An investigation of the types of support perceived necessary by Iowa elementary classroom teachers for the integration of students identified as severely disabled

Katheryn Ann Kinnard East
University of Northern Iowa

Copyright ©1992 Katheryn Ann Kinnard East

Follow this and additional works at: https://scholarworks.uni.edu/etd

Part of the Special Education and Teaching Commons

Let us know how access to this document benefits you

Recommended Citation
East, Katheryn Ann Kinnard, "An investigation of the types of support perceived necessary by Iowa elementary classroom teachers for the integration of students identified as severely disabled" (1992). Dissertations and Theses @ UNI. 273.
https://scholarworks.uni.edu/etd/273

This Open Access Dissertation is brought to you for free and open access by the Student Work at UNI ScholarWorks. It has been accepted for inclusion in Dissertations and Theses @ UNI by an authorized administrator of UNI ScholarWorks. For more information, please contact scholarworks@uni.edu.
AN INVESTIGATION OF THE TYPES OF SUPPORT PERCEIVED NECESSARY
BY IOWA ELEMENTARY CLASSROOM TEACHERS FOR THE INTEGRATION
OF STUDENTS IDENTIFIED AS SEVERELY DISABLED

An Abstract of a Dissertation
Submitted
In Partial Fulfillment
of the Requirement for the Degree
Doctor of Education

Approved:
Susan Stainback
Faculty Advisor
John W. Somervill
Dean of Graduate College

Katheryn Ann Kinnard East
University of Northern Iowa
May 1992
ABSTRACT

The purpose of this study was to investigate Iowa elementary classroom teachers perceptions regarding the conditions required for successfully including students identified as severely disabled in their regular classroom. Specifically, data were gathered to determine the types and ranking of types of support perceived necessary for such inclusion. Additionally, how actual levels of support differed from those deemed necessary and teacher willingness to accept these students were investigated. Comparisons were made between teachers with experience and those without experience in teaching students identified as severely disabled in the regular classroom.

An adapted version of the survey instrument devised by Myles and Simpson (1989) was used to collect the information directly from regular classroom teachers. Each quadrant of the state was surveyed using a total of 25 schools. Schools were selected from those identified by area consultants as schools currently having programs in which students identified as severely disabled were being taught in the regular classroom. A total of 202 teachers were surveyed. Data were analyzed using a chi-square test for independence to determine if the differences were statistically significant.

Analysis of the data gathered indicated that the majority of teachers from both groups were willing to accept the placement of students identified as severely disabled in their classroom if that placement was accompanied by a minimal level of support. The level of support which teachers perceived as minimally necessary included the following: a class size of 19 or less, paraprofessional services for
the full school day, at least 2 hours of planning time, consultation with a special educator regarding instruction and behavior management, and inservice in instruction and behavior management. Class size, paraprofessional, and planning time ranked (in that order) as the most necessary types of support for successful inclusion.
AN INVESTIGATION OF THE TYPES OF SUPPORT PERCEIVED NECESSARY BY IOWA ELEMENTARY CLASSROOM TEACHERS FOR THE INTEGRATION OF STUDENTS IDENTIFIED AS SEVERELY DISABLED

A Dissertation
Submitted
In Partial Fulfillment
of the Requirement for the Degree
Doctor of Education

Approved:

Susan B. Stainback, Ed.D.

William C. Stainback, Ed.D.

Barry J. Wilson, Ph.D.

Harley E. Erickson, Ph.D.

B. Keith Crew, Ph.D.

Katheryn Ann Kinnard East
University of Northern Iowa
May 1992
Acknowledgements

I wish to thank Dr. Keith Crew, Dr. William Stainback, and Dr. Barry Wilson, committee members who assisted me with this work. Special thanks go to Dr. Harley Erickson and to Dr. Susan Stainback who both gave indispensable assistance and encouragement. And to Philip, Kara, and Amber, my family, goes my gratitude and appreciation for all their support.
TABLE OF CONTENTS

Chapter

1  THE PROBLEM ................................................. 1
   Problem Statement ....................................... 1
   Research Objectives ..................................... 4
   Purpose of the Study .................................... 5
   Definition of Terms ..................................... 6
   Organization of the Document ......................... 8

2  REVIEW OF THE LITERATURE .......................... 10
   Background .............................................. 10
   Related Position Papers ................................ 11
   Need for Input from Regular Educators ............... 13
   Needs Indicated by Regular Classroom Teachers ...... 14
   Summary ................................................... 20

3  METHODOLOGY ........................................... 22
   Research Objectives .................................... 22
   Sampling Information .................................. 22
   Data Collection and Instrumentation .................. 23
   Procedure ............................................... 25
   Research Design ....................................... 25

4  ANALYSIS AND RESULTS ............................... 26
   Demographic Descriptions ............................... 27
   Analysis Groups ......................................... 30
   Placement Decision ..................................... 31
   Types of Support ....................................... 31
   Ranking of Types of Support ......................... 47
<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Comparison of Perceived Necessary Types of Support and Current Support</td>
<td>48</td>
</tr>
<tr>
<td>Teacher Willingness to Accept Students Identified as Severely Disabled</td>
<td>51</td>
</tr>
<tr>
<td>SUMMARY, DISCUSSION, AND IMPLICATIONS</td>
<td>54</td>
</tr>
<tr>
<td>Summary and Discussion of the Findings</td>
<td>54</td>
</tr>
<tr>
<td>Implications for Practice</td>
<td>60</td>
</tr>
<tr>
<td>Implications for Research</td>
<td>62</td>
</tr>
<tr>
<td>Limitations of This Study</td>
<td>63</td>
</tr>
<tr>
<td>NOTES</td>
<td>65</td>
</tr>
<tr>
<td>REFERENCES</td>
<td>66</td>
</tr>
<tr>
<td>APPENDIX A: SUPPORT SERVICES SURVEY</td>
<td>71</td>
</tr>
<tr>
<td>APPENDIX B: SUPPORT SERVICES SURVEY COVER LETTER</td>
<td>74</td>
</tr>
<tr>
<td>APPENDIX C: LETTER TO STATE AREA EDUCATION CONSULTANTS</td>
<td>76</td>
</tr>
<tr>
<td>Table Number</td>
<td>Table Description</td>
</tr>
<tr>
<td>-------------</td>
<td>-----------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>1</td>
<td>Grade Currently Teaching</td>
</tr>
<tr>
<td>2</td>
<td>Years of Teaching Experience</td>
</tr>
<tr>
<td>3</td>
<td>Special Education Hours Taken to Date</td>
</tr>
<tr>
<td>4</td>
<td>Current Class Size</td>
</tr>
<tr>
<td>5</td>
<td>Class Size Perceived Minimally Necessary</td>
</tr>
<tr>
<td>6</td>
<td>Class Size Perceived Ideal</td>
</tr>
<tr>
<td>7</td>
<td>Current Planning Time</td>
</tr>
<tr>
<td>8</td>
<td>Amount of Planning Time Perceived Minimally Necessary</td>
</tr>
<tr>
<td>9</td>
<td>Amount of Planning Time Perceived Ideal</td>
</tr>
<tr>
<td>10</td>
<td>Current Paraprofessional Time</td>
</tr>
<tr>
<td>11</td>
<td>Amount of Paraprofessional Time Perceived Minimally Necessary</td>
</tr>
<tr>
<td>12</td>
<td>Amount of Paraprofessional Time Perceived Ideal</td>
</tr>
<tr>
<td>13</td>
<td>Current, Necessary, and Ideal Professional Services</td>
</tr>
<tr>
<td>14</td>
<td>Current, Necessary, and Ideal Consultation with a Special Educator</td>
</tr>
<tr>
<td>15</td>
<td>Current, Necessary, and Ideal Inservice</td>
</tr>
<tr>
<td>16</td>
<td>Ranking of Types of Support</td>
</tr>
<tr>
<td>17</td>
<td>Comparison of Perceived Needs and Current Support</td>
</tr>
<tr>
<td>18</td>
<td>Teacher Willingness to Accept Students Identified as Severely Disabled with Perceived Necessary Types of Support</td>
</tr>
<tr>
<td>19</td>
<td>Teacher Willingness to Accept Students Identified as Severely Disabled without Perceived Necessary Types of Support</td>
</tr>
</tbody>
</table>
CHAPTER 1
THE PROBLEM

In this chapter, the problem is presented. Following that presentation the research questions are outlined. Next, the purpose of the study is discussed. Finally, the terms used in the study are defined and the organization of the remainder of the report is explained.

Problem Statement

For most of the history of formal education, there have been students who were considered unable to profit from typical school activities. In the past, many of these students, particularly those with more severe learning and/or physical disabilities, were excluded from school (Lipsky & Gartner, 1989). Others were relegated to a separate system of special education that paralleled the regular education system. In the 1970s, public education became a recognized legal right for all students. Many of these students, however, are still either partially or totally excluded from regular education.

Special Education, to serve students who are not or possibly may not be successful in regular classes, has developed into a complicated system. Special education services are typically delivered in a setting separated from regular education. In these separate, segregated settings, identified students (identified by teachers and testing as students needing services not typically offered in the regular classroom) are taught by special educators. The apparent goal in such a
system is to return such students to the regular classroom when they have learned the skills that will allow them to meet the demands of the regular education system (Lipsky & Gartner, 1989).

The practice of removing students from the regular classroom has been questioned by many educators (Dunn, 1968; The Holmes Group, 1990; Stainback & Stainback, 1984; Wang, Reynolds, & Walberg, 1987; Will, 1986) for numerous reasons. For example, the educational gains made by students removed from regular education have been questioned (Dunn, 1968; Shotel, Iano, & McGettigan, 1972; Stainback & Stainback, 1984). Also, there are questions concerning the stigma experienced by children in both segregated programs and segregated schools which isolate students from their peers (Brown et al., 1989; Dunn, 1968). Other questions involve the lack of opportunity provided by segregated settings for building a supportive community of diverse friends (Brown et al., 1989; Gilhool & Stutman, 1978). Additionally, questions are raised about the expense in both time and money for identifying and labeling children solely to provide them needed educational services (Gartner & Lipsky, 1987; Lilly, 1987; Reschly, 1988; Stainback & Stainback, 1984). Such questions have led to the suggestion that all students be included in the regular education system and there be provided with the support that would make them successful in the regular setting rather than removing identified students from regular classrooms (Lipsky & Gartner, 1989; Stainback & Stainback, 1984; Wang, Reynolds, & Walberg, 1987; Will, 1986).

In the past decade, this push to move from the two-system education (regular and special) to a single system in which all students
are served in the mainstream has grown into a full-blown debate within the circles of special education. Both The Journal of Learning Disabilities and Exceptional Children have devoted an entire issue to this debate. The fact that this discourse has been limited mainly to professionals in the area of special education is cited by critics as one of the primary drawbacks for giving the one-system proposal serious consideration at this time (Keogh, 1988a; Kauffman, 1989).

Including all student in the mainstream of regular education does present some very real problems regarding support in the classroom for the regular classroom teacher (Gerber & Semmel, 1984; Jones, Gottlieb, Guskin, & Yoshida, 1978; Larrivee, 1982; MacMillan, Meyers, & Yoshida, 1978). Ignoring these concerns, significantly lessens the potential success of integration endeavors, for it is the classroom teacher who will be ultimately responsible for the success of students in the regular classroom (Davis, 1989; Gerber, 1988a; Hagarty & Abramson, 1987; Iano, 1986; Kauffman, 1989; Keogh, 1988a; Little, 1988; Pugach & Sapon-Shevin, 1987; Roubinek, 1978).

Specific information regarding regular classroom teachers' perceived needs when integrating students with disabilities has been lacking in the literature (Myles & Simpson, 1989). In order to begin gathering information in this area, Myles and Simpson (1989) studied the types of support regular classroom teachers perceived as necessary for successfully integrating students with mild disabilities. Using a vignette about a student with a mild disability as a stimulus, regular classroom teachers were asked to identify the minimal classroom supports they would need if that student were placed in their classroom.
Additionally, teachers reported the types of support that they were currently receiving as well as whether they would be willing to accept the described student into their classroom with the indicated supports or without the indicated supports.

The study expanded in two ways on the original study by Myles and Simpson (1989). First, it looked at the integration of students identified as severely disabled rather than mildly disabled. Second, this study included teacher ranking of the types of support.

Research Objectives

The primary objective of this research was to determine the answers to the following questions.

1. Is there a difference in the types of classroom support perceived minimally necessary for integrating students identified as severely disabled between groups of elementary teachers in Iowa who have and have not integrated students identified as severely disabled into their classroom?

2. Is there a difference in the ranking of types of classroom support by Iowa elementary teachers who have and have not integrated students identified as severely disabled?

There were two secondary objectives. The first was to compare the currently received levels of classroom support and the types of support perceived as minimally necessary for integration of students identified as severely disabled by answering the following question: Do the types of support teachers currently receive differ from those they perceive as minimally necessary for successful inclusion of a student with severe
disabilities? The second was to determine if teachers were willing to accept students identified as severely disabled with and without the support they perceived as being minimally necessary by answering the following question: Does teachers' acceptance of the placement of students identified as severely disabled into their classroom depend on receiving the types of support perceived minimally necessary?

**Purpose of the Study**

The purpose of this study was to increase the knowledge of what specific types of support were perceived necessary by regular classroom teachers for implementing successful regular education integration programs for students identified as severely disabled. To do so, this study solicited and interpreted information regarding the support needs elementary classroom teachers expressed as being minimally necessary in the areas of class size, planning time, professional services (paraprofessional, ancillary personnel, and special education personnel), consultation with a special educator, and inservice work shops when integrating students identified as severely disabled into their classroom. In particular, this study focused on the perceptions of elementary classroom teachers in Iowa. Determining which types of support were perceived as most necessary by the classroom teacher allows the formulation of programs which provide the types of support which can lead to the successful inclusion in the regular classroom of students identified as severely disabled.

Teacher responses regarding the support for integrating students identified as severely disabled that they currently received, that they
considered minimally necessary, and that they considered ideal were collected and analyzed. A comparison was made between the responses of elementary classroom teachers who had and who had not integrated students identified as severely disabled. Finally, the ranking of the support by teachers was analyzed to determine which of these supports regular classroom teachers felt were most critical.

Definition of Terms

Elementary School—a school in which students from age 5 to 12 are educated in classrooms from Kindergarten through Grade 6.

Typical/Regular Classroom—the general education classroom in which children within the school attendance area are ordinarily enrolled.

Elementary Classroom Teacher—a teacher who teaches in a typical classroom as described above.

Student Identified as Severely Disabled—"severely handicapped" are pupils with any severe disability including pupils who are profoundly, multiply handicapped (Iowa Administrative Code, 1988)

Integration/Mainstreaming/Inclusion—educating student identified as disabled in age-appropriate regular classrooms. For purposes of this study, full- and part-time integration were both included and terms are used interchangeably.

Part-Time Integration—the student is with the regular classroom less than one half of the teaching day.

Full-Time Integration—the student is present in the regular classroom for one half or more of the teaching day.
Teacher Biographical Characteristics—these are defined to include level of education, type of certification, grade taught, years of teaching experience at the elementary level, hours of special education course work at the college level, and amount of teaching experience with students identified as severely disabled.

Teachers with Experience in Integrating Students Identified as Severely Disabled—a teacher is considered to be experienced in integration if she or he has had a student identified as severely disabled as a student in their classroom half day or more daily for at least a two-month period.

Teachers without Experience in Integrating Students Identified as Severely Disabled—Teachers who have not had a student identified as severely disabled as a student in their classroom for half a day daily for at least a two-month period.

Support—changes in the usual classroom routine made to facilitate the inclusion of a student identified as disabled. (e.g., If the planning time teachers usually have is one half hour daily, a support would be an increase in that amount of time.)

Minimal Support—support a teacher identifies as minimally necessary for the placement of a student identified as severely disabled in their classroom.

Ideal Support—support a teacher identifies as ideal for the placement of a student identified as severely disabled in their classroom.
Types of support--classroom characteristics that can be modified to provide classroom teachers with support. The types of support considered in this study are defined individually below.

Class Size--the number of students assigned to the teacher in the regular classroom.

Weekly Planning Time--the time a teacher is allotted, without classroom teaching duties for planning instruction.

Paraprofessional Services--the time period each day that a teacher has the direct services of a paraprofessional in the regular classroom.

Professional Services--are defined as the services of any of the following ancillary personnel: psychologist, social worker, speech and language pathologist, and occupational/physical therapist.

Consultation Services by Special Educator--the direct services offered to the regular classroom teacher by the special educator such as modifying curriculum, designing behavior programs for students, etc.

Inservice Workshops--informational sessions dealing with the integration of students identified as severely disabled presented to teachers outside of classroom teaching time.

Organization of the Document

The remainder of this document is organized as follows. Chapter 2 reviews literature related to teachers' perceived support needs for
integrating students identified as disabled. Additionally, it includes the limitations of those studies, and explains the significance of the current study as it relates to the literature. Chapter 3 covers the research design, data collection, and instrumentation of the study. Population, sample, and selection of subjects are also discussed. The findings of the survey are analyzed and reported in Chapter 4. Chapter 5 includes a summary of the study and discusses conclusions as well as implications for practice and suggestions for further study. Limitations to the current study are also presented.
CHAPTER 2
REVIEW OF THE LITERATURE

In this review, the first section presents background for understanding the current debate regarding inclusion. The second section discusses position papers related to that debate and section three reviews literature which supports including regular classroom teachers in the debate about integration. Section four presents the types of needs suggested by the literature which regular classroom teachers may see as necessary for including a diverse population of students in their classroom. The final section summarizes the review, discusses the study done by Myles and Simpson (1989) and relates the current study to both of those areas.

Background

Only, in the last two decades have the public education rights and needs of students with severe disabilities been recognized. This issue of educating students identified as disabled has come to the forefront in a variety of national court cases, e.g. Pennsylvania Association for Retarded Citizens v. Commonwealth of Pennsylvania. (1971) and Mills v. Board of Education of the District of Columbia. (1972). Eventually, the passage of The Education of All Handicapped Children Act (1975), P.L. 94-142, insured that all students identified as having a disability would be allowed to receive a free and appropriate public education. Congress, in tying P.L. 94-142 to federal assistance, required that states establish and use procedures that remove children from the
regular classroom only when regular class placement with modifications cannot provide an appropriate education.

Current court cases have extended this mandate for maximum inclusion of students identified as disabled within the regular education system. In particular, in *Roncker v. Walter*, (1983) the court stated:

> Even in cases where the segregated facility is considered superior, the court should determine whether the services which make that placement superior could be feasibly provided in a non-segregated setting. If they can, the placement in the segregated school would be inappropriate under the Act. (P.L. 94-142)

While this decision applies directly to segregated school placement, its application to segregated classroom placement is a natural extension.

**Related Position Papers**

In addition to court cases, there are a number of position papers and research articles that address the issue of including students identified as disabled within the regular education classroom. While a majority of these articles are directed at inclusion of students identified as mildly disabled, there are implications that can be drawn for the inclusion of students identified as having severe disabilities.

Some feel public school placement is not indicated for all students (Burton & Hirshoren, 1979), but there have been strong moral and philosophical arguments made for the benefits of including all students in the mainstream of education (Biklen, 1985; Sailor et al., 1989; Stainback & Stainback, 1984). Additionally, Madden and Slavin (1983) examined the literature specifically related to the efficacy of special education placements and found "few consistent benefits of full-
time special education on any important outcomes" (p. 519). Instead, most students benefitted from regular class placement supported by individualized instruction or a well-designed resource program addressing academic, social, behavioral, and emotional areas.

As further pressure is exerted for the inclusion of all students within regular education, there will be a variety of changes in the way needed instructional services are delivered to students. The need for reform of the regular education system is found in a number of position papers published as part of the current debate discussing the merits and demerits of serving all students within the regular education system (Davis, 1989; Keogh, 1988a, 1988b; Pugach & Johnsen, 1990; Stainback & Stainback, 1984).

One cited indication of the need for reform is the growing heterogeneity of the total student population. This diversity requires a more flexible education system in order to meet student needs (Davis, 1989; Graden, Zins, & Curtis, 1988; Keogh, 1988a; Pugach & Johnsen, 1990). Further support for reform comes from the increase in the number of students who are considered to be at risk or are experiencing learning and adjustment problems (Graden, Zins, & Curtis, 1988).

An increasing number of students referred for special education services is also being reported (Lilly, 1987; Shepard, 1987). While some question the basis for these claims of increased numbers of students receiving special education services (Kauffman, Gerber, & Semmel, 1988), they still acknowledge that reform is inevitable in the current course of education and merits attention. "More careful attention to the nature of and trade-offs entailed by the options
selected for support and implementation might help us achieve more meaningful reform of education" (Kauffman, 1989, p. 273).

**Need for Input from Regular Educators**

As more inclusion of students with disabilities occurs, (professionals debate not if a reform is coming but rather how to make it more effective) it is apparent that we stand at a critical juncture in the evolution of delivery of educational services to students with disabilities. The Special Education profession, however, does not stand alone at this crossroad. It is imperative that any plans for the future involve participants from both current systems if a solid, unitary system is to be developed.

As McKinney and Hocutt (1988) state in their position paper, regular educators have not had sufficient input into defining reform and in the implementation of reform though it is dependent on their cooperation and collaboration. Numerous others echo these concerns (Davis, 1989; Gerber, 1988b; Hagerty & Abramson, 1987; Kauffman, 1989; Keogh, 1988a; Little, 1988). McKinney and Hocutt (1988) underscore the need to develop a better understanding of the acceptance, attitudes, values, and capabilities of the regular classroom teachers.

Ammer (1984) evaluated the process of mainstreaming from the perspective of the regular educator. He surveyed 37 elementary and 33 high school classroom teachers regarding variables that enhance or diminish effective integration of students with disabilities. These teachers had been presented the opportunity to participate in educational programs designed to increase classroom teacher awareness of
the needs of students with disabilities in the classroom. Of those surveyed, 48.6% reported no role in developing services for students once they were identified as having a disability. Yet, 46% of the teachers suggested that classroom teachers could provide pertinent curricular information and emphasized the need for these teachers to be active members of the planning and monitoring process.

Salend (1984) reviewed the professional literature on mainstreaming and defined the factors which contribute to developing successful mainstreaming programs. He reported that the research suggests success is dependent, among other things, on collaborative support beyond the placement of a student with disabilities in the regular classroom.

Developing and implementing a single system of education for all students is dependent, as suggested above, on collaborative involvement of teachers from both current (special and regular) education systems. Success can only be assured if voices from both sides are heard and recognized as being equally capable of providing pertinent information. Despite these calls for including regular educators in the reform dialogue, little research beyond regular classroom teachers attitudes toward integration have been done.

**Needs Indicated by Regular Classroom Teachers**

There is research support for the need of input from regular classroom teachers when developing a collaborative single system for the delivery of education. There are also secondary research findings (those which were not the main thrust of the original research) which
suggest the types of support classroom teachers would prefer. This information offers insight into the perceived support needs of regular classroom teachers in relation to the education of students with disabilities in the regular classroom.

While the majority of the studies cited deal with the integration of students with mild disabilities, Brinker and Thorpe (1984) investigated the effect of public school integration on the educational progress as measured by IEP objectives met by students identified as severely disabled. Students from 13 public schools and one residential institution were evaluated on their amount of interaction with nondisabled peers, functional ability and the portion of IEP goals achieved in one school year. Of the variance found, 14.6% was attributed to three factors: (a) rate of interaction with nondisabled peers, (b) rate of interaction with disabled peers, and (c) functioning level of the student. When controlling for the effect of functioning level, the rate of interaction with nondisabled students accounted for 2.1% of the variance in the proportion of IEP goals they met ($F = 5.43, df = 1.217, p < .025$). They concluded that these findings support the positive educational advantages of integration for students with severe disabilities.

Shotel, Iano, and McGettigan (1972) compared the attitudes of 115 classroom teachers toward various aspects of integration in schools with and without integrative resource rooms. The subjects were elementary classroom teachers from three matched pairs of schools in Philadelphia, Pennsylvania. There was near unanimity (over 99%) among both groups that students identified as disabled required special teaching methods
and materials. Teachers showed significantly less agreement with the statement that they could meet special students' needs without supportive services (10.5% for educable retarded, 17.5% for emotionally disturbed, and 61.4% for learning disabled) than with the statement that they could meet special students' needs when given supportive services or help (38.6% for educable retarded, 51.8% for emotionally disturbed, and 89.7% for learning disabled). The type of supportive services desired by these teachers was not explored.

Hegarty (1985) reported on a study in England which explored the tasks faced by classroom teachers as a result of integration. The team identified students with disabilities who were integrated, visited their school sites, and conducted 26 detailed case studies of integrated students and their instructors. The author found that the teachers interviewed felt ancillary staff was a major resource in educating students with disabilities. The specific type of ancillary staff was not described.

O'Reilly and Duquette (1988) looked at the views of teachers experienced in mainstreaming. Using a 7-point Likert scale, they surveyed 189 elementary teachers in the major Ottawa school districts, all of whom had actually integrated a student with disabilities for at least a quarter of a day over a 6-month period. Teachers' attitudes toward mainstreaming were guardedly positive with the mean score on any one item never exceeding 5.6, 7 being the most positive. One of their findings was that teachers felt they could teach students with disabilities yet felt they lacked the time needed to give those students the attention required. They concluded that teachers need more
in-service and classroom support in order to allow them to feel comfortable in teaching students with disabilities in their regular classroom. Salend (1984) also concluded that there is need for the development of in-service programs that increase regular classroom teachers' skills in teaching students identified as disabled. It remains to be determined, however, if these are priorities for classroom teachers.

Knoff (1985) compared the attitudes of regular educators and special educators toward mainstreaming. Four hundred randomly selected regular and special educators in two states, New York and Massachusetts, were surveyed using a bipolar 16-item survey instrument. All groups felt that regular education teachers lacked the skills necessary to help exceptional children but that if time were provided, they would work and consult with special education teachers about specific students. The author concluded that the practice of mainstreaming is greatly influenced by the regular and special educators who implement the programs daily.

Hudson, Graham, and Warner (1979) reported the results of a survey designed to study the attitudes and needs of regular classroom teachers when mainstreaming students with mild disabilities. They surveyed 150 regular elementary classroom teachers in Missouri and Kansas. Each question asked the teachers to rate, on a 5-point Likert scale, their agreement with a statement in relation to mainstreaming students with disabilities. The authors concluded that modifications in school-associated variables such as class size, accessibility of materials,
time restraints, and availability of support services will be needed for successfully mainstreaming students with disabilities.

Kauffman, Agard, and Semmel (1985) in an extensive study examined the relationships between learners and the classroom environment by comparing students with mental retardation in mainstemmed and segregated placements. Using nondisabled learners as a contrast group they attempted to determine the viability of mainstreaming as an educational alternative. In this process, regular and resource teachers were queried concerning the number and seriousness of classroom problems directly related to mainstreaming. Of those teachers, 53.5% cited lack of appropriate materials while 54.6% reported lack of time to work with children individually as serious mainstreaming problems.

Mandell and Strain (1978) examined the factors related to positive classroom teacher attitudes toward mainstreaming students with mild disabilities. At 54 elementary schools in Fairfax County, Virginia they surveyed two randomly selected elementary school teachers, the principal and one randomly selected special education teacher from each school. Using a multiple linear regression, eight factors were found to be significant predictors of positive teacher attitude toward mainstreaming. Those factors were: team teaching, years of experience (which showed a negative correlation i.e., the less years of experience, the more positive the teacher attitude toward integration), courses in diagnosing behavior problems, resource room teacher available, special education teaching experience, number of courses in special education, number of students in class, and inservice programs on integration
related topics. There was, however, no examination of teacher preferred modifications for any of these variables.

Martens, Petersen, Witts, and Cirone (1986) studied teachers perceptions of a variety of typical intervention strategies. They surveyed regular and special educators in two states with a questionnaire that asked them to assess the effectiveness, ease of use, and frequency of use of a variety of intervention strategies. They concluded that the preferred interventions were ones that required little teacher time or resources. Of note were their findings that removal of the student was rated as least effective and consultation was considered difficult to use because of the time it involved.

In an investigation of teacher tolerance for students with disabilities, Gersten, Walker, and Darch (1988) explored the relationship between teacher's self-reported tolerance and their supervisors' rating on effectiveness. They evaluated 15 primary grade teachers in rural Texas using four self-report instruments. Each teacher was also evaluated by a supervising principal. They found that teachers who were rated by administrators as the most effective teachers of students at any ability level rated themselves as more likely to resist placement of students with disabilities.

Ammer (1984) evaluated the process of mainstreaming from the perspective of the regular educator. He surveyed 37 elementary and 33 high school classroom teachers regarding variables that enhance or diminish effective integration of students with disabilities. These teachers had been presented the opportunity to participate in educational programs designed to increase classroom teacher awareness of
the needs of students with disabilities in the classroom. Teachers reported time restraints and lack of assistance as serious hindrances to success of the integration process.

Summary

Gerber in a number of studies and position papers has looked beyond attitudes to the context in which teachers find themselves on a daily basis (Gerber, 1988a & 1988b; Gerber & Levine-Donnerstein, 1989; Gerber & Semmel, 1984). Gerber explored the effect of the classroom economy of resources or constraints on the attitude and decisions of teachers and reports: "With the typical levels of support they are allocated, regular teachers are not so much unwilling as unmotivated to try to work with these students [students identified as disabled]" (Gerber, 1988b, p. 28). The type of supports which would motivate teachers to work with such students is an unexplored area which may significantly affect the outcome of the current debate over the delivery of services to such students.

One study which begins looking beyond attitudes, was done by Myles and Simpson (1989). They surveyed regular classroom teachers in Kansas regarding their preference of types of support when integrating mildly handicapped students. Using vignettes of students with various disabilities, teachers were asked to indicate the types of classroom support they perceived as necessary for the placement of that particular child in their classroom. Students identified as learning disabled, behavioral disordered and mentally disabled were included in these descriptions. Each teacher reacted to one randomly assigned vignette
and identified the minimal types of support which would be necessary for them to accept that student in full-time placement. Teachers also reported their actual classroom conditions relative to each support. Additionally, they were asked if they would be willing to accept the student's placement with or without those supports. Of these teachers, 86% were willing to accept the placement of a student with disabilities if their suggested supports were implemented as contrasted to 32% without the implementation of their suggested supports.

These finding underscore the importance of involving regular classroom teachers in the development and implementation of educational reforms in the delivery of services for students with disabilities. To date, however, no one has looked specifically at the support needs expressed by classroom teachers for integrating students identified as severely disabled as is being proposed in this study.

The current education system will change, and regular educators have valuable insights into the types of support which could enable the current system to successfully serve widely diverse students. A unitary system of service delivery, however, can be built only by collaborative work with participants from both current education systems. McKinney and Hocutt (1988) warn, "at present, we have little knowledge about what particular collection of "effective practices" might be best with individual students, classrooms, and schools, or how they would be implemented in practice" (p. 21). As this review of the literature shows, there is particular need for specific research in the area of integration of students identified as severely disabled.
In this chapter the process by which the study was conducted is presented. The research objectives are presented. The sampling technique is discussed as are the design of the study, the instrumentation, the data collection and the analysis of data.

Research Objectives

The primary research objective was to determine if there was a difference in the number of minimal types of support perceived necessary or in the ranking of those types of support by regular classroom teachers with and without experience in integrating students identified as severely disabled. The two secondary objectives were to compare the types of support perceived minimally necessary with currently received support and to determine if teachers would accept placement of a student identified as severely disabled without the support they perceive as minimally necessary.

Sampling Information

A cluster random sampling technique was used to identify the schools where data would be gathered. Elementary schools in Iowa in which students identified as severely disabled were being integrated either full-time or part-time were identified by contacting consultants (for students identified as severely disabled) in each of the state's 16 Area Education Agencies (AEAs). The AEAs were divided into four
groups: 1-4, 5-8, 9-12, and 13-16. Each consultant was requested to name the elementary schools in their education area in which integration of students identified as severely disabled was currently taking place. Using the schools identified by the consultants, seven schools for each group of AEAs were identified. In those clusters in which more than seven schools were identified, seven schools were randomly selected. This type of cluster sampling was used to assure that no geographic area of the state was over-represented in the final sample.

Twenty-eight schools were originally selected, but some schools were disqualified when contacted because they did not have an integrated program or they were a segregated school setting. When possible, these disqualified schools were replaced from the original cluster pool. Such replacement was not possible in all clusters because some pools contained only seven schools. The result was that 25 schools meeting the qualifications were surveyed. Of those 25 schools, 24 returned the survey packets with 202 regular education teachers responding. The 25th school was contacted by phone but the surveys were never received.

Data Collection and Instrumentation

Data were collected by questionnaire in a cross-sectional survey (Borg & Gall, 1979) of Iowa elementary school teachers. The instrument was one adapted from an original survey developed by Myles and Simpson (1989). The categories for the classroom characteristics used were identified "from a survey conducted by the National Education Association (Teacher Opinion Poll, 1975) and from current educational trends, e.g., collaborative consultation (Idol & Paolucci-Whitcomb,
(Myles & Simpson, 1989, p. 482). The instrument was extended to include: (a) ranking (by importance of need) of the 6 support categories from the original survey (class size, paraprofessional support, special educator consultation, weekly planning time, support services, and inservice workshops) and (b) identification of ideal supports in addition to identifying minimal modifications\(^1\). The instrument was considered to have content or face validity that can be verified by an examination of the instrument (Appendix A). Additionally the instrument was piloted to improve face validity.

The instrument was piloted at a local, non-integrated, elementary school. A non-integrated school was selected because it was felt that teachers without experience in integrating students identified as severely disabled might have more questions regarding the questionnaire and it would be advantageous to deal with these questions as soon as possible. Additionally, using a school without integration precluded the same school from being one in the final survey sample assuring that there would not be a group of teachers in the sample who would be seeing the survey for a second time.

Five elementary school teachers participated in the pilot. When the surveys were returned, an informal interview was held with each teacher. Questions and comments were noted on the survey itself. Areas receiving more than five comments/questions were adapted to improve understanding and appropriate completion. This cycle was repeated twice with the same teachers. A copy of the resulting survey instrument is included in Appendix A.
Procedure

A packet of surveys and a letter (containing instructions, purpose of the research, and a thank you) was mailed to each selected school's principal after an initial phone contact during which teacher counts were obtained. Surveys were to be distributed to the regular classroom teachers in March 1991 by the school principal. A cover letter to the teacher explaining the importance of the information requested was included with each survey. A copy of that letter is contained in Appendix B. With each survey packet, there was an addressed, stamped return envelope which was to be returned by the principal in April 1991. Survey packets were number-coded in order to facilitate the follow-up process but all information included in the survey was anonymous.

Research Design

This study used a causal-comparative or ex post facto research method (Borg & Gall, 1979). This method was necessary because the independent variable of experience in teaching students identified as severely disabled occurred naturally and was not experimentally manipulated. A static-group comparison design was used as there was no way to assure equivalency when using these naturally occurring groups.

The primary threat to validity, both internal and external in such a design is that it does not allow control or certain identification of variables other than experience that may have influenced self-selection into the groups. To offset this limitation, teachers were asked if they themselves made the decision to have a student with severe disabilities placed in their regular classroom. These data were examined and reported to attempt to control for this potential weakness.
CHAPTER 4
ANALYSIS AND RESULTS

The purpose of this study was to investigate Iowa elementary classroom teachers’ perceptions regarding the conditions required for successfully including students identified as severely disabled in their regular classroom. Specifically, data were gathered to determine the number and ranking of types of support perceived necessary for such inclusion. Additionally, how currently received levels of support differed from those deemed necessary and teacher willingness to accept these students were investigated. An adapted version of the instrument devised by Myles and Simpson (1989) was used to collect the information directly from regular classroom teachers. In this chapter, the data gathered by administering that instrument are presented.

Chapter 4 is divided into seven sections. The first section deals with the demographic description of those who filled out the questionnaire. The second section describes how teachers were divided into groups for analysis. The third section presents data regarding teachers’ involvement in the decision to place students identified as severely disabled in their classroom. In the fourth section, data involving the types of support teachers currently received, perceived as ideal, and perceived minimally necessary for successful inclusion of students identified as severely disabled are presented. In section five, a report of the analysis of the ranking of support types is included. Section six compares teachers' currently received support level to the level which they perceive would be minimally necessary for
successful integration. In the final section, teachers' willingness to accept students identified as severely disabled with or without the perceived minimally necessary types of support is reported.

**Demographic Descriptions**

Twenty-five regular elementary schools in Iowa received packets of the Support Services Survey. Of those 25 schools, 24 returned their questionnaires. When each school was contacted, principals were asked for the number of regular elementary classroom teachers in their building. This number seemed difficult to determine so in order to make sure a sufficient number of surveys was sent to each school, each packet contained more surveys than the principal estimated would be needed. Principals were given directions, both during the phone conversation and in a letter with the surveys, to have all regular classroom teachers in the school complete a survey. Three hundred sixty-seven surveys were sent to the 25 schools. Of those, 220 completed surveys were returned. Eighteen of the 220 were discounted because they were not completed by regular classroom teachers. Returns per school ranged from 3 out of 10 to 26 out of 35. For this analysis 202 completed surveys were used.

Of the total number of teachers, 162 (80.2%) had B.S. or B.A. degrees while 39 (19.3%) had M.S. or M.A. degrees. One teacher (0.5%) did not respond.

Of the teachers completing the survey, 199 (98.5%) teachers had elementary teaching certification. In addition to elementary certification, 28 (14.1%) teachers had certification in other areas. Fourteen teachers (7%) had elementary certification in combination with
at least one of the special education certifications listed as choices (mental retardation, learning disabilities, and behavior disabilities). Seven (3.5%) had certification in elementary teaching and mental retardation. Two (1%) had certification in elementary teaching and learning disabilities. The other five teachers (2.5%) had various combinations of elementary certification and at least two of the special education certifications. Seventeen teachers (8.4%) had various other certifications not listed (e.g., early childhood, mental retardation, reading, etc.) in addition to their elementary teaching certification. Two teachers (1%) reported not having elementary certification and one was certified in curriculum and instruction and the other as a reading specialist. One teacher (0.5%) did not respond.

The number and percentage of teachers teaching at each grade level are presented in Table 1. Teachers surveyed represented all elementary grades, kindergarten through sixth grade. In general, the number of teachers at each grade level was similar except for the sixth grade with only 8 (4.0%) of the respondents.

Table 1

<table>
<thead>
<tr>
<th>Grade Currently Teaching</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
<tr>
<td>K 1 2 3 4 5 6 Total</td>
</tr>
<tr>
<td>Number 31 39 36 29 32 27 8 202</td>
</tr>
<tr>
<td>Percnt. 15.3 19.3 17.8 14.4 15.8 13.4 4.0 100.0</td>
</tr>
</tbody>
</table>
The years of teaching experience of the teachers surveyed are presented in Table 2. Of the 196 teachers responding to this item, 173 (88.2%) had 6 or more years of teaching experience. One hundred forty one (71.9%) had more than 10 years of teaching experience.

Table 2

<table>
<thead>
<tr>
<th>Years of Teaching Experience</th>
<th>0-2 years</th>
<th>3-5 years</th>
<th>6-10 years</th>
<th>&gt; 10 years</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number</td>
<td>13</td>
<td>10</td>
<td>32</td>
<td>141</td>
<td>196</td>
</tr>
<tr>
<td>Percentage</td>
<td>6.6</td>
<td>5.1</td>
<td>16.3</td>
<td>71.9</td>
<td>99.9</td>
</tr>
</tbody>
</table>

The hours of special education coursework for the teachers surveyed are presented in Table 3. Of the 197 teachers responding to this item, only 28 (14.2%) had taken 10 or more hours. For 134 teachers

Table 3

<table>
<thead>
<tr>
<th>Special Education Hours Taken to Date</th>
<th>0-3</th>
<th>4-9</th>
<th>10-15</th>
<th>&gt; 15</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number</td>
<td>134</td>
<td>35</td>
<td>10</td>
<td>18</td>
<td>197</td>
</tr>
<tr>
<td>Percentage</td>
<td>68.0</td>
<td>17.8</td>
<td>5.1</td>
<td>9.1</td>
<td>100.0</td>
</tr>
</tbody>
</table>
the number of special education hours taken tended to be minimal (2 hours or less).

**Analysis Groups**

While the above descriptions of the teachers surveyed are informative, the primary goal of this research was to investigate the types of support perceived as necessary by elementary teachers who had and had not experienced teaching students identified as severely disabled in their classroom. In order to make these types of comparisons, it was necessary to determine whether a teacher belonged to the group with experience or the group without experience in teaching students identified as severely disabled. (In all later discussion in this chapter, the terms experienced and without experience refer to teachers with and without experience in teaching students identified as severely disabled).

Teachers were divided into the appropriate groups by their responses to the question: Have you ever had a student identified as severely disabled placed in your classroom? The response options for this question were: (a) no, (b) yes, part-time (less than 1/2 day for two-month period), and (c) yes, full-time (more than 1/2 day for two-month period). The 130 (64.4%) teachers responding no were designated as the group without experience. The 72 (35.6%) teachers responding yes were designated as the group with experience. This group included both the 40 (19.8%) teachers who responded yes, full-time and the 32 (15.8%) teachers who responded yes, part-time.
Placement Decision

To address the possible threat to validity that teachers had self-selected into the experienced group, teachers in that group were asked whether they had input into the decision to place a student identified as severely disabled in their classroom. Of the 72 teachers with experience, 67 (93.1%) teachers responded to this question. Of those, 49 (73.1%) replied that they had no input in the placement decision and 18 (26.9%) reported having had such input. These results suggest that teachers had little input in the decision to place a student identified as severely disabled in their classroom.

In fact, when asked if they would accept the placement of a student identified as severely disabled in their classroom 11 teachers indicated in unsolicited written comments that they would have no choice in the placement decision. Comments such as "No choice.", "I was not aware there was a choice involved.", and "Never been asked, just told they were in my class!" were written next to the two questions regarding willingness to accept the placement of students identified as severely disabled.

Types of Support

A primary objective of this investigation was to answer the following question: Is there a difference in the types of classroom supports perceived minimally necessary for integrating students identified as severely disabled between groups of elementary teachers in Iowa who have and have not had students identified as severely disabled integrated into their classroom?
In order to answer this question, teachers were asked to consider different levels of support under each of three categories (class size, planning time, and paraprofessional support) and to consider different kinds of support under three categories (professional services, special educator consultation, and inservice). In each category, teachers were asked to indicate (a) the support they currently received, (b) the support they perceived would be minimally necessary for integrating a student with severe disabilities into their classroom, and (c) the support they perceived would be ideal for integrating a student with severe disabilities into their classroom. A chi-square test was used to determine if the responses by group (without and with) were significantly different. In the following section, teacher responses in each of these six categories are reported and tables summarizing those results are presented.

Class Size

Regarding class size, teachers were asked to indicate their current class size, the class size they perceived that would be necessary for including a student identified as severely disabled, and the class size they perceived that would be ideal for including such a student.

The frequency of teacher responses regarding current class size are reported in Table 4. The majority of teachers were currently assigned classes of 20-29 students. The smallest numbers of teachers in both groups responded that they had classes of more than 30 students. Eighteen teachers without experience and four with did not respond to
this item. The chi-square value for current class size (calculated using the categories of \( \leq 19 \) and \( \geq 20 \)) was not significant, \( \chi^2 = 3.00 \) (df = 1, N = 180).

Table 4

Current Class Size

<table>
<thead>
<tr>
<th></th>
<th>( \leq 19 )</th>
<th>20-29</th>
<th>( \geq 30 )</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Without Experience</td>
<td>21</td>
<td>88</td>
<td>3</td>
<td>112</td>
</tr>
<tr>
<td>With Experience</td>
<td>6</td>
<td>61</td>
<td>1</td>
<td>68</td>
</tr>
<tr>
<td>Total</td>
<td>27</td>
<td>149</td>
<td>4</td>
<td>180</td>
</tr>
</tbody>
</table>

\[ \chi^2 = 3.00 \]

The frequency of teacher responses regarding the class size perceived minimally necessary are reported in Table 5. The majority of teachers in each group responded that a class of 19 students or less would be necessary for including a student identified as severely disabled in their classroom. A greater percentage of the teachers with experience (37%) than of the teachers without experience (26.4%) responded that a class of 20 to 29 would be minimally necessary. A class of more than 30 students was not chosen by any teacher as necessary. Forty-three teachers without experience and 18 with did not respond to this item. The chi-square value for class size perceived
minimally necessary (calculated using the categories of \( \leq 19 \) and \( \geq 20 \)) was not significant, \( \chi^2 = 1.76 \) (df = 1, \( N = 141 \)).

Table 5

**Class Size Perceived Minimally Necessary**

<table>
<thead>
<tr>
<th></th>
<th>( \leq 19 )</th>
<th>20-29</th>
<th>( \geq 30 )</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Without Experience</td>
<td>64</td>
<td>23</td>
<td>0</td>
<td>87</td>
</tr>
<tr>
<td>With Experience</td>
<td>34</td>
<td>20</td>
<td>0</td>
<td>54</td>
</tr>
<tr>
<td>Total</td>
<td>98</td>
<td>43</td>
<td>0</td>
<td>141</td>
</tr>
</tbody>
</table>

\[ \chi^2 = 1.76 \]

The frequency of teacher responses regarding class size perceived ideal are reported in Table 6. No teacher from either group responded that a class of more than 30 students would be ideal when including a student with severe disabilities. In fact, the majority of teachers in each group indicated that a class of 19 students or less would be the ideal size. Thirty teachers without experience and 13 with did not respond to this item. The chi-square value for ideal class size (calculated using the categories of \( \leq 19 \) and \( \geq 20 \)) was not significant, \( \chi^2 = 0.23 \) (df = 1, \( N = 159 \)).
Table 6

<table>
<thead>
<tr>
<th>Class Size Perceived Ideal</th>
<th>≤19</th>
<th>20-29</th>
<th>≥30</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Without Experience</td>
<td>93</td>
<td>7</td>
<td>0</td>
<td>100</td>
</tr>
<tr>
<td>With Experience</td>
<td>56</td>
<td>3</td>
<td>0</td>
<td>59</td>
</tr>
<tr>
<td>Total</td>
<td>149</td>
<td>10</td>
<td>0</td>
<td>159</td>
</tr>
</tbody>
</table>

\[ \chi^2 = 0.23 \]

Planning Time

Teachers were asked to report the amount of planning time per day they currently received, the amount that would be necessary and the amount they perceived would be ideal for integrating a student with severe disabilities into their regular classroom.

The frequency of teacher responses regarding the current amounts of planning time are presented in Table 7. In general, teachers with experience reported receiving less planning time than did teachers without experience. A smaller percentage of the teachers with experience had two hours or more planning time (52.2% with and 68.9% without experience) and a greater percentage of the teachers with experience had less than one half hour of planning time (23.2% with and 9.7% without experience). Twenty-seven teachers without experience and three with did not respond to this item. The chi square value for
current planning time was significant at the .05 level, $\chi^2 = 7.03$ (df = 2, N = 172).

Table 7

Current Planning Time

<table>
<thead>
<tr>
<th></th>
<th>≥2 Hrs.</th>
<th>1 to 1 1/2 Hrs.</th>
<th>≤1/2 Hr.</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Without Experience</td>
<td>71</td>
<td>22</td>
<td>10</td>
<td>103</td>
</tr>
<tr>
<td>With Experience</td>
<td>36</td>
<td>17</td>
<td>16</td>
<td>69</td>
</tr>
<tr>
<td>Total</td>
<td>107</td>
<td>39</td>
<td>26</td>
<td>172</td>
</tr>
</tbody>
</table>

$\chi^2 = 7.03, p < .05$

The frequency of teacher responses regarding the perceived minimally necessary amounts of planning time are presented in Table 8. The greatest number of teachers in both groups indicated that more than 2 hours would be necessary. A greater percentage of the teachers with experience (31.7%) were willing to accept one to one and one half hours planning time as minimally necessary than were teachers without experience (22.9%). A few teachers from each group responded that they could manage with only 30 minutes or less of planning time. Thirty-four teachers without experience and nine with experience did not respond to this item. The chi-square value for minimally necessary planning time
Table 8

Amount of Planning Time Perceived Minimally Necessary

<table>
<thead>
<tr>
<th></th>
<th>≥2 Hrs.</th>
<th>1 to 1 1/2 Hrs.</th>
<th>≤1/2 Hr.</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Without Experience</td>
<td>73</td>
<td>22</td>
<td>1</td>
<td>96</td>
</tr>
<tr>
<td>With Experience</td>
<td>39</td>
<td>20</td>
<td>4</td>
<td>63</td>
</tr>
<tr>
<td>Total</td>
<td>112</td>
<td>42</td>
<td>5</td>
<td>159</td>
</tr>
</tbody>
</table>

\[ \chi^2 = 3.50 \]

The frequency of teacher responses regarding the ideal amounts of planning time are presented in Table 9. The majority of teachers in both groups responded that it would be ideal to have more than two hours planning time when including a student identified as severely disabled in their classroom. The percentage of teachers with experience (15.9%) who indicated that one to one and one half hour of planning time would be ideal was almost twice that of those without experience (8.3%). Only one teacher with experience, and none without, indicated that 30 minutes or less would be an ideal amount of planning time. Thirty-four teachers without experience and nine with experience did not respond to this item. The chi-square value for ideal planning time (calculated using categories of ≥ 2 hours and ≤ 1 1/2 hours) was not significant \((\chi^2 = 3.01, df = 1, N = 159)\).
Table 9

<table>
<thead>
<tr>
<th>Amount of Planning Time Perceived Ideal</th>
<th>≥2 Hrs.</th>
<th>1 to 1 1/2 Hrs.</th>
<th>≤1/2 Hr.</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Without Experience</td>
<td>88</td>
<td>8</td>
<td>0</td>
<td>96</td>
</tr>
<tr>
<td>With Experience</td>
<td>52</td>
<td>10</td>
<td>1</td>
<td>63</td>
</tr>
<tr>
<td>Total</td>
<td>140</td>
<td>18</td>
<td>1</td>
<td>159</td>
</tr>
</tbody>
</table>

$\chi^2 = 3.01$

Paraprofessional Support

Regarding paraprofessional support, teachers were asked to consider various amounts of the school day that they might have a paraprofessional in their classroom. Teachers were asked to select the amount of paraprofessional time they currently received, the amount they perceived would be minimally necessary, and the amount of paraprofessional time that they perceived would be ideal for including a student identified as severely disabled in their classroom.

The frequency of teacher responses regarding the current amounts of paraprofessional time are presented in Table 10. The majority of teachers in both groups currently had a paraprofessional less than one quarter of the school day. A larger percentage of the teachers with experience (21.8%) had a paraprofessional for three quarters or more of the school day than did those without experience (9.2%). A larger percentage of teachers with experience (14.5%) had a paraprofessional for one half to one quarter of the school day than did teachers without
experience (9.2%). Fifty-four teachers without experience and seventeen with experience did not respond to this item. This could be because the choice none was not included. The chi-square value for current paraprofessional time was not significant, \( \chi^2 = 5.67 \) (df = 2, N = 131).

Table 10

**Current Paraprofessional Time**

<table>
<thead>
<tr>
<th></th>
<th>( \geq \frac{3}{4} ) Day</th>
<th>( \frac{1}{2} ) to ( \frac{1}{4} ) Day</th>
<th>( \leq \frac{1}{4} ) Day</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Without Experience</td>
<td>7</td>
<td>7</td>
<td>62</td>
<td>76</td>
</tr>
<tr>
<td>With Experience</td>
<td>12</td>
<td>8</td>
<td>35</td>
<td>55</td>
</tr>
<tr>
<td>Total</td>
<td>19</td>
<td>15</td>
<td>97</td>
<td>131</td>
</tr>
</tbody>
</table>

\( \chi^2 = 5.67 \)

The frequency of teacher responses regarding the amounts of paraprofessional time perceived minimally necessary are presented in Table 11. Similar percentages of teachers from both groups (36.9% without and 36.7% with) indicated that a paraprofessional for the entire school day would be minimally necessary. A greater percentage of the teachers without experience (27.2%) responded that a paraprofessional for three quarters of the school day would be minimally necessary than did those with experience (18.3%). A larger percentage of the teachers with experience (33.3%) reported that a paraprofessional would be minimally necessary in the category of one half day than did teachers
without experience (25.2%). Few teachers in either group indicated that a paraprofessional for less than one quarter of the school day would be minimally necessary. Twenty-seven teachers without experience and thirteen with experience did not respond to this item. The chi-square value was not significant, $\chi^2 = 2.15$ (df = 3, N = 163).

Table 11
Amount of Paraprofessional Time Perceived Minimally Necessary

<table>
<thead>
<tr>
<th>Portion of Day</th>
<th>All</th>
<th>3/4</th>
<th>1/2</th>
<th>≤1/4</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Without Experience</td>
<td>38</td>
<td>28</td>
<td>26</td>
<td>11</td>
<td>103</td>
</tr>
<tr>
<td>With Experience</td>
<td>22</td>
<td>11</td>
<td>20</td>
<td>7</td>
<td>60</td>
</tr>
<tr>
<td>Total</td>
<td>60</td>
<td>39</td>
<td>46</td>
<td>18</td>
<td>163</td>
</tr>
</tbody>
</table>

$\chi^2 = 2.15$

The frequency of teacher responses regarding the amounts of paraprofessional time perceived ideal are presented in Table 12. The majority of teachers in both groups responded that it would be ideal to have a paraprofessional in the classroom full-time. A greater percentage of the teachers with experience (19.4%) perceived having a paraprofessional for half the school day as ideal than did teachers without experience (8.8%). Few teachers in either group indicated that having a paraprofessional for one quarter of the school day or less would be ideal. Twenty-eight teachers without experience and ten with
experience did not respond to this item. Due to the number of cells with small expected values, the chi-square was calculated using the two categories of all day and less than or equal to three-quarters day. The chi-square value (calculated using the categories of all day and ≤ three quarters of a day) was not significant, $\chi^2 = 1.39$ (df = 1, N = 164).

Table 12

<table>
<thead>
<tr>
<th>Portion of Day</th>
<th>All</th>
<th>3/4</th>
<th>1/2</th>
<th>1/4</th>
<th>&lt;1/4</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Without Experience</td>
<td>85</td>
<td>5</td>
<td>9</td>
<td>0</td>
<td>3</td>
<td>102</td>
</tr>
<tr>
<td>With Experience</td>
<td>47</td>
<td>2</td>
<td>12</td>
<td>1</td>
<td>0</td>
<td>62</td>
</tr>
<tr>
<td>Total</td>
<td>132</td>
<td>7</td>
<td>21</td>
<td>1</td>
<td>3</td>
<td>164</td>
</tr>
</tbody>
</table>

$\chi^2 = 1.39$

Professional Support

When considering professional support, teachers were asked to indicate the types of professional support that they currently received, that they considered minimally necessary for the successful inclusion of students with severe disabilities in their regular classroom, and that they considered ideal for inclusion. The options for response were social worker, speech and language pathologist, occupational/physical therapist, school psychologist, and other. These data are presented in Table 13.
Table 13

Current, Necessary, and Ideal Professional Services

<table>
<thead>
<tr>
<th></th>
<th>Social Worker</th>
<th>Speech Therapist</th>
<th>OT/PT</th>
<th>School Psychologist</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Current</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>W/o Exper.</td>
<td>55 (42.3%)</td>
<td>71 (54.6%)</td>
<td>39 (30.0%)</td>
<td>60 (46.2%)</td>
<td>10 (7.7%)</td>
</tr>
<tr>
<td>W/ Exper.</td>
<td>40 (55.6%)</td>
<td>49 (68.1%)</td>
<td>38 (52.8%)</td>
<td>41 (57.0%)</td>
<td>6 (8.3%)</td>
</tr>
<tr>
<td><strong>Necessary</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>W/o Exper.</td>
<td>48 (37.0%)</td>
<td>66 (50.7%)</td>
<td>65 (50.0%)</td>
<td>52 (40.0%)</td>
<td>14 (10.7%)</td>
</tr>
<tr>
<td>W/ Exper.</td>
<td>28 (38.9%)</td>
<td>34 (47.2%)</td>
<td>25 (34.7%)</td>
<td>27 (37.5%)</td>
<td>5 (6.9%)</td>
</tr>
<tr>
<td><strong>Ideal</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>W/o Exper.</td>
<td>38 (29.2%)</td>
<td>40 (30.8%)</td>
<td>46 (35.4%)</td>
<td>37 (28.5%)</td>
<td>11 (8.5%)</td>
</tr>
<tr>
<td>W/ Exper.</td>
<td>26 (36.1%)</td>
<td>31 (43.1%)</td>
<td>28 (38.9%)</td>
<td>27 (37.5%)</td>
<td>4 (5.6%)</td>
</tr>
</tbody>
</table>

Note.  

* Significant at the .05 level.

The teachers surveyed reported that they currently received support in all categories. There were variations in the groups' (with and without experience) responses in all categories. The percentage of teachers without experience responding that they currently had services from any one of these categories was consistently lower than that of teachers with experience. The differences between the two groups was
statistically significant at the .05 level in the OT/PT category 
($X^2 = 10.19, df = 1, N = 202$).

With respect to teachers' perceptions of the types of professional support minimally necessary, the percentages of teachers without experience were consistently higher in every category, except social worker, than those of teachers with experience. The differences, however, were small except in the category of occupational/physical therapist which was statistically significant at the .05 level ($X^2 = 4.38, df = 1, N = 202$).

The percentages of teachers with experience responding that a particular professional service would be ideal were higher than those of teachers without experience in every category but other. The two categories with the largest differences were speech therapist and school psychologist. No category had statistically significant differences.

**Consultation with a Special Educator**

Teachers were questioned regarding the types of support they currently received, perceived to be necessary, and perceived would be ideal from a special educator. The category options included consultation regarding instruction, consultation regarding behavior management, team teaching, and other. These data are presented in Table 14.

The percentages of teachers with experience reporting that they currently had particular consultation services from a special educator were consistently higher than the group without experience.
Statistically significant differences were seen in the categories of behavior management ($X^2 = 27.55$, df = 1, N = 202) and team teaching ($X^2 = 10.71$, df = 1, N = 202).

When teachers were asked to identify necessary types of support in the area of consultation with a special educator, the percentages of teachers in both groups were similar. A majority of teachers in both groups indicated that instruction consultation would be necessary and

Table 14

**Current, Necessary, and Ideal Consultation with a Special Educator**

<table>
<thead>
<tr>
<th>Services</th>
<th>Instructional</th>
<th>Behavior Management</th>
<th>Team Teaching</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Current</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>W/o Exper.</td>
<td>28 (21.5%)</td>
<td>9 (7.0%)*</td>
<td>13 (10.0%)*</td>
<td>3 (2.3%)</td>
</tr>
<tr>
<td>W/ Exper.</td>
<td>20 (27.8%)</td>
<td>26 (36.1%)*</td>
<td>20 (27.8%)*</td>
<td>3 (4.2%)</td>
</tr>
<tr>
<td>Necessary</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>W/o Exper.</td>
<td>68 (52.3%)</td>
<td>66 (50.8%)</td>
<td>33 (25.4%)</td>
<td>2 (1.5%)</td>
</tr>
<tr>
<td>W/ Exper.</td>
<td>38 (52.8%)</td>
<td>33 (45.8%)</td>
<td>21 (29.2%)</td>
<td>2 (2.8%)</td>
</tr>
<tr>
<td>Ideal</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>W/o Exper.</td>
<td>45 (34.6%)</td>
<td>38 (29.2%)</td>
<td>45 (34.6%)</td>
<td>0 (0.0%)</td>
</tr>
<tr>
<td>W/ Exper.</td>
<td>29 (40.3%)</td>
<td>29 (40.3%)</td>
<td>27 (37.5%)</td>
<td>2 (2.8%)</td>
</tr>
</tbody>
</table>

**Note.**  
\(^a\) n = 130.  
\(^b\) n = 72.  
* Significant at the .05 level.
nearly a majority in each group reported that consultation regarding behavior management would be necessary. No category had statistically significant differences.

The percentages of teachers reporting a particular category as ideal were larger for the group of teachers with experience in all categories. The largest difference was seen in the category of behavior management. No category had statistically significant differences.

**Inservice**

Regarding inservice, teachers reported the types that they currently received, those they perceived to be necessary, and those they perceived as ideal for the successful inclusion of a student identified as severely disabled. Options included inservice on instruction, on behavior management, and other inservice (such as diagnosis of learning difficulties). These data are presented in Table 15.

Teachers with and without experience reported currently receiving inservice in all categories. Teachers with experience indicated that they received significantly more inservice in the other category than did teachers without experience ($\chi^2 = 7.20$, $df = 1$, $N = 202$).

In regard to necessary inservice, identical percentages of teachers in both groups responded that instructional inservice would be necessary. A slightly larger percentage of the group of teachers without experience indicated that behavior management inservice would be necessary than did the group of teachers with experience. No category had significant differences.
When responding to the types of inservice that would be ideal, the percentages of teachers with experience were consistently larger those of the teachers without experience. The largest difference was in the category of instructional inservice and was statistically significant ($X^2 = 4.57$, df = 1, N = 202).

Table 15

Current, Necessary, and Ideal Inservice

<table>
<thead>
<tr>
<th></th>
<th>Instructional</th>
<th>Behavior Management</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Current</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>W/o Exper.</td>
<td>25 (19.2%)</td>
<td>18 (13.9%)</td>
<td>9 (6.9%)*</td>
</tr>
<tr>
<td>W/ Exper.</td>
<td>17 (23.6%)</td>
<td>15 (20.8%)</td>
<td>14 (19.4%)*</td>
</tr>
<tr>
<td><strong>Necessary</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>W/o Exper.</td>
<td>74 (56.9%)</td>
<td>71 (54.6%)</td>
<td>37 (28.5%)</td>
</tr>
<tr>
<td>W/ Exper.</td>
<td>41 (56.9%)</td>
<td>34 (47.2%)</td>
<td>20 (27.8%)</td>
</tr>
<tr>
<td><strong>Ideal</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>W/o Exper.</td>
<td>45 (34.6%)*</td>
<td>41 (31.5%)</td>
<td>31 (23.8%)</td>
</tr>
<tr>
<td>W/ Exper.</td>
<td>36 (50.0%)*</td>
<td>31 (43.1%)</td>
<td>20 (27.8%)</td>
</tr>
</tbody>
</table>

Note.  

*a* $n = 130.  \  \  b$ $n = 72.  \  *$ Significant at the .05 level.


Ranking of Types of Support

The second primary objective of this research was to answer the following question: Is there a difference in the ranking of classroom supports by Iowa elementary teachers who have and have not integrated students identified as severely disabled?

In order to answer this question, teachers were asked to rank order by necessity for successfully including a student identified as severely disabled in their classroom (one being most necessary) the six support categories (class size, planning time, paraprofessional, professional services, consultation with special educator, and inservice).

The rankings of the support categories by the two groups of teachers (those without experience in teaching students identified as severely disabled in their classroom and those with experience) were analyzed using a two-tailed Mann-Whitney U test corrected for ties. In this section the results of that analysis are reported. A summary of those results is presented in Table 16.

Of the teachers surveyed, 127 (97.7%) of the teachers without experience in including students identified as severely disabled and 71 (98.6%) with such experience responded to this section of the survey. When the rankings of the two groups were compared only the ranking of planning time was significant at the .05 level. Teachers with experience ranked planning time as more necessary than did teachers without experience ($z = -2.0018, p = .045$). No other category met the criteria of $p < .05$. 
Table 16

<table>
<thead>
<tr>
<th>Ranking of Types of Support</th>
<th>Mean Rank W/o Exper.</th>
<th>Mean Rank W/ Exper.</th>
<th>Z score (corr. for ties)</th>
<th>2-tailed p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Class size</td>
<td>1.77</td>
<td>1.88</td>
<td>-.5371</td>
<td>.5912</td>
</tr>
<tr>
<td>Planning time</td>
<td>3.51</td>
<td>3.09</td>
<td>-2.0018</td>
<td>.0453*</td>
</tr>
<tr>
<td>Paraprof.</td>
<td>2.56</td>
<td>2.35</td>
<td>.9111</td>
<td>.3623</td>
</tr>
<tr>
<td>Professional</td>
<td>3.95</td>
<td>4.15</td>
<td>-1.0327</td>
<td>.3017</td>
</tr>
<tr>
<td>Consultation</td>
<td>4.00</td>
<td>4.08</td>
<td>-.5724</td>
<td>.5670</td>
</tr>
<tr>
<td>Inservice</td>
<td>5.14</td>
<td>5.35</td>
<td>-1.6562</td>
<td>.0977</td>
</tr>
</tbody>
</table>

Note: * p ≤ .05

Comparison of Perceived Necessary Types of Support and Current Support

A secondary goal of this research was to answer the following question: Do the types of support teachers currently receive differ from those they perceive as minimally necessary for successful inclusion of a student with severe disabilities?

To answer this question, a contingency table was constructed for each support category of class size, planning time, and paraprofessional support. In the categories of professional support, consultation with a special educator, and inservice, a contingency table was constructed for each option. For each table, one side of the table was current support and the other side was the type of support perceived necessary. The
category of other was not included in this analysis as a wide variety of services were subsumed under the response.

Using the contingency table, teachers who expressed a perceived need were categorized as having their perceived need met or not having their need met. If their current support matched their perceived need exactly they were categorized as having their need met. If they did not receive a type of support they perceived as necessary or if the level of support in a particular category was less than their perceived minimally necessary level of support they were categorized as not having their need met. For example, if a teacher perceived 1 1/2 hour planning time as minimally necessary and received 1 hour of planning time they would be categorized as not having their need met. This information is presented in Table 17.

Examination of the data in the table indicates that there are differences in the types of support teachers receive and those they perceive as necessary for successful inclusion. Only in the category of professional services were more teachers categorized as having their needs met than were categorized as not having their needs met. This was true in the case of social worker, speech therapist, and school psychologist. In the support of planning time, teachers were nearly equally divided between the categories of having their needs met and not having their needs met. In all other types of support, the percentage of teachers categorized as having their needs met was considerably smaller than the percentage of teachers categorized as not having their needs met. Over 60% of the teachers were categorized as not having their needs met in the following types of support: class size,
paraprofessional time, occupational and physical therapist, consultation with a special educator (instructional, behavior management, and team teaching), and inservice (instructional and behavior management).

Table 17
Comparison of Perceived Needs and Current Support

<table>
<thead>
<tr>
<th></th>
<th>Need and Have</th>
<th>Need and Don't Have</th>
</tr>
</thead>
<tbody>
<tr>
<td>Class Size (N = 124)</td>
<td>16 (12.6%)</td>
<td>108 (85%)</td>
</tr>
<tr>
<td>Planning Time (N = 128)</td>
<td>59 (42.4%)</td>
<td>69 (49.6%)</td>
</tr>
<tr>
<td>Paraprofessional (N = 109)</td>
<td>17 (15.5%)</td>
<td>92 (83.6%)</td>
</tr>
</tbody>
</table>

Professional Services

<table>
<thead>
<tr>
<th></th>
<th>Need and Have</th>
<th>Need and Don't Have</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social Worker (N = 76)</td>
<td>45 (59.2%)</td>
<td>31 (40.8%)</td>
</tr>
<tr>
<td>Speech Therapist (N = 100)</td>
<td>60 (60.0%)</td>
<td>40 (40.0%)</td>
</tr>
<tr>
<td>Occup./Phys. Ther. (N = 91)</td>
<td>36 (39.6%)</td>
<td>55 (60.4%)</td>
</tr>
<tr>
<td>School Psychologist (N = 79)</td>
<td>47 (59.5%)</td>
<td>32 (40.5%)</td>
</tr>
</tbody>
</table>

Spec. Ed. Consultation

<table>
<thead>
<tr>
<th></th>
<th>Need and Have</th>
<th>Need and Don't Have</th>
</tr>
</thead>
<tbody>
<tr>
<td>Instructional (N = 107)</td>
<td>18 (17.0%)</td>
<td>89 (83.2%)</td>
</tr>
<tr>
<td>Behav. Mgmt. (N = 99)</td>
<td>19 (19.2%)</td>
<td>80 (80.8%)</td>
</tr>
<tr>
<td>Team Teaching (N = 54)</td>
<td>9 (16.7%)</td>
<td>45 (83.3%)</td>
</tr>
</tbody>
</table>

Inservice

<table>
<thead>
<tr>
<th></th>
<th>Need and Have</th>
<th>Need and Don't Have</th>
</tr>
</thead>
<tbody>
<tr>
<td>Instructional (N = 115)</td>
<td>10 (8.7%)</td>
<td>105 (91.3%)</td>
</tr>
<tr>
<td>Behav. Mgmt. (N = 105)</td>
<td>10 (9.5%)</td>
<td>95 (90.5%)</td>
</tr>
</tbody>
</table>
Another secondary goal of this research was to answer this question: Does teachers’ acceptance of the placement of students identified as severely disabled into their classroom depend on receiving the types of support perceived minimally necessary?

To address this goal teachers were asked to respond to the following questions: (a) Would you accept the placement of a student identified as severely disabled if you received the modifications you indicated as needed on the survey? and (b) Would you accept the placement of a student identified as severely disabled if you did not receive the modifications you indicated as needed in the survey?

This section reports the results of the analysis of the data generated by those two questions. Results are analyzed using a chi-square test for difference.

The frequency of teachers responses to willingness to accept placement of a student identified as severely disabled with the necessary perceived types of support are presented in Table 18. When answering these questions, the majority of the teachers in both groups responded that they would accept the placement of such a student if the types of support perceived necessary were provided. Four teachers without experience were undecided. None of the teachers with experience responded that they were undecided regarding this question. Six teachers without experience and two with experience did not respond to this item. The chi-square was not significant, \( \chi^2 = 0.59 \) (df = 1, N = 190).
Table 18

Teacher Willingness to Accept the Placement of Severely Disabled Students with Perceived Necessary Types of Support

<table>
<thead>
<tr>
<th>Acceptance</th>
<th>Yes</th>
<th>No</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Without Experience</td>
<td>92</td>
<td>28</td>
<td>120</td>
</tr>
<tr>
<td>With Experience</td>
<td>57</td>
<td>13</td>
<td>70</td>
</tr>
<tr>
<td>Total</td>
<td>149</td>
<td>41</td>
<td>190</td>
</tr>
</tbody>
</table>

$\chi^2 = 0.59$

The frequency of teachers responses to willingness to accept placement of a student identified as severely disabled without the perceived necessary types of support are presented in Table 19. The majority of teachers in both groups were not willing to accept the placement of students identified as severely disabled without the types of support they perceived minimally necessary. A slightly larger percentage of teachers with experience (26.7%) were willing to accept such placement than were teachers without (22.8%). A few teachers, three without experience and one with experience responded that they were undecided. Nine teachers without experience and 12 with experience did not respond to this item. The chi-square value for willingness to accept placement of students identified as severely disabled without the types of support perceived minimally necessary was not significant, $\chi^2 = 0.31$ ($df = 1$, $N = 179$).
Table 19

**Teacher Willingness to Accept the Placement of Severely Disabled Students without Perceived Necessary Types of Support**

<table>
<thead>
<tr>
<th>Acceptance</th>
<th>Yes</th>
<th>No</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Without Experience</td>
<td>28</td>
<td>92</td>
<td>120</td>
</tr>
<tr>
<td>With Experience</td>
<td>16</td>
<td>43</td>
<td>59</td>
</tr>
<tr>
<td>Total</td>
<td>44</td>
<td>135</td>
<td>179</td>
</tr>
</tbody>
</table>

\[ \chi^2 = 0.31 \]
CHAPTER 5
SUMMARY, DISCUSSION, AND IMPLICATIONS

The purpose of this study was to investigate the classroom conditions elementary teachers perceived as necessary for the inclusion of students identified as severely disabled. Specifically, types and ranking of the types of support necessary for such programs were examined. Comparisons were made between the responses of groups of elementary classroom teachers with experience in including students with severe disabilities and teachers who had not yet had such experience (referred to as teachers with and without experience in further discussions in this chapter). The difference between the types of support received and those deemed necessary were also investigated. Finally, teacher willingness to accept the placement of these students with and without support was examined.

Summary and Discussion of the Findings

Major Questions

The first major question of this study was: Is there a difference in the types of classroom supports perceived minimally necessary for integrating students identified as severely disabled between groups of elementary teachers in Iowa who have and have not integrated students identified as severely disabled into their classroom?

There were no statistically significant differences in the types of support perceived minimally necessary between groups of teachers with and without experience in integrating students identified as severely
disabled in their classrooms. Teachers in both groups, indicated the same specific types of support as minimally necessary for inclusion. Those types of support were: class size of nineteen or less (73.6% without and 63.0% with experience), two or more hours of planning time (76.0% without and 62.0% with experience), a paraprofessional for the entire school day (36.9% without and 36.7% with experience), the services of a speech and language therapist (50.7% without and 47.2% with experience), consultation with a special educator regarding instruction (52.3% without and 52.8% with experience) and behavior management (50.8% without and 45.8% with experience), and inservice in the areas of instruction (56.9% without and 56.9% with experience) and behavior management (54.6% without and 47.2% with experience).

These percentages show the consistency between the groups (with and without experience) when identifying the types of support which would allow them to be successful in including students with severe disabilities. While Martens, Petersen, Witts, and Cirone (1986) stated that teachers prefer adaptations that cost teachers little time or resources, the results of this research suggest, rather, that teachers would select types of support which would increase their time for instruction and planning. Of those types of support teachers indicated as needed, reduced class size, paraprofessional time, and additional planning time, in particular, allow the teacher opportunities to engage in more direct student contact and reflective consideration of the changes introduced into the classroom when all students are included. As found in the literature (Ammer, 1984; Hudson, Graham, & Warner, 1979; Kauffman, Agard, & Semmel, 1985; Knoff, 1985; O'Reilly & Duquette,
1988), the results of this research also suggest that time and its effect in the classroom are critical variables in the perception of teachers.

The second major question was: Is there a difference in the ranking of classroom supports by Iowa elementary teachers who have and have not integrated students identified as severely disabled?

Teachers with experience ranked, from most to least necessary, the types of support in the following order: class size, paraprofessional time, planning time, consultation, professional services, and inservice. Teachers without experience ranked the items in the same order except for reversing the order of consultation and professional services. The similarity of the rankings by both groups of teachers (with and without experience) emphasizes how necessary these types of additional supports will be under current classroom conditions if students identified as severely disabled are to be successfully included.

Though the rank order for both groups (with and without experience) was very similar, the mean rank of planning time by teachers with experience (3.09) was statistically significantly different from that of teachers without experience (3.51, p < .05). The higher mean ranking of planning time by teachers with experience indicates that this type of support constitutes a strong need area which successful inclusion programs will need to address.

Secondary Objectives

The first secondary objective investigated in this research was: Do the types of support teachers currently receive differ from those
they perceive as minimally necessary for successful inclusion of a student with severe disabilities?

Over 60% of the teachers were categorized as not having their needs met in the following types of support: class size, paraprofessional time, occupational and physical therapist, consultation with a special educator (instructional, behavior management, and team teaching), and inservice (instructional and behavior management). These findings corroborate those of Myles and Simpson (1989). Myles and Simpson (1989) reported that statistically significant differences existed between currently received types of support and those perceived as minimally necessary in all of the following categories: class size, special educator consultation, planning time, and paraprofessional time (listed from most to least significant). Schools are not currently providing the types of support teachers indicated as minimally necessary for successful inclusion.

While inservice support (ranked sixth by both groups of teachers) and consultation support (ranked fifth by teachers without experience and fourth by teachers with experience) were ranked the least necessary of the types of support ranked by both groups of teachers, they were the types of support reported as needed but not received by the greatest percent of teachers. These findings support those of Salend (1984) who identified collaborative support and inservice beyond the time of placement as components of successful mainstreaming programs and those of O'Reilly and Duquette (1988) who concluded that teachers required inservice to successfully serve students with disabilities.
The second secondary objective was to answer the following: Does teachers' acceptance of the placement of students identified as severely disabled into their classroom depend on receiving the types of support perceived minimally necessary?

There were no statistically significant differences between the two group's (with and without experience) willingness to accept students identified as severely disabled under either condition (with support or without support). The majority of teachers in both groups (76.7% without experience and 81.4% with) were willing to accept placement of students identified as severely disabled when the types of support perceived necessary were given. The majority of teachers in both groups (76.7% without experience and 72.9% with) were not willing to accept placement of students identified as severely disabled when the types of support perceived necessary were not given.

As indicated by these responses, the majority of teachers in both groups (with and without experience) were willing to accept the placement of students with severe disabilities, if given the types of support they perceived necessary. Without that support, classroom teachers appear to be reluctant participants in inclusion programs.

These findings are quite similar to those of Myles and Simpson (1989) who found that 86% of the teachers they surveyed were willing to accept the placement of students with mild disabilities when given teacher selected types of support. Of the teachers they surveyed, 68%, given the choice, would not accept the placement of students with mild disabilities in their classroom without those supports.
The findings of this research cast a different interpretation on Gersten, Walker, and Darch's (1988) contention that effective teachers resist placement of students with disabilities. According to the findings of the present study, had teachers in Gersten, Walker, and Darch's (1988) study been given a choice of placement with support, the researchers might have found that such placement was not resisted. The findings of this study suggest that the findings of Gersten, Walker, and Darch (1988) were a reflection of teachers' recognition of what they could do given the types of support available in the regular classroom.

Despite the fact that most of the teachers in this study had more than 6 years of teaching experience (85%) and few hours of special education (66.3% had 3 hours or less), the majority were willing to include students identified as severely disabled in their classroom when given the types of support they considered minimally necessary. These findings are contrary to those of Mandell and Strain, (1978) who found years of teaching experience a negative factor and number of courses in special education a positive factor when correlated with positive teacher attitudes toward mainstreaming.

Summary

The results of this study indicate that a number of types of support can affect the success of inclusion programs. The specific types of support which affect success which were identified by teachers in this study are class size, paraprofessional time, planning time, special educator consultation (on instruction and behavior management), and inservice (on instruction and behavior management). Additionally,
teacher willingness to accept the placement of students identified as severely disabled is closely tied to receiving those types of support with placements. The findings have implications for practice and research which are discussed in the following section.

**Implications for Practice**

Teacher identification of minimal support needs and the comparison of those preferred needs with those they actually receive allows identification of the types of support which schools will need to provide to support successful inclusion of students with severe disabilities. Teachers have identified some types of support as minimally necessary for successful inclusion that are not consistently provided by schools. To meet these needs, school districts must be prepared to offer support in the form of reduced class size, additional paraprofessional time, additional teacher planning time, special educator consultation services in the areas of instruction and behavior management, and inservice in instructional techniques and behavior management.

In particular, planning time was ranked by teachers with experience as more necessary for successful inclusion than it was by teachers without experience. This need may exist because the introduction of students with more diverse characteristics alters the classroom dynamic and routines which the teacher has learned to use and rely on as effective. As a result of these changes, teachers with experience recognized the need for time to develop new routines and solutions to replace those which are no longer effective. While this
need may lessen as teachers develop strategies for including such
students, at the outset, schools will need to provide ample teacher
planning time for inclusion programs to be successful.

As early as 1972, Shotel, Iano, and McGettigan indicated that,
given appropriate support, the majority of teachers agreed that they
could meet the needs of students with disabilities in the classroom.
The need to listen to and involve regular classroom teachers in
integration plans are emphasized by the finding of this research that
the majority of teachers are willing to accept placement of students
identified as severely disabled with support. This finding corroborates
that of Myles and Simpson (1989). The majority of teachers surveyed in
that study were willing to accept placement of students with mild
disabilities when given preferred support. As the literature (Davis,
1989; Gerber & Levine-Donnerstein, 1989; Hagerty & Abramson, 1987;
Kauffman, 1989; Keogh, 1988a; Little, 1988) suggests the involvement of
classroom teachers is critical to the success of those programs.

Teacher willingness to accept the placement of students identified
as severely disabled is, however, according to these results, dependent
on the types of support which accompany the placement. Myles and
Simpson (1989) also concluded that the most significant finding of their
study was "the general willingness among regular classroom teachers to
accept exceptional children into their classrooms [is] contingent upon
consideration of their mainstreaming recommendations" (p. 486). Without
input, teachers in the study of Myles and Simpson (1989) and this study
were not willing to accept the placement of students with disabilities.
These findings are consistent with the literature on teacher empowerment
and change (Harvey, 1990; Sergiovanni, 1990) which suggests that "real" change can only come about if those who will be affected by the change are involved in the decision making process.

The overall results of this research indicate that inclusion can be accepted by classroom teachers if the appropriate types of support are in place. Schools need not let concerns regarding classroom teacher reluctance to participate in inclusion programs stop them from initiating such programs. This research shows that given the opportunity to help develop inclusion programs and provided the types of support to make such programs successful at the classroom level, the majority of classroom teachers are willing to be involved in such programs.

Additionally, the findings of this research have implications for teacher training. Teachers in training need to receive specific instruction in strategies designed to meet diverse student needs in the regular classroom. Teachers will then come to the classroom ready to serve a wide variety of students. Teachers in the field of special education should have a strong component of consultative training since regular class room teachers, according to these results, will be expecting this type of service to support the placement of students with severe disabilities in their classroom.

**Implications for Research**

The information gathered by this research regarding the perceived needs of classroom teachers for including students identified as severely disabled in their classroom continues to tap the knowledge of
classroom teachers regarding the number and diversity of students they can teach given current classroom conditions. Further research should be done exploring classroom teachers' knowledge of what works and what does not work in the classroom serving diverse students and why this is so. Such research would allow a bank of strategies for serving diverse students in the classroom to be developed. Additionally, further inquiry into teachers attitudes regarding the best placement for students academically (Madden & Slavin, 1983) and morally (Biklen, 1985; Sailor et al., 1989; Stainback & Stainback, 1984) would assist in building a basis for successful integration programs. Finally, by investigating schools which have created successful inclusion programs, guidelines for the process through which other schools could build successful inclusion programs could be developed.

Limitations of This Study

This study was conducted on a small population of elementary classroom teachers (N = 202) from the midwest and may not be representative of teachers from other geographic regions and in particular, those from large metropolitan areas. Additionally, sixth grade teachers were under represented (4.0%) in comparison to other grade levels (19% to 13%).

Though the survey instrument was field tested and revised, there may have been some ambiguity regarding how teachers were expected to respond to some items that may have influenced the results. As a result, not all teachers included in the survey responded to each item.
Currently, there are a limited number of schools which operate programs that include all students. As a result, the sample of teachers with experience in teaching students with severe disabilities in their regular classroom is small (n = 72). This reflects the state of practice at this time.

In addition, because the groups of teachers with and without experience were products of the schools' operation rather than random assignment, there are limitations to the assumption that any differences found are solely products of experience in including students identified as severely disabled in their classroom. Other mediating variables may have affected which teachers were selected by administrators or themselves as amenable to the placement of a student identified as severely disabled. The fact that only one third of the teachers with experience had input into the decision to place a student identified as severely disabled in their classroom eliminates at least the variable of self-selection as a mediating variable in this study (see Chapter Four, p. 35).
When discussing the development of the instrument with professionals in the field, it was suggested that allowing teachers to identify their ideal types of support would assist them to more clearly identify their required minimal types of support. There are two reasons. First, it would require them to put some thought into differentiating the two categories. Second, it would allow them a way to express their ideal and thereby keep ideal from becoming intermixed with the minimal necessary support.


assumptions underlying the REI. Journal of Learning Disabilities, 21, 6-11.

Keogh, B. K. (1988a). Improving services for problem learners:

Focus, 4, 3-5.

and comparison of regular and special educators in New York and
Massachusetts. Psychology in the Schools, 22, 410-418.

Larrivee, B. (1982). Factors underlying regular classroom teachers'
attitude toward mainstreaming. Psychology in the Schools, 19, 374-379.

Lilly, M. S. (1987). The lack of focus in special education literature
on educational reform. Exceptional Children, 53, 325-326.

Baltimore, MD: Paul H. Brookes.

Little, D. M. (1988, spring). The redefinition of special education:
Special ordinary education individualized and personalized in the
regular classroom. Education Canada, 36-43.

teachers' perceptions of transition programs for emr students and
their impact on the students. Psychology in the Schools, 15, 99-103.

handicaps: Academic and social outcomes. Review of Educational
Research, 53, 519-569.

to the attitudes of regular classroom teachers toward mainstreamed
mildly handicapped children. Contemporary Education Psychology, 2, 154-162.

Teacher perceptions of school-based interventions. Exceptional
Children, 52, 213-223.


Roncker v. Walter, 700 F. 2d 1058 (6th Cir. 1983).


Appendix A

SUPPORT SERVICES SURVEY
1. In each of the following questions circle the appropriate choices:

**Education:**

<table>
<thead>
<tr>
<th>B.S.</th>
<th>M.S.</th>
<th>Ed. Specialist</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>other (specify)</td>
</tr>
</tbody>
</table>

**Certification:**

<table>
<thead>
<tr>
<th>elementary</th>
<th>learning disabilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>behavior disorders</td>
<td>mental retardation</td>
</tr>
<tr>
<td>other</td>
<td></td>
</tr>
</tbody>
</table>

**Grade(s) you teach:**

| K | 1 | 2 | 3 | 4 | 5 | 6 |

2. In each of the following questions circle the one most appropriate choice:

Have you ever had a student identified as severely disabled placed in your classroom?

- no
- yes-part-time (less than 1/2 day for two months or more)
- yes-full-time (more than 1/2 day for two months or more)

If yes, did you make the decision for the placement of this student in your classroom?

- yes / no

How many special education hours have you had in college?

- 0-3
- 3-9
- 9-15
- more than 15

How many years have you taught elementary school?

- 0-2
- 3-5
- 5-10
- more than 10

The questions on the following page deal with the type of modifications that you may perceive as necessary for supporting the education of a student identified as severely disabled in your regular classroom. In each category indicate what you currently receive with an x. Mark the modifications that you feel you would need at the very least with an N. Mark the modifications that you feel you would be ideal with an I. For instance, if you currently have one hour of planning time but feel you would need one and one half hours in order to meet the needs of a student identified as severely disabled and feel that 21/2 hours would be ideal, your weekly planning time section would be marked like this:

```
weekly planning time

I 2 hours
N 1 1/2 hours
x 1 hour
___ 30 minutes
___ less than 30 minutes
```
3. Place an N on the appropriate line below, in each category, to indicate the minimal modifications you feel you would need if a student identified as severely disabled were placed in your classroom. In categories 4, 5, and 6, you may mark more than one if appropriate.

4. Place an I on the appropriate line below, in each category, to indicate the modifications you feel you would be ideal if a student identified as severely disabled were placed in your classroom. In categories 4, 5, and 6, you may mark more than one if appropriate.

<table>
<thead>
<tr>
<th>1) class size</th>
<th>2) weekly planning time</th>
</tr>
</thead>
<tbody>
<tr>
<td>___ over 30</td>
<td>___ more than 2 hrs</td>
</tr>
<tr>
<td>___ 29-25</td>
<td>___ 2 hours</td>
</tr>
<tr>
<td>___ 24-20</td>
<td>___ 1 1/2 hours</td>
</tr>
<tr>
<td>___ 19-15</td>
<td>___ 1 hour</td>
</tr>
<tr>
<td>___ 14-10</td>
<td>___ 30 minutes</td>
</tr>
<tr>
<td></td>
<td>___ less than 30 minutes</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>3) paraprofessional</th>
<th>4) professional services</th>
</tr>
</thead>
<tbody>
<tr>
<td>___ entire day</td>
<td>___ social worker</td>
</tr>
<tr>
<td>___ 3/4 day</td>
<td>___ speech and language therapist</td>
</tr>
<tr>
<td>___ 1/2 day</td>
<td>___ occupational/physical therapist</td>
</tr>
<tr>
<td>___ 1/4 day</td>
<td>___ psychologist</td>
</tr>
<tr>
<td>___ less than 1/4 day</td>
<td>___ other (specify)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>5) consultation with a special educator</th>
<th>6) implementation of instructional techniques</th>
</tr>
</thead>
<tbody>
<tr>
<td>___ implementation of instructional techniques</td>
<td>___ implementation of instructional techniques</td>
</tr>
<tr>
<td>___ concerning behavior management</td>
<td>___ behavior management</td>
</tr>
<tr>
<td>___ team teaching</td>
<td>___ other e.g. diagnosis of learning</td>
</tr>
<tr>
<td>___ other (please specify)</td>
<td>___ difficulties (please specify)</td>
</tr>
</tbody>
</table>

4. Please describe your current classroom situation and supports by placing an X on the appropriate line in each category above. You may have an N, I, and an X on the same line. In categories 4, 5, and 6, you may mark more than one if appropriate.

5. Please rank order the following modification categories with number 1 being the most necessary, 2 the next most necessary, then 3, 4, 5, to 6 the least necessary for supporting the education of a student identified as severely disabled in your regular classroom. Rank them all, one number per support, even though you may not have indicated needing a particular modification. No two supports may have the same rank number.

<table>
<thead>
<tr>
<th>___ class size</th>
<th>___ weekly planning time</th>
<th>___ paraprofessional</th>
<th>___ professional services</th>
</tr>
</thead>
<tbody>
<tr>
<td>___ consultation with a special educator</td>
<td>___ instructional techniques</td>
<td></td>
<td></td>
</tr>
<tr>
<td>___ other (please specify)</td>
<td>___ behavior management</td>
<td></td>
<td></td>
</tr>
<tr>
<td>___ other (please specify)</td>
<td>___ other e.g. diagnosis of learning difficulties (please specify)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

6. Would you accept the placement of a student identified as severely disabled if you received the modifications you indicated as needed on page 2?  yes / no

7. Would you accept the placement of a student identified as severely disabled if you did not receive the modifications you indicated as needed on page 2?  yes / no

Thank you for your participation!!
Appendix B

SUPPORT SERVICES SURVEY COVER LETTER
Dear,

I am a doctoral student at the University of Northern Iowa. For my dissertation, I have chosen to investigate the types of support Iowa elementary classroom teachers feel are necessary for integrating students identified as severely disabled into their regular classroom.

The current trend toward increasing inclusion of all students in the regular classroom provides a strong impetus for understanding the position of the regular classroom teacher who will receive and teach such students. Only with an understanding of the classroom teachers' perspective on inclusion can we begin to plan adequately for this future possibility. I intend to begin developing such understanding by surveying classroom teachers to determine exactly what types of support they would require should such inclusion come to their classroom.

Your school has been identified by an area education consultant as one in which there is currently some integration of students identified as severely disabled. Every classroom teacher in your building is being requested to complete the following survey. Only with your valuable input can we begin to develop an understanding of what integration of students identified as severely disabled in the regular classroom requires.

Copies of the results will be made available to your school and your area education agencies. Thank you for your time and information.

Sincerely,

Katheryn A. East
Appendix C

LETTER TO STATE AREA EDUCATION CONSULTANTS
Dear ,

I am a doctoral student at the University of Northern Iowa. For my dissertation, I have chosen to investigate the types of support Iowa elementary classroom teachers feel are necessary for integrating students identified as severely disabled into their regular classroom.

The current trend toward increasing inclusion of all students in the regular classroom provides a strong impetus for understanding the position of the regular classroom teacher who will receive and teach such students. Only with an understanding of the classroom teachers' perspective on inclusion can we begin to plan adequately for this future possibility. I intend to begin developing such understanding by surveying classroom teachers to determine exactly what types of support they would require should such inclusion come to their classroom.

In order to survey such teachers, I am asking that you identify the elementary schools in your area agency in which some inclusion of students identified as severely disabled is currently occurring. For your convenience in doing so, space has been provided below, as well as an addressed, stamped envelope in which to return the information.

I have requested such a list from each state education agency and will randomly select schools from that pool. Should you indicate interest below, I would be glad to forward to you a copy of my results which I anticipate having completed by Fall, 1991.

Thank you for your assistance.

Sincerely,

Katheryn A. East

---

I would like to receive a copy of the survey results.

The names of schools in my area which currently have programs: