51)	4.06 (1.55)	4.14 (1.55)	4.09 (1.52)	.40	.8523
18c	3.82 (1.37)	3.74 (1.38)	3.85 (1.37)	3.93 (1.32)	3.89 (1.39)	3.84 (1.37)	.85	.5150
18c+	3.62 (1.48)	3.52 (1.55)	3.73 (1.51)	3.78 (1.46)	3.72 (1.47)	3.67 (1.50)	1.74	.1220
18d	4.86 (1.28)	4.89 (1.23)	4.81 (1.24)	4.96 (1.18)	4.92 (1.22)	4.88 (1.23)	.69	.6286
18d+	4.25 (1.56)	4.19 (1.53)	4.43 (1.46)	4.57 (1.34)	4.52 (1.43)	4.39 (1.47)	4.03	.0012 ***
18e	2.93 (1.58)	2.94 (1.57)	2.78 (1.47)	2.78 (1.64)	2.83 (1.66)	2.85 (1.58)	.93	.4633
18e+	3.10 (1.71)	3.14 (1.73)	2.97 (1.63)	3.03 (1.77)	3.00 (1.73)	3.04 (1.71)	.76	.5812
18f	3.81 (1.62)	4.05 (1.60)	3.99 (1.56)	3.96 (1.60)	4.04 (1.58)	3.97 (1.59)	1.13	.3413
18f+	3.28 (1.76)	3.54 (1.78)	3.38 (1.73)	3.46 (1.75)	3.41 (1.82)	3.41 (1.76)	.94	.4535
19a	1.53 (1.00)	1.59 (1.08)	1.46 (.90)	1.45 (.98)	1.49 (1.01)	1.51 (.99)	1.33	.2500
19a+	2.36 (1.57)	2.39 (1.61)	2.07 (1.45)	1.95 (1.40)	2.11 (1.48)	2.17 (1.51)	5.32	.0001 ***
19b	2.80 (1.42)	2.90 (1.43)	2.85 (1.44)	2.77 (1.32)	2.80 (1.42)	2.82 (1.40)	.87	.5018
19b+	3.36	3.47	3.37	3.26	3.26	3.35	1.02	.4071

	(1.54)	(1.60)	(1.58)	(1.53)	(1.63)	(1.57)		
19c	3.44	3.38	3.46	3.48	3.42	3.44	.26	.9350
	(1.40)	(1.43)	(1.36)	(1.33)	(1.31)	(1.36)		
19c+	3.08	3.05	3.13	3.16	3.12	3.10	.67	.6469
	(1.66)	(1.59)	(1.51)	(1.54)	(1.49)	(1.55)		
19d	4.76	4.72	4.70	4.79	4.68	4.73	.66	.6562
	(1.23)	(1.35)	(1.25)	(1.21)	(1.29)	(1.26)		
19d+	3.97	3.89	4.07	4.29	4.08	4.06	3.22	.0067 **
	(1.56)	(1.67)	(1.50)	(1.42)	(1.49)	(1.53)		
19e	3.61	3.48	3.51	3.63	3.54	3.54	.68	.6417
	(1.55)	(1.56)	(1.64)	(1.56)	(1.57)	(1.57)		
19e+	3.82	3.68	3.73	3.85	3.88	3.79	.81	.5411
	(1.66)	(1.69)	(1.68)	(1.76)	(1.64)	(1.69)		
19f	4.36	4.48	4.43	4.43	4.44	4.43	.32	.9034
	(1.55)	(1.42)	(1.47)	(1.48)	(1.48)	(1.48)		
19f+	3.92	4.04	4.00	3.95	3.94	3.97	.30	.9119
	(1.80)	(1.67)	(1.72)	(1.68)	(1.74)	(1.72)		

\*Significant at the .05 level.

\*\*Significant at the .01 level.

\*\*\*Significant at the .001 level.



DATA SUMMARY 6. ATTENDANCE CENTER LEVEL RANK-ORDER DATA ON THE FREQUENCY AND QUALITY OF SUPPORT TO REGULAR TEACHERS IN MEETING THE NEEDS OF STUDENTS WITH MILD LEARNING OR BEHAVIOR PROBLEMS

ITEM	ELEM. X	MIDDLE/ J. HIGH X	SECONDARY X	GENERAL X	ENTIRE POPULATION X	F	SIG.	
18a	1.75 (1.19)	1.54 (1.07)	1.42 (.98)	1.83 (1.24)	1.61 (1.11)	10.01	0.0000	***
18a+	2.52 (1.61)	2.04 (1.41)	1.99 (1.43)	2.53 (1.62)	2.25 (1.53)	14.89	0.0000	***
18b	3.81 (1.48)	3.86 (1.44)	3.60 (1.43)	3.37 (1.47)	3.72 (1.46)	5.32	.0003	***
18b+	4.20 (1.55)	4.16 (1.49)	4.01 (1.50)	3.69 (1.54)	4.09 (1.53)	4.53	.0012	***
18c	3.64 (1.35)	3.98 (1.37)	4.01 (1.33)	3.77 (1.45)	3.84 (1.37)	8.16	0.0000	***
18c+	3.42 (1.47)	3.86 (1.52)	3.84 (1.45)	3.68 (1.53)	3.68 (1.53)	9.58	0.0000	***
18d	4.89 (1.29)	4.92 (1.20)	4.82 (1.19)	4.99 (1.20)	4.88 (1.23)	.87	.4760	
18d+	4.19 (1.58)	4.57 (1.35)	4.52 (1.38)	4.34 (1.50)	4.39 (1.47)	6.63	0.0000	***
18e	2.73 (1.58)	2.81 (1.58)	2.89 (1.52)	3.32 (1.70)	2.85 (1.58)	4.98	.0005	***
18e+	2.93 (1.72)	2.99 (1.71)	3.10 (1.67)	3.51 (1.78)	3.04 (1.71)	4.51	.0013	***
18f	3.85 (1.56)	4.03 (1.60)	4.23 (1.55)	3.36 (1.66)	3.97 (1.59)	11.62	0.0000	***
18f+	3.35 (1.72)	3.55 (1.78)	3.55 (1.78)	2.82 (1.77)	3.41 (1.76)	6.55	0.0000	***
19a	1.62 (1.07)	1.40 (.88)	1.36 (.89)	1.81 (1.14)	1.51 (.99)	11.81	0.0000	***
19a+	2.43 (1.59)	1.91 (1.32)	1.96 (1.45)	2.51 (1.58)	2.17 (1.51)	14.61	0.0000	***
19b	2.94 (1.48)	1.81 (1.41)	2.73 (1.29)	2.74 (1.47)	2.82 (1.40)	2.64	.0324	*

19b+	3.50 (1.63)	3.26 (1.58)	3.25 (1.48)	3.26 (1.63)	3.35 (1.57)	2.82	.0239	*
19c	3.38 (1.38)	3.40 (1.34)	3.55 (1.35)	3.39 (1.45)	3.44 (1.36)	1.46	.2121	
19c+	3.00 (1.54)	3.14 (1.53)	3.18 (1.57)	3.23 (1.61)	3.10 (1.55)	2.07	.0826	
19d	4.83 (1.28)	4.65 (1.29)	4.62 (1.23)	4.92 (1.23)	4.73 (1.26)	4.06	.0028	***
19d+	3.90 (1.62)	4.14 (1.45)	4.14 (1.47)	4.26 (1.54)	4.06 (1.53)	3.82	.0042	**
19e	3.35 (1.55)	3.65 (1.58)	3.62 (1.53)	3.80 (1.67)	3.54 (1.57)	5.06	.0005	***
19e+	3.68 (1.73)	3.84 (1.66)	3.85 (1.64)	3.93 (1.78)	3.79 (1.69)	1.46	.2104	
19f	4.30 (1.48)	4.52 (1.44)	4.64 (1.43)	3.96 (1.57)	4.43 (1.48)	9.48	0.0000	***
19f+	3.87 (1.71)	4.12 (1.73)	4.14 (1.69)	3.41 (1.72)	3.97 (1.72)	7.70	0.0000	***

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\*Significant at the .05 level.  
\*\*Significant at the .01 level.  
\*\*\*Significant at the .001 level.

ITEM NUMBER AND DESCRIPTION SUMMARY FOR DATA SUMMARIES 7, 8,  
AND 9

ITEM	DESCRIPTION
20a	Increased paperwork LP
20a+	Increased paperwork BP
20b	Insufficient time LP
20b+	Insufficient time BP
20c	Teachers lack skill needed to individualize LP
20c+	Teachers lack skill needed to individualize BP
20d	Large classes LP
20d+	Large classes BP
20e	Curriculum does not lend itself to individualization LP
20e+	Curriculum does not lend itself to individualization BP
20f	Lack of personnel to assist in classroom LP
20f+	Lack of personnel to assist in classroom BP
20g	Lack of administrative support LP
20g+	Lack of administrative support BP
21a	Ways to modify materials LP
21a+	Ways to modify materials BP
21b	Ways to group students LP
21b+	Ways to group students BP
21c	Ways to motivate students LP
21c+	Ways to motivate students BP
21d	Ways to present content LP
21d+	Ways to present content BP
21e	Ways to modify the learning environment LP
21e+	Ways to modify the learning environment BP
21f	Ways to modify the learning objectives LP
21f+	Ways to modify the learning objectives BP
21g	Ways to manage behavior LP
21g+	Ways to manage behavior BP

DATA SUMMARY 7. PERSONNEL CATEGORY RANK-ORDER DATA ON OBSTACLES TO AND MODIFICATIONS FOR SERVING STUDENTS WITH MILD LEARNING OR BEHAVIOR PROBLEMS IN THE REGULAR CLASSROOM

ITEM	GEN. ED. SPEC. ED. ENTIRE					F	SIG.
	SUPT. X	PRIN. X	TEACHERS X	TEACHERS X	POP. X		
20a	4.02 (1.85)	3.98 (1.83)	3.93 (1.82)	3.85 (1.87)	3.93 (1.83)	.98	.4178
20a+	4.33 (1.78)	4.28 (1.77)	4.48 (1.82)	4.37 (1.82)	4.39 (1.80)	1.26	.2821
20b	2.54 (1.50)	2.67 (1.60)	2.20 (1.44)	2.56 (1.57)	2.43 (1.53)	9.37	0.0000 ***
20b+	2.75 (1.52)	2.90 (1.63)	2.57 (1.58)	2.99 (1.71)	2.77 (1.63)	5.97	.0001 ***
20c	3.00 (1.69)	3.27 (1.80)	4.69 (1.90)	3.78 (2.07)	3.97 (2.01)	59.33	0.0000 ***
20c+	2.81 (1.71)	3.08 (1.80)	4.48 (1.90)	3.38 (2.01)	3.72 (2.00)	61.92	0.0000 ***
20d	3.89 (2.03)	3.51 (1.88)	2.78 (1.84)	3.15 (1.85)	3.15 (1.90)	19.25	0.0000 ***
20d+	3.68 (2.01)	3.18 (1.87)	2.50 (1.80)	2.93 (1.84)	2.87 (1.88)	20.30	0.0000 ***
20e	4.08 (1.84)	4.10 (1.76)	4.20 (1.80)	4.29 (1.88)	4.18 (1.82)	1.25	.2867
20e+	4.35 (1.74)	4.44 (1.64)	4.44 (1.77)	4.75 (1.74)	4.51 (1.73)	3.51	.0072 **
20f	3.84 (1.75)	3.70 (1.71)	3.48 (1.71)	4.10 (1.68)	3.71 (1.72)	11.03	0.0000 ***
20f+	3.56 (1.77)	3.50 (1.73)	3.30 (1.72)	3.66 (1.74)	3.46 (1.73)	3.63	.0060 **
20g	6.15 (1.36)	6.32 (1.28)	5.64 (1.67)	5.67 (1.73)	5.86 (1.60)	18.04	0.0000 ***
20g+	6.16 (1.37)	6.17 (1.49)	5.35 (1.84)	5.39 (1.89)	5.63 (1.78)	24.31	0.0000 ***
21a	2.98 (1.87)	2.72 (1.70)	2.82 (1.83)	2.34 (1.51)	2.69 (1.74)	7.58	0.0000 ***

21a+	4.28 (1.98)	4.19 (1.91)	4.39 (1.95)	4.27 (1.96)	4.30 (1.94)	.97	.4232	
21b	5.02 (1.79)	5.05 (1.75)	4.64 (1.82)	5.36 (1.63)	4.95 (1.78)	13.40	0.0000	***
21b+	4.82 (1.88)	5.00 (1.70)	4.36 (1.83)	5.02 (1.67)	4.72 (1.79)	15.28	0.0000	***
21c	2.89 (1.67)	3.07 (1.70)	3.05 (1.76)	3.70 (1.75)	3.20 (1.76)	14.69	0.0000	***
21c+	2.85 (1.56)	2.87 (1.62)	2.81 (1.60)	3.07 (1.62)	2.89 (1.61)	2.86	.0224	*
21d	3.80 (1.75)	3.83 (1.79)	3.73 (1.85)	3.56 (1.84)	3.71 (1.83)	2.14	.0734	
21d+	4.59 (1.75)	4.67 (1.67)	4.65 (1.77)	4.88 (1.68)	4.70 (1.72)	1.85	.1168	
21e	4.66 (1.77)	4.65 (1.82)	4.43 (1.88)	4.64 (1.79)	4.55 (1.84)	2.00	.0916	
21e+	4.43 (1.77)	4.14 (1.83)	4.00 (1.90)	3.88 (1.84)	4.04 (1.86)	3.16	.0133	*
21f	3.20 (1.88)	3.28 (1.85)	3.58 (1.93)	2.99 (1.80)	3.33 (1.88)	8.30	0.0000	***
21f+	4.31 (1.96)	4.38 (1.93)	4.48 (1.91)	4.25 (1.91)	4.38 (1.92)	1.18	.3181	
21g	4.84 (2.16)	4.91 (2.03)	4.76 (2.18)	4.86 (1.91)	4.83 (2.07)	.45	.7700	
21g+	1.96 (1.54)	2.20 (1.81)	2.24 (1.87)	2.04 (1.66)	2.16 (1.78)	1.96	.0988	

\*Significant at the .05 level.  
\*\*Significant at the .01 level.  
\*\*\*Significant at the .001 level.

DATA SUMMARY 8. DISTRICT SIZE RANK-ORDER DATA ON OBSTACLES TO AND  
 MODIFICATIONS FOR SERVING STUDENTS WITH MILD LEARNING  
 OR BEHAVIOR PROBLEMS IN THE REGULAR CLASSROOM

ITEM	ENTIRE POP.						F	SIG.
	0-599 X	600-999 X	1000-2499 X	2500-7499 X	7500+	X		
20a	3.55 (1.79)	3.85 (1.86)	4.06 (1.79)	4.08 (1.87)	4.12 (1.80)	3.93 (1.83)	5.82	0.0000 ***
20a+	4.10 (1.82)	4.38 (1.83)	4.44 (1.82)	4.50 (1.79)	4.53 (1.75)	4.39 (1.80)	2.98	.0110 *
20b	2.27 (1.51)	2.36 (1.50)	2.49 (1.55)	2.47 (1.52)	2.57 (1.52)	2.43 (1.53)	2.08	.0647
20b+	2.64 (1.66)	2.81 (1.64)	2.77 (1.61)	2.83 (1.64)	2.80 (1.61)	2.77 (1.63)	.65	.6639
20c	3.86 (1.91)	3.93 (2.00)	3.94 (2.11)	4.05 (2.00)	4.07 (2.00)	3.97 (2.01)	.75	.5893
20c+	3.52 (1.94)	3.60 (2.05)	3.77 (2.00)	3.74 (1.99)	3.97 (2.00)	3.72 (2.00)	2.66	.0209 *
20d	3.67 (2.00)	3.35 (1.94)	3.17 (1.86)	2.90 (1.80)	2.60 (1.73)	3.15 (1.90)	14.42	0.0000 ***
20d+	3.34 (2.04)	3.06 (1.91)	2.84 (1.83)	2.68 (1.80)	2.42 (1.70)	2.87 (1.88)	11.15	0.0000 ***
20e	4.26 (1.72)	4.08 (1.77)	4.19 (1.81)	4.31 (1.83)	4.09 (1.95)	4.18 (1.81)	1.36	.2358
20e+	4.57 (1.62)	4.29 (1.68)	4.49 (1.72)	4.66 (1.78)	4.53 (1.85)	4.51 (1.73)	2.28	.0444 *
20f	3.87 (1.70)	3.66 (1.76)	3.75 (1.77)	3.57 (1.68)	3.74 (1.70)	3.71 (1.72)	1.76	.1185
20f+	3.54 (1.71)	3.52 (1.84)	3.50 (1.79)	3.38 (1.69)	3.34 (1.63)	3.46 (1.74)	.78	.5638
20g	5.98 (1.56)	5.91 (1.60)	5.76 (1.62)	5.81 (1.63)	5.86 (1.55)	5.86 (1.60)	1.10	.3583
20g+	5.79 (1.75)	5.72 (1.75)	5.61 (1.76)	5.50 (1.84)	5.55 (1.76)	5.63 (1.78)	2.07	.0664
21a	2.65 (1.81)	2.58 (1.69)	2.69 (1.73)	2.71 (1.70)	2.83 (1.78)	2.69 (1.74)	.93	.4563
21a+	4.27	4.05	4.44	4.35	4.38	4.30	1.96	.0823

21b	(1.96) 4.97	(1.93) 4.94	(1.03) 5.03	(1.93) 5.04	(1.96) 4.78	(1.94) 4.95	1.23	.2928
21b+	(1.74) 4.80	(1.82) 4.69	(1.77) 4.74	(1.69) 4.77	(1.86) 4.60	(1.78) 4.72	.72	.6105
21c	(1.77) 3.04	(1.82) 3.15	(1.78) 3.15	(1.81) 3.41	(1.79) 3.27	(1.79) 3.20	2.74	.0179 *
21c+	(1.71) 2.83	(1.69) 2.88	(1.80) 2.93	(1.80) 3.09	(1.76) 2.69	(1.76) 2.89	2.96	.0115
21d	(1.67) 3.82	(1.53) 3.84	(1.63) 3.62	(1.67) 3.58	(1.51) 3.75	(1.61) 3.71	1.87	.0959
21d+	(1.82) 4.66	(1.79) 4.81	(1.79) 4.59	(1.85) 4.69	(1.89) 4.79	(1.83) 4.70	.96	.4393
21e	(1.68) 4.66	(1.68) 4.55	(1.69) 4.61	(1.80) 4.47	(1.77) 4.49	(1.72) 4.55	.85	.5129
21e+	(1.84) 4.14	(1.81) 4.13	(1.77) 4.00	(1.84) 3.98	(1.94) 3.95	(1.84) 4.04	.71	.6127
21f	(1.89) 3.41	(1.84) 3.35	(1.86) 3.27	(1.84) 3.30	(1.88) 3.30	(1.86) 3.33	.52	.7596
21f+	(1.81) 4.43	(1.90) 4.41	(1.84) 4.36	(1.95) 4.27	(1.94) 4.47	(1.88) 4.38	.50	.7760
21g	(1.88) 4.83	(1.94) 4.89	(1.94) 4.96	(1.92) 4.88	(1.92) 4.54	(1.92) 4.83	1.78	.1143
21g+	(2.05) 2.22-	(2.06) 2.28	(1.97) 2.15	(2.05) 2.12	(2.24) 1.99	(2.07) 2.16	1.44	.2067
	(1.77)	(1.93)	(1.78)	(1.77)	(1.63)	(1.78)		

\*Significant at the .05 level.

\*\*\*Significant at the .001 level.

DATA SUMMARY 9. ATTENDANCE CENTER LEVEL RANK-ORDER DATA ON OBSTACLES  
TO AND MODIFICATIONS FOR SERVING STUDENTS WITH MILD  
LEARNING OR BEHAVIOR PROBLEMS IN THE REGULAR  
CLASSROOM

ITEM	ELEM. X	MIDDLE/ J. HIGH X	SECONDARY X	GENERAL X	ENTIRE POP. X	F	SIG.
20a	3.89	4.01	3.91	4.02	3.93	.94	.4396
	1.82	1.85	1.83	1.85	1.83		
20a+	4.35	4.48	4.38	4.33	4.39	.59	.6713
	1.78	1.81	1.85	1.78	1.80		
20b	2.27	2.54	2.53	2.54	2.43	3.89	.0037 **
	1.43	1.62	1.56	1.50	1.53		
20b+	2.63	2.90	2.84	2.75	2.77	2.35	.0522
	1.56	1.72	1.66	1.54	1.63		
20c	4.40	3.93	3.73	3.00	3.97	21.72	0.0000 ***
	1.96	2.04	2.00	1.69	2.01		
20c+	4.09	3.72	3.51	2.81	3.72	17.52	0.0000 ***
	1.99	1.99	1.99	1.71	2.00		
20d	2.94	3.84	3.28	3.89	3.15	9.78	0.0000 ***
	1.85	1.83	1.92	2.03	1.90		
20d+	2.67	2.72	3.03	3.68	2.87	12.39	0.0000 ***
	1.81	1.80	1.93	2.01	1.88		
20e	4.78	4.32	4.37	4.35	4.51	7.40	0.0000 ***
	1.62	1.82	1.76	1.74	1.73		
20e+	4.38	4.02	4.11	4.08	4.18	3.84	.0041 ***
	1.76	1.87	1.82	1.84	1.82		
20f	3.46	3.76	3.97	3.84	3.71	8.42	0.0000 ***
	1.68	1.71	1.74	1.75	1.72		
20f+	3.23	3.44	3.72	3.56	3.46	6.96	0.0000 ***
	1.69	1.73	1.76	1.77	1.74		
20g	5.81	5.81	5.87	6.15	5.86	1.89	.1100
	1.61	1.57	1.65	1.36	1.60		
20g+	5.53	5.60	5.64	6.16	5.63	5.26	.0003 ***
	1.83	1.75	1.80	1.37	1.78		
21a	2.63	2.79	2.61	2.98	2.69	2.30	.0567
	1.68	1.81	1.72	1.87	1.74		
21a+	4.51	4.26	4.08	4.28	4.30	4.29	.0019 ***



	1.84	2.01	1.98	1.98	1.94			
21b	4.96	4.84	5.02	5.02	4.95	.96	.4272	
	1.73	1.82	1.79	1.79	1.78			
21b+	4.70	4.50	4.89	4.82	4.72	3.31	.0103	*
	1.72	1.85	1.80	1.88	1.79			
21c	3.31	3.11	3.23	2.89	3.20	3.19	.0127	*
	1.75	1.78	1.76	1.67	1.76			
21c+	2.91	2.74	2.99	2.85	2.89	2.38	.0494	*
	1.54	1.55	1.74	1.56	1.61			
21d	3.93	3.60	3.52	3.80	3.71	5.66	.0002	***
	1.83	1.85	1.80	1.75	1.83			
21d+	5.06	4.54	4.43	4.59	4.70	13.00	0.0000	***
	1.65	1.77	1.69	1.75	1.72			
21e	4.61	4.44	4.56	4.66	4.55	1.13	.3425	
	1.88	1.90	1.75	1.77	1.84			
21e+	3.88	4.00	4.15	4.43	4.04	3.64	.0079	**
	1.86	1.85	1.88	1.77	1.86			
21f	3.12	3.45	3.52	3.20	3.33	4.66	.0010	***
	1.84	1.93	1.90	1.88	1.88			
21f+	4.33	4.51	4.38	4.30	4.38	.67	.6138	
	1.89	1.92	1.95	1.96	1.92			
21g	4.74	4.77	4.98	4.84	4.83	1.24	.2931	
	2.08	2.06	2.05	2.16	2.07			
21g+	1.81	2.31	2.52	1.96	2.16	15.20	0.0000	***
	1.50	1.88	2.00	1.54	1.78			

\*Significant at the .05 level.  
\*\*Significant at the .01 level.  
\*\*\*Significant at the .001 level.

APPENDIX G. FORMULAS FOR CALCULATING GROUP  
ATTITUDES TOWARD MAJOR AREAS  
OF INTEREST

Attitudes Toward the Desirability of Educating Students With Mild Learning or Behavior Problems Within General Education Environments:

[(6 - Question 1a) + (6 - Question 1b) + (Question 2a) + (Question 2b) + (Question 3a) + (Question 3b) + (Question 4a) + (Question 4b) + (Question 5a) + (Question 5b) + (Question 6a) + (Question 6b) + (Question 7a) + (Question 7b) + (6 - Question 14a) + (6 - Question 14b) + (6 - Question 15a) + (6 - Question 15b)] : 18

Perceptions Toward Cooperative and Team Teaching in Order to Meet the Individual Needs of Students With Mild Learning or Behavior Problems:

[(Question 8a) + (Question 8b) + (Question 9a) + (Question 9b) + (Question 25a)] : 5

Perceptions Concerning the Effect on General Education Pupils When Students With Mild Learning or Behavior Problems Are Served in General Education Classrooms:

[(Question 10a) + (Question 10b) + (6 - Question 11a) + (6 - Question 11b) + (6 - Question 12a) + (6 - Question 12b) + (Question 13)] : 7

Attitudes Toward Cooperative Planning and Problem Solving Between Special Education and General Education Teachers for Meeting the Needs of Students With Mild Learning or Behavior Problems:

[(Question 22a) + (Question 22b) + (Question 23a) + (Question 23b) + (Question 24a) + (Question 24b) + (Question 25b) + (Question 26a) + (Question 26b) + (Question 27)] : 10

Attitudes Toward the Use of Consultants for Meeting the  
Needs of Students With Mild Learning or Behavior  
Problems:

[(Question 16a) + (Question 16b) + (Question 17a) +  
(Question 17b) + (Question 25c) + (Question 25d) +  
(Question 25e) + (Question 25f)] : 8

APPENDIX H. FORMULAS FOR CALCULATING GROUP ATTITUDES  
TOWARD MODELS

## Attitudes Toward Student Services Specialist:

$$[(6 - \text{Question 1a}) + (6 - \text{Question 1b}) + (\text{Question 6a}) + (\text{Question 6b}) + (6 - \text{Question 12a}) + (6 - \text{Question 12b}) + (\text{Question 8a}) + (\text{Question 8b}) + (\text{Question 16a}) + (\text{Question 16b}) + (\text{Question 17a}) + (\text{Question 17b})] \div 12$$

## Attitudes Toward Teacher Assistance Team:

$$[(\text{Question 2a}) + (\text{Question 2b}) + (\text{Question 3a}) + (\text{Question 3b}) + (\text{Question 4a}) + (\text{Question 4b}) + (\text{Question 5a}) + (\text{Question 5b}) + (\text{Question 7a}) + (\text{Question 7b}) + (\text{Question 8a}) + (\text{Question 8b}) + (\text{Question 9a}) + (\text{Question 9b}) + (6 - \text{Question 14a}) + (6 - \text{Question 14b}) + (6 - \text{Question 15a}) + (6 - \text{Question 15b}) + (\text{Question 10a}) + (\text{Question 10b}) + (6 - \text{Question 11a}) + (6 - \text{Question 11b}) + (\text{Question 16a}) + (\text{Question 16b}) + (\text{Question 17a}) + (\text{Question 17b}) + (\text{Question 22a}) + (\text{Question 22b}) + (\text{Question 23a}) + (\text{Question 23b}) + (\text{Question 24a}) + (\text{Question 24b}) + (\text{Question 25a}) + (\text{Question 25b}) + (\text{Question 25c}) + (\text{Question 25d}) + (\text{Question 25e}) + (\text{Question 25f})] \div 38$$

## Attitudes Toward Adaptive Learning Environment Model:

$$[(\text{Question 2a}) + (\text{Question 2b}) + (\text{Question 4a}) + (\text{Question 4b}) + (\text{Question 5a}) + (\text{Question 5b}) + (\text{Question 7a}) + (\text{Question 7b}) + (\text{Question 8a}) + (\text{Question 8b}) + (\text{Question 9a}) + (\text{Question 9b}) + (\text{Question 10a}) + (\text{Question 10b}) + (6 - \text{Question 11a}) + (6 - \text{Question 11b}) + (\text{Question 13}) + (6 - \text{Question 14a}) + (6 - \text{Question 14b}) + (6 - \text{Question 15a}) + (6 - \text{Question 15b}) + (\text{Question 16a}) + (\text{Question 16b}) + (\text{Question 17a}) + (\text{Question 17b}) + (\text{Question 22a}) + (\text{Question 22b}) + (\text{Question 23a}) + (\text{Question 23b}) + (\text{Question 24a}) + (\text{Question 24b}) + (\text{Question 25a}) + (\text{Question 25b}) + (\text{Question 25c}) + (\text{Question 25d}) + (\text{Question 25e}) + (\text{Question 25f})] \div 37$$

## Attitudes Toward Consulting Teacher Model:

[(Question 2a) + (Question 2b) + (Question 9a) + (Question 9b) + (Question 10a) + (Question 10b) + (Question 8a) + (Question 8b) + (6 - Question 14a) + (6 - Question 14b) + (6 - Question 15a) + (6 - Question 15b) + (Question 16a) + (Question 16b) + (Question 17a) + (Question 17b) + (Question 22a) + (Question 22b) + (Question 23a) + (Question 23b) + (Question 24a) + (Question 24b) + (Question 25a) + (Question 25b) + (Question 25c) + (Question 25d) + (Question 25e) + (Question 25f)] ÷ 28

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