1990

Principals' perceptions about regular education teachers' attitudes toward integration of students with handicaps

Susan Kay Posekany Sherwood

University of Northern Iowa

Copyright ©1990 Susan Kay Posekany Sherwood

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

Part of the Curriculum and Instruction Commons, and the Special Education and Teaching Commons

Let us know how access to this document benefits you

Recommended Citation
Sherwood, Susan Kay Posekany, "Principals' perceptions about regular education teachers' attitudes toward integration of students with handicaps" (1990). Dissertations and Theses @ UNI. 844.
https://scholarworks.uni.edu/etd/844

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.
INFORMATION TO USERS

The most advanced technology has been used to photograph and reproduce this manuscript from the microfilm master. UMI films the text directly from the original or copy submitted. Thus, some thesis and dissertation copies are in typewriter face, while others may be from any type of computer printer.

The quality of this reproduction is dependent upon the quality of the copy submitted. Broken or indistinct print, colored or poor quality illustrations and photographs, print bleedthrough, substandard margins, and improper alignment can adversely affect reproduction.

In the unlikely event that the author did not send UMI a complete manuscript and there are missing pages, these will be noted. Also, if unauthorized copyright material had to be removed, a note will indicate the deletion.

Oversize materials (e.g., maps, drawings, charts) are reproduced by sectioning the original, beginning at the upper left-hand corner and continuing from left to right in equal sections with small overlaps. Each original is also photographed in one exposure and is included in reduced form at the back of the book.

Photographs included in the original manuscript have been reproduced xerographically in this copy. Higher quality 6" x 9" black and white photographic prints are available for any photographs or illustrations appearing in this copy for an additional charge. Contact UMI directly to order.
Principals' perceptions about regular education teachers' attitudes toward integration of students with handicaps

Sherwood, Susan Kay Posekany, Ed.D.
University of Northern Iowa, 1990

Copyright ©1990 by Sherwood, Susan Kay Posekany. All rights reserved.
PRINCIPALS' PERCEPTIONS ABOUT REGULAR EDUCATION TEACHERS' ATTITUDES TOWARD INTEGRATION OF STUDENTS WITH HANDICAPS

A Dissertation
Submitted
in Partial Fulfillment
of the Requirements for the Degree
Doctor of Education

Approved:

S.E. Mary Nan Aldridge
Ray Buss
Dr. John Nietupski
Dr. Edward Rathmell
Dr. Greg Stefanich

Susan Kay Posekany Sherwood
University of Northern Iowa
December 1990
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>LIST OF TABLES</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Chapter</strong></td>
<td></td>
</tr>
<tr>
<td>I  THE PROBLEM AND ITS SETTING</td>
<td>1</td>
</tr>
<tr>
<td>The Importance of the Study</td>
<td>4</td>
</tr>
<tr>
<td>The Purpose of the Study</td>
<td>6</td>
</tr>
<tr>
<td>Research Questions</td>
<td>6</td>
</tr>
<tr>
<td>The Null Hypotheses</td>
<td>7</td>
</tr>
<tr>
<td>Limitations</td>
<td>7</td>
</tr>
<tr>
<td>Assumptions</td>
<td>8</td>
</tr>
<tr>
<td>The Definition of Research Terms</td>
<td>9</td>
</tr>
<tr>
<td>The Definition of Population Terms</td>
<td>9</td>
</tr>
<tr>
<td>The Definition of Data Analysis Terms</td>
<td>10</td>
</tr>
<tr>
<td>II  REVIEW OF THE RELATED LITERATURE</td>
<td>12</td>
</tr>
<tr>
<td>III  THE RESEARCH METHODOLOGY</td>
<td>30</td>
</tr>
<tr>
<td>Population and Sampling</td>
<td>30</td>
</tr>
<tr>
<td>Subjects</td>
<td>31</td>
</tr>
<tr>
<td>Instrumentation</td>
<td>31</td>
</tr>
<tr>
<td>Variables</td>
<td>36</td>
</tr>
<tr>
<td>Independent Variables</td>
<td>36</td>
</tr>
<tr>
<td>Dependent Variables</td>
<td>36</td>
</tr>
<tr>
<td>Procedure</td>
<td>37</td>
</tr>
<tr>
<td>Chapter</td>
<td>Page</td>
</tr>
<tr>
<td>---------</td>
<td>------</td>
</tr>
<tr>
<td>Analysis</td>
<td>40</td>
</tr>
<tr>
<td>Tests for Hypothesis One</td>
<td>40</td>
</tr>
<tr>
<td>Tests for Hypothesis Two</td>
<td>41</td>
</tr>
<tr>
<td>IV ANALYSIS OF DATA</td>
<td>43</td>
</tr>
<tr>
<td>Statistical Procedures</td>
<td>44</td>
</tr>
<tr>
<td>Hypothesis One</td>
<td>44</td>
</tr>
<tr>
<td>Hypothesis Two</td>
<td>48</td>
</tr>
<tr>
<td>Summary</td>
<td>51</td>
</tr>
<tr>
<td>V SUMMARY AND CONCLUSIONS</td>
<td>53</td>
</tr>
<tr>
<td>Summary</td>
<td>53</td>
</tr>
<tr>
<td>Significance of Findings</td>
<td>55</td>
</tr>
<tr>
<td>Recommendations for Practice</td>
<td>62</td>
</tr>
<tr>
<td>Further Research</td>
<td>67</td>
</tr>
<tr>
<td>REFERENCES</td>
<td>69</td>
</tr>
<tr>
<td>APPENDIX A: Flow Chart</td>
<td>78</td>
</tr>
<tr>
<td>APPENDIX B: Human Subjects Review Board Consent</td>
<td>81</td>
</tr>
<tr>
<td>APPENDIX C: Permission to Utilize Questionnaire</td>
<td>83</td>
</tr>
<tr>
<td>APPENDIX D: Teacher Questionnaire</td>
<td>85</td>
</tr>
<tr>
<td>APPENDIX E: Principal Questionnaire</td>
<td>90</td>
</tr>
<tr>
<td>APPENDIX F: Telephone Introduction to Principals</td>
<td>95</td>
</tr>
<tr>
<td>APPENDIX G: Common Questions and Answers During Phone Conversations</td>
<td>97</td>
</tr>
</tbody>
</table>
LIST OF TABLES

<table>
<thead>
<tr>
<th>TABLE</th>
<th>PAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Differences Between Teachers and Principals Scores on Factors 1-6 and the Bonferroni Results</td>
<td>46</td>
</tr>
<tr>
<td>2. Means and Standard Deviations for Teachers and Principals on Factors 1-6</td>
<td>47</td>
</tr>
<tr>
<td>3. Mean Difference Scores and Standard Deviations for Teachers and Principals on Factors 1-6 by Educational Level</td>
<td>49</td>
</tr>
<tr>
<td>4. Means and Standard Deviations for Teachers and Principals on Factors 1-6 by Educational Level</td>
<td>50</td>
</tr>
</tbody>
</table>
PRINCIPALS' PERCEPTIONS ABOUT REGULAR EDUCATION TEACHERS' ATTITUDES TOWARD INTEGRATION OF STUDENTS WITH HANDICAPS

An Abstract of a Dissertation
Submitted
in Partial Fulfillment
of the Requirements for the Degree
Doctor of Education

Approved:
Mary Jane Aldridge
Faculty Advisor

Susan Kay Posekany Sherwood
University of Northern Iowa
December 1990
ABSTRACT

As the movement to integrate students with handicaps into regular education classrooms continues, regular education teachers are a critical component of the successful implementation of the integration process. Because building principals must assume responsibility for selecting the teachers who will be assigned integrated classrooms, this investigation determined the degree to which principals were able to predict the attitudes of regular education teachers toward the integration of students with handicaps.

From public school districts in a Midwestern state, 85 pairs of teachers and principals were randomly selected from three educational levels: (a) elementary, (b) middle, and (c) secondary. The data were collected from questionnaires completed by the teachers, and from questionnaires completed by their principals predicting the attitudes of those regular education teachers regarding the following six factors: Factor 1, willingness; Factor 2, location of information; Factor 3, confidence about skills; Factor 4, effects on placement; Factor 5, adequate time; and Factor 6, teacher input.
The results showed difference scores between teachers and principals were significant on Factors 2, 3, 5, and 6; whereas, principals' predictions were not significantly different on Factors 1 and 4. With regards to educational level of the school, there were no differences between elementary, middle, or secondary level principals' ability to predict teacher responses.

Although principals were able to identify the teachers willing to teach students with handicaps, they overestimated teachers' knowledge of where to obtain help or information about handicapped students, confidence in their personal skills about instruction and management in an integrated classroom, and sufficiency of time for carrying out the integration process. Principals also underestimated teacher attitudes regarding their input into the integration process.

Principals can accurately predict teacher attitudes about integration and, therefore, place handicapped students appropriately with willing teachers. False assumptions, based on the overestimation on the three factors, can lead principals to believe that once initiated, the integration process will be maintained and sustained. Therefore, principals need to provide
additional information, staff development, and support to the regular education teachers to ensure that the integration of students with handicaps reaches its optimum potential.
Our nation is experiencing a dramatic shift in education. Schools are increasingly becoming less segregated and are moving to integrate handicapped students into regular classrooms. In 1978 it was estimated that 70% of students with moderate/severe disabilities were served in segregated facilities (Kenowitz, Zweibel, & Edgar, 1978). Recent reports indicate a greater number of students with moderate/severe handicaps are being served in regular schools (Nietupski, Hamre-Nietupski, Burger, & Erickson, 1987); those regular school placement percentages range from less than 50% in some states to more than 90% in others (Fredericks, 1987). Because the federal government monitors the efforts of each state to implement Public Law 94-142, the Education for All Handicapped Children Act, this trend is expected to continue. As a result, schools are examining the processes of placement and associated integration practices in order to improve conditions for handicapped students and provide rich experiences for all children.
As public schools move toward the inclusion of handicapped students, the building principal plays a key role in providing for an effective, integrated environment (McDonnell & Hardman, 1989). Principals are ultimately responsible for programs, procedures, and practices in their respective schools. The importance of the principal in providing quality education is supported by current research on effective schools: Key components include (a) strong leadership, (b) clearly stated mission and goals, (c) a belief that all students can learn, and (d) a focus on improving instructional programs while providing staff support and resources (Blum, 1986). As educators and administrators seek to expand the educational setting for the integration of students with handicaps, the leadership of the building principal is critical (Wilson, 1989). Without commitment and support for teachers by the building administrator, efforts to integrate handicapped students will be superficial and largely ineffective (McDonnell & Hardman, 1989).

Strong leadership provides support for classroom teachers, the professionals who directly implement student programs. Those teachers are the vital links to the successful integration of handicapped students into the
regular classroom (Stainback & Stainback, 1989). Their attitudes are paramount in the integration process (Diebold, 1986). Teacher actions, reactions, and interactions with handicapped children are reflections of their attitudes and perceptions, and these are influenced by the administrator who evaluates performance and sets goals. Larrivee (1982, p. 374) stated:

While mainstreaming may be imposed by binding laws, the manner in which the classroom teacher responds to the needs of the special child may be a far more potent variable in ultimately determining the success of mainstreaming than any administrative or curricular strategy.

Teachers play a primary role in the integration process, but principals, by virtue of their leadership roles, determine the value placed on the program (Garvar-Pinhas & Schmelkin, 1989). Because teacher responses to handicapped students reflect their attitudes, building principals must be aware of the attitudes regular education teachers possess concerning the integration of handicapped students. Without considering these attitudes and expectations, administrative decisions will result in inappropriate placement and poorly implemented programs (Vergasson, Smith, & Wyatt, 1974).
The Importance of the Study

To comply with the federal and state mandates, educators and administrators must continue to pursue integration placements for handicapped students in terms of "free and appropriate" education in the "least restrictive environment." Diebold (1986) and Diebold and Trentham (1987) conducted research concerning special educator's perceptions of regular education teacher's attitudes concerning integration. The results of both studies indicated that special educators consistently underestimated the regular education teacher's willingness to teach handicapped students. Anticipation of an unwillingness of regular education teachers to teach handicapped students may prevent special educators from exploring the entire range of "least restrictive environments," and foster a self-fulfilling prophecy. They may be reluctant to make educational recommendations based on a false assumption that regular education teachers are reluctant to participate in the integration process.

The present research study extends this line of research in order to acquire parallel data about principals' perceptions of regular education teachers'
attitudes concerning integration within their schools and classrooms.

Because the principal's role is critical within the building, it is imperative that principals know and understand their regular education teachers' attitudes toward integration. They set a tone of acceptance in the building and select teachers for participation in the program. It is important to investigate whether placement is based on an accurate appraisal of individual teacher's attitudes toward integration. The level of understanding by principals can be discerned by asking them to describe how specific teachers will react. Their ability to describe is, in reality, the ability to predict how teachers will react to specific questions which concern integration. This knowledge will assist principals in providing leadership and teacher support necessary for ensuring the successful experiences of all students within the building and the regular education classrooms. Perhaps of greatest importance, it will aid the principals in the identification of "least restrictive environments" for handicapped students. This data regarding principals' perceptions of regular education teachers' attitudes about integration will complete a missing link in the present
chain of research as public schools move toward the fuller integration of handicapped students.

The Purpose of the Study

In order to meet the spirit of the mandate of Public Law 94-142, it is essential to examine the building principals' ability to predict the attitudes of regular education teachers. Because the regular classroom teacher is essential to the success of educational integration, and building administrators are responsible for placement, this study will investigate the ability of principals to predict the attitudes of regular education teachers concerning integration. The purpose of this investigation is to determine whether there is a discrepancy between teacher attitudes concerning integration and the predictions of those attitudes by the building principal. The resultant information could be used as a basis for appropriate staff development and inservice programs for the careful planning, implementation, and evaluation of integration programs.

Research Questions

The following major research questions were investigated:
1. How well are principals able to predict the attitudes of regular education teachers regarding the integration of students with handicaps?

2. Are there differences in the ability to predict attitudes of teachers toward integration by elementary level principals, middle level principals, and secondary level principals?

The Null Hypotheses

Two major hypotheses were derived from the research questions. To be consistent with data analyses, hypotheses are stated in the null form.

$H_{01}$: There is no difference between principals' predictions of regular classroom teachers' attitudes toward integration of students with handicaps and the attitudes expressed by those teachers.

$H_{02}$: There is no difference between elementary level, middle level, and secondary level school principals' prediction of regular classroom teachers' attitudes toward integration of students with handicaps and the attitudes expressed by those teachers.

Limitations

The following limitations were made regarding this study:
1. The location of the investigation will be limited to the state of Iowa.

2. This investigation will be limited to principals and will not include other building level administrators such as assistant principals, associate principals, or curriculum directors.

3. During the 1989-90 school year, four Area Education Agencies in the state of Iowa had "Integration Proposals" accepted by the Department of Education and are piloting these integration projects with varying service delivery models. Those principals and teachers working collaboratively to develop integration models will not be representative of the state of Iowa. The school districts located within Area Education Agencies 3, 6, 13, and 15 will, therefore, be excluded from this study.

4. The data collection for this investigation will be limited to the spring term of 1990.

5. The sample size will be limited to a random sampling of public school districts.

Assumptions

The following assumptions were made regarding this study:
1. The responses of the sample will accurately represent those of the population.

2. The respondents will clearly understand the questions on the instrument.

3. The respondents will answer honestly and those responses will accurately reflect their attitudes and perceptions.

The Definition of Research Terms

For the purpose of this investigation the following research terms were utilized:

Handicapped student. This term refers to any child evaluated as requiring special education and related services (Smith, 1978).

Integration. This term refers to the involvement of students with mild/moderate/severe handicaps in regular class activities. For the purpose of this study, integration encompasses mainstreaming, defined as the primary placement of a pupil in the regular classroom for educational purposes (Biklen, 1985).

The Definition of Population Terms

The following terms were used to describe the population selected for the study:
Elementary level. This term refers to any educational unit including first grade and any combination of grades which does not extend beyond sixth grade.

Middle level. This term refers to any educational unit containing, but not limited to, seventh and eighth grades.

Secondary level. This term refers to any educational unit including, but not limited to, tenth through twelfth grades.

The Definition of Data Analysis Terms

Factor 1--willingness. This term refers to the willingness of the regular education teacher to teach students with handicaps.

Factor 2--location of information. This term refers to the regular education teacher's knowledge of where to obtain help or information about students with handicaps.

Factor 3--confidence about skills. This term refers to the regular education teacher's feelings of confidence about personal skills in carrying out the integration program in the regular classroom.

Factor 4--effects on placement. This term refers to the effects of the placement of students with handicaps on the regular education classroom. It is divided into two
parts: Factor 4a—adverse effects, caused by the placement of students with handicaps within the regular classroom; and Factor 4b—class size and structure, the effects of the placement of students with handicaps on the class size and the structure of the regular education classroom.

**Factor 5—adequate time.** This term refers to the sufficiency of time for carrying out the integration program by the regular education teacher.

**Factor 6—teacher input.** This term refers to the effects of teacher input into the education program of students with handicaps who are integrated into the regular classroom; perceptions about special educators' knowledge of the regular education classroom; and the appropriateness of the placement of special needs students within the schools.
CHAPTER II
REVIEW OF THE RELATED LITERATURE

In 1975 the Education for All Handicapped Children Act was passed by the Congress of the United States. Public Law 94-142 states:

The state has established procedures to assure that, to the maximum extent appropriate, handicapped children, including children in public or private institutions or other care facilities, are educated with children who are not handicapped, and that special classes, separate schooling, or the removal of handicapped children from the regular environment occurs only when the nature or severity of the handicap is such that education in regular classes with the use of supplemental aids and services cannot be achieved satisfactorily.

The passage of this law mandated the policy of integration of students with disabilities into regular public education classrooms (Gent, 1988). This law provides the legal foundation for the integration of students with handicaps in terms of a "free and appropriate" education in the "least restrictive environment." In 1986, clarification of student placement was articulated through the amendment to the Education for All Handicapped Children by federal regulations (34 CFR 300.552) which states:
Each handicapped child's educational placement is as close as possible to the child's home. Unless a handicapped child's individualized education program requires some other arrangement, the child is educated in the school which he or she would attend if not handicapped.

As a result of this landmark legislation, educators and other professionals have used this law as the basis for new concepts of education that promote regular classroom placement for handicapped students. Regardless of the terminology, identifiers, or jargon, the emerging theme evolving with regular classroom placement is one of a unitary educational system to replace the present dual system of regular education and special education (Meyen, 1978; Sailor et al., 1989; Skrtic, 1989; Stainback & Stainback, 1984; Wang, Reynolds, & Walberg, 1986). As early as 1978, Meyen stated:

The most significant change that could occur in the future would be for public education to individualize instruction and to eliminate the dichotomy between serving exceptional and unexceptional students (p. 53).

In 1984, Stainback and Stainback presented a rationale for the merger of special education and regular education, into one unified system, structured to meet the unique needs of all students. Two premises undergird this rationale. First, the instructional needs of students do
not warrant the operation of a dual system. Second, it is inefficient to operate a dual system of education.

The Regular Education Initiative is one label for the merger of special education and regular education. This merger advocates that the general educational system of public schools assume the primary responsibility for the education of all students including those students with handicaps (Davis, 1989; Wang, Reynolds, & Walberg, 1988; Will, 1986).

The most recent model to emerge from the literature is that of an inclusive school (Biklen, Ford, & Ferguson, 1989; Stainback & Stainback, in press; Villa & Thousand, 1988). An inclusive school is one in which all students, including those with severe disabilities, are educated together in the mainstream of one system, referred to as regular education. Although to date there are only a few inclusive schools, Stainback and Stainback (in press) have identified common characteristics:

1. Inclusive schools are grounded in a philosophy that all children belong in the mainstream of school and community life.

2. These schools accept all students within their given neighborhood or district. In this way a natural
proportion of handicapped and nonhandicapped students attend school in their age-appropriate, neighborhood school.

3. Inclusive schools focus on providing assistance, specialized support, and services to all students within the regular classroom.

4. These schools adapt, modify, and expand the curriculum by differentiating objectives within the same instructional lesson.

5. Inclusive schools foster interdependence and natural support networks among staff and students through cooperation and collaboration by de-emphasizing competition.

6. Teachers and other staff personnel are empowered to make decisions on how the combined special education and regular education resources in terms of money, personnel, curriculum, and instructional procedures will be utilized to meet the needs of the students within the school.

A review of the history of special education indicates the need for a closer collaboration of special education and regular education. Historically, the trend that is emerging indicates eliminating the dichotomy of special education and regular education (Davis, 1989). Reynolds
and Birch (1982) pointed out that the whole history of education for exceptional students can be told in terms of one steady trend that can be described as progressive inclusion. Gartner and Lipsky (1987, p. 388) state:

A unitary system requires adaptations in society and in education, not solely in the individual. . . In a merged or unitary system, effective practices in classrooms and schools would characterize education for all students. No longer would there be an educational system that focuses on the limitations of "handicapped" students, a teacher's incapacity to teach students because of a lack of special credentials, or instruction that is determined by the label attached to students. Rather, the focus would be on effective instruction for all students . . .

As school personnel focus on the effective instruction and education of students in the neighborhood school (Brown et al., 1989), a new partnership between regular education and special education is formed. These educators work cooperatively with shared responsibility for integrated students (Bauwens, Hourcade, & Friend, 1989; Hamre-Nietupski et al., 1989; Lipsky & Gartner, 1989; Reynolds & Birch, 1988; Reynolds, Wang, & Walberg, 1987; Stainback, Stainback, Courtnage, & Jaben, 1985; Thousand & Villa, 1989; Westling, 1989; Wilson, 1989). This sharing provides the basis for special educators and regular educators to develop activities to take full advantage of
the numerous interaction opportunities available for handicapped students attending regular public schools (Hamre-Nietupski & Nietupski, 1985). Through this interaction teachers are able to capitalize on one another's expertise while planning, implementing, and evaluating educational programs and activities for students. When teachers work to achieve common goals, their collaboration aids the problem-solving and decision-making processes. In addition, this collaboration serves as a model for students. In Harris' paper presented at Vermont's Least Restrictive Environment Conference (cited by Stainback & Stainback, 1989, p. 82), he states:

The integration of professionals within a school system is a prerequisite to the successful integration of students. We cannot ask our students to do those things which we as professionals are unwilling to do.

When handicapped students are integrated into regular classrooms, a major concern that emerges is the potential impact of the attitudes of regular classroom teachers toward these students (Garvar-Pinhas & Schmelkin, 1989; Hannah & Pliner, 1983; Kunzweiler, 1982; Larrivee & Cook, 1979; Shotel, Iano, & McGettigan, 1972). Teachers do have different dispositions toward children whose capabilities deviate from the norm. These attitudes lead to different
patterns of interaction (Good & Brophy, 1972). For example, studies to determine whether teacher attitudes and expectancies affect student progress were conducted by Rosenthal and Jacobson (1968). Students in the first 6 grades were given intelligence and achievement tests. A random sample of students was drawn and labeled as students with hidden potential. Their teachers were told these students, with hidden potential, would display a spurt in their learning within the next year. The students were retested later in the year, and while not all differences were statistically significant, the gains of the children arbitrarily labeled with "hidden potential" were generally greater than those of the other nonlabeled children. These differences were particularly dramatic in the first and second grades.

The attitudes and behaviors of educators toward any individual student can either enable the pupil to progress intellectually, socially, and emotionally, or can inhibit the child's opportunities for learning and growth. Because a teacher's positive attitude toward a handicapped child may facilitate the child's functioning and a negative attitude can magnify difficulties, the identification of teacher attitudes is particularly crucial to the

As special education teachers interact with regular education teachers concerning integration, it is important that they know the attitudes of those specific regular educators. Diebold and Trentham (1987) asked a group of special educators to predict regular education colleague responses to a questionnaire designed to elicit attitudes about several aspects of the integration concept and process. Of the 148 questionnaires distributed to regular educators, 131 regular educators responded by marking the Likert scale response corresponding most closely with their feelings about the statements contained in each item. One-hundred-twenty questionnaires were distributed to special educators of which 85 were returned. Special educators received the same questionnaire but they were to respond to each statement as they believed regular class colleagues in their respective buildings would respond. Special educators were able to predict responses of regular education colleagues on two of six factors: (a) effects of the placement of students with handicaps in the regular school program in terms of class size, classroom procedures, and benefits and/or disruptions of the
educational process for both handicapped and nonhandicapped students; and (b) effects of teacher input into the educational program of students with handicaps who are integrated into the regular classroom, special educators knowledge of the regular education classroom, and the appropriateness of the placement of special needs students within the schools.

They concluded that nearly half of the special educators had considerable difficulty predicting the attitudes of regular educators on four of the six factors: (a) willingness to teach students with handicaps, (b) knowledge of where to obtain help or information about students with handicaps, (c) feelings of confidence about skills in carrying out the integration program in the regular classroom, and (d) sufficiency of time for carrying out the integration program. These special educators consistently underestimated the positive attitudes of their regular education colleagues concerning opinions toward integration. Diebold and Trentham (1987, p. 24) concluded, "These results appear to run counter to beliefs frequently put forward by special educators that regular class teachers are negative about the concept and process of integration." If the perceptions of special educators are
not accurate, it has the potential for becoming a self-fulfilling prophecy.

In a similar study, Diebold (1986) surveyed 25 dyads of special educators and regular educators who taught within the same school building. He asked special educators to predict attitudes toward integration held by regular education teachers within their building with whom they were paired.

The results showed that their predictions were not significantly different from regular educators responses on five of the six factors: (a) knowledge of where to obtain help or information about students with handicaps; (b) feelings of confidence about skills in carrying out the integration program in the regular classroom; (c) effects of the placement of students with handicaps on the regular program in terms of class size, classroom procedures, and benefits and/or disruptions of the educational process for both handicapped and nonhandicapped students; (d) sufficiency of time for carrying out the integration program; and (e) the effects of teacher input into the educational program of students with handicaps who are integrated into the regular classroom, special educators knowledge about the regular education classroom, and the
appropriateness of the placement of special needs students within the schools. With regard to the other factor, willingness to teach handicapped students, special educators underestimated the attitudes of their regular education colleagues.

Diebold and vonEschenbach (in press) expanded this line of research by asking college and university special education professors to predict the attitudes of regular education teachers' attitudes toward integration. Findings showed an even greater discrepancy in predicting the willingness of regular educators to educate handicapped children exists among college and university special education professors.

Diebold concluded that if special educators anticipate an unwillingness of regular educators to teach handicapped students, then this preconceived notion may prevent them from exploring the entire range of least restrictive environments. If special educators recognize greater willingness on the part of regular education teachers to accept placement of handicapped students in the regular classroom, the range of least restrictive environments may be expanded.
As professionals continue to seek least restrictive environments and unify the educational system, change is inevitable. Miles and Louis (1990) offer insights in successful change based on the findings from a four-year study of schools experiencing improvement through the change process. The following five issues involved in getting from knowledge to action are defined by Miles and Louis (1990, p. 58):

**Clarity.** The knowledge must be understood clearly—not be fuzzy, vague, or confusing.

**Relevance.** The knowledge must be seen as meaningful, as connected to one's normal life and concerns—not be irrelevant, inapplicable, or impractical.

**Action images.** The knowledge must be exemplified in specific actions, clearly visualized. People must have an image of "what to do to get there."

**Will.** There must be motivation, interest, action orientation, a will to do something with the knowledge.

**Skill.** There must be actual behavioral ability to do the action envisioned.

They have capsulized the potential success of a change process in relation to two words: will and skill. The generation of two simple but key questions surfaces. First, in relation to will, is there a desire to do it by those who must implement the change? Although the question may seem trite, it cuts to the essence of the change process. The answer simply and concisely reveals
commitment; without commitment, the change process will fail.

Second, in relation to skill, do the individuals who must implement the change possess the required skills? This question is often ignored, but it holds the key to implementation. Knowing that something is a workable action does not necessarily mean one knows how to deliver that something. The development of skills necessary for a specific change process cannot depend solely on reading, explanations, or videotapes but must be developed through participation, practice, feedback, and reshaping.

Change is a complex process that can be initiated from a number of different sources and can be achieved in diverse ways. Lieberman and Miller (1990) identify teacher unions, innovative school leaders, academics, governors, legislators, state departments of education, professional associations, and parent and community organizations as possible groups initiating change through a variety of approaches. Focusing on the change initiated by any group as a change agent, Harvey (1990) identifies three stages of the complex change process. They are (a) analysis, (b) planning, and (c) implementation and evaluation. Each stage must be carefully examined and developed to increase
the probability that the innovation will succeed and be institutionalized.

In the initial stages of the change process, defining the change and identifying the audience are imperative to future success (Rogers, 1983). A clear, concise statement defining the actual change must be delineated. After defining the change, it is essential that the proponents of change, those initiating the change process, identify and reflect on the needs of the changees, those people involved in the change effort. This reflection will enable the proponents of change to accurately understand and plan to meet the individual and group needs. This knowledge of specific needs aids in the identification of, and incorporation of appropriate antidotes for potential sources of resistance (a) lack of ownership, (b) lack of benefits, (c) increased burdens, (d) insecurity, and (e) lack of support by senior personnel (Harvey, 1990).

Regardless of the initial impetus for change or the planned process for change, at some point, the involvement of public school administrators is imperative (McDonnell & Hardman, 1989). Central administrations with strong positive attitudes toward integration programs have surfaced as an instrumental factor in the creation and
maintenance of successful integration programs (Guerin & Szatlocky, 1974). The importance of administrative support has been corroborated in studies by Dodd (1980), Pugach (1982), Sivage (1980), and Stephens and Braun (1980). Principals are critical to the success of any school program (Sergiovanni, 1987; Ubben & Hughes, 1987); they make a difference in integration (Bogdan & Biklen, 1985; Gage, 1979; Garvar-Pinhas & Schmelkin, 1989; Hamre-Nietupski, Nietupski, Stainback, & Stainback, 1984).

As educators strive to improve schools and programs, the effective schools research provides a base for improvement. In current literature regarding the effectiveness of schools, the importance of administrative support is cited as being a paramount factor (Austin, 1979; Edmonds, 1979; Lieberman & Miller, 1981). A synthesis of the research on effective schools by Purkey and Smith (1982) identified two prominent elements that appear to be common to effective schools. The first is high expectations for student achievement on the part of the school staff. The second is the strong instructional leadership on the part of the principal. Other common characteristics were identified: (a) well-defined school goals, (b) school-wide staff training, (c) control by staff
over instructional and training decisions, (d) a sense of order, (e) a system for monitoring school progress, and (f) good school discipline. As schools begin to focus on improvement through change, strong leadership combined with the collaboration of administrators and the staff focusing on the overall culture of the individual school provides direction for successful change (Purkey & Smith, 1982).

Bennis (1984) identified four competencies of leadership. As a competent educational leader, the principal must be effective in the following areas:

1. The management of schooling which means the leader has a clear understanding of the purpose for schools and can manage the organization toward fulfilling that purpose.

2. Management of attention is the educational leader's ability to enable teachers to focus on the purpose of the school and facilitate them in fulfilling the purpose of the school.

3. Management of trust means that others believe in them because of the way in which they behave, and their leadership style does not become an issue.

4. Management of self is the leader's ability to identify personal strengths and weaknesses and use them advantageously.
When principals tend to the management of meaning, of attention, of trust, and self-management, they are in a unique position to impact school philosophies, goals, practices, and procedures. As instructional leaders, they provide the resources and activities necessary to meet perceived needs (Snyder, 1983).

The principal's leadership behavior is shaped by the perceptions of how other people want the leader to behave (Smith & Andrews, 1989). This behavior is influenced and constrained by the expectations of others (Kahn & Rosenthal, 1964; Pfeffer & Salancik, 1975). Independently and collectively, teachers, superintendents, parents, and students impact the principal's personal role perception.

Some authorities contend that the principal must attend to differences in the attitudes of staff members regarding student capabilities (Austin, 1979; Edmonds, 1979) and to the feelings of both teachers and students that what they do makes a difference (Sergiovanni, 1984). Before a new policy or program can be implemented, the differences in attitudes of regular education teachers, administrators, and special educators must be identified and acknowledged (Garvar-Pinhas & Schmelkin, 1989). For example, if regular education teachers are willing to
accept handicapped students into their classrooms but principals fail to recognize this willingness, then the potential for integration in additional less restrictive environments is an untapped resource. In contrast, if the principal is supportive of the integration of handicapped students into regular education and proceeds to place students into regular classrooms in which teachers are resistant to working with these students, then the integration policy or program will be unsuccessful (Larrivee, 1982; Vergasson, Smith, & Wyatt, 1974).

Regardless of the positive or negative attitudes which exist, the attitudinal differences must be identified to allow the development, implementation, and evaluation of an appropriate plan for the integration of handicapped students into public schools. This integration plan must provide successful school experiences for all students and staff. Every staff member must believe that all children can learn and that all teachers and administrators make a difference in the quality of education afforded each student.
CHAPTER III
THE RESEARCH METHODOLOGY

There is a movement toward the integration of handicapped students into regular classrooms. Because building principals must assume responsibility for selecting the teachers who will be assigned integrated classrooms, this investigation ascertained the degree to which principals were able to predict the attitudes of their regular education teachers toward integration. Building principals were surveyed regarding their perceptions of their teacher's acceptance of integration and teachers were surveyed relative to their acceptance of such an assignment. A graphic representation of the sequential steps of this investigation is displayed in a flow chart (Appendix A).

Population and Sampling

The educational system of the state of Iowa is composed of 431 public school districts. From the 327 public school districts not involved in the integration projects through the Department of Education, 90 were randomly selected with 30 at each of three educational levels: (a) elementary level, (b) middle level, and (c) secondary level.
Subjects

The subjects for this study consisted of principals and regular education teachers. Based on the educational level, one school within each district was randomly selected for participation. From that school, the building principal and one randomly selected teacher from the regular education faculty were paired. Approximately 30 pairs of principals and regular education teachers were surveyed from each of the three educational levels. In accordance with the policy of the University of Northern Iowa, the Human Subjects Review Board granted approval for the continuation of this investigation (Appendix B).

Instrumentation

The instrument used in this study was the Teacher Questionnaire which was developed by Gans (1983) and adapted by Diebold and Trentham (1987). The original questionnaire was developed through a needs assessment questionnaire, interviews with school personnel, and a review of the literature (Gans, 1983). The instrument was originally used to obtain perceptions of regular educators and special educators about the integration of handicapped students into regular education classrooms (Gans, 1983,
1985). Permission to use the questionnaire in this present research study was granted by Dr. Karen Gans (Appendix C).

Diebold and Trentham (1987) used two forms of the questionnaire. The first form was used to survey regular education teachers. The second form was modified so that special educators could predict the responses of regular educators. For the purpose of this study, two forms of the questionnaire were utilized as well. The first (Appendix D) was used to survey regular education teachers, and the second one (Appendix E) was modified to collect pertinent demographic information from the principals and allow them to predict the attitudes of regular educators concerning integration.

The questionnaire was composed of three sections. In the first section, the items were designed to measure the teacher's experience and contact with handicapped students, along with attitudes toward students having selected handicapping conditions: (a) hearing impairments, (b) visual impairments, (c) communication disorders, (d) learning disabilities, (e) emotional disturbance, (f) orthopedic problems, (g) health impairments, and (h) mental retardation. The items in this section of the
questionnaire required the respondent to "check all that apply."

The second section contained general survey questions. These items were designed to collect information regarding teacher attitudes regarding roles, expertise, confidence, appropriate placement, classroom management, and perceptions of support provided for the integration process. A combination of response formats was utilized in this section of the questionnaire. Responses were marked (a) on a six-point, forced-choice Likert scale ranging from (1) strongly agree to (6) strongly disagree, (b) by checking all that apply, and (c) by answering open-ended questions.

The last section dealt with demographic information. It focused on the respondents personal characteristics, professional background, and expertise. The responses to this section of the questionnaire were made by checking the appropriate descriptor and answering open-ended questions.

The questionnaire targeted six factors for analysis. The six factors were:

1. Factor 1—willingness ascertained the willingness of regular education teachers to teach students with handicaps. This factor had a possible value of zero
through eight, reflecting teacher willingness to teach students with the following handicapping conditions: (a) communication disorders, (b) emotional disturbances, (c) hearing impairments, (d) health impairments, (e) learning disabilities, (f) mental retardation, (g) orthopedic problems, and (h) impairments.

2. Factor 2—location of information ascertained if regular education teachers knew where to get help or information regarding students with specific handicaps. This factor had a possible value of zero through eight, reflecting teacher knowledge about where to obtain help or information pertaining to the eight handicapping conditions: (a) communication disorders, (b) emotional disturbances, (c) hearing impairments, (d) health impairments, (e) learning disabilities, (f) mental retardation, (g) orthopedic problems, and (h) visual impairments.

3. Factor 3—confidence about skills asked teachers to identify areas in which they felt confident about their personal skills in relation to students with handicaps. This factor had a possible value of zero through five, reflecting teacher confidence in the areas of: (a) setting goals and objectives, (b) measuring achievement,
(c) managing behavior, (d) adapting materials and activities, and (e) developing Individual Education Programs.

4. Factor 4—effects on placement is divided into two parts. Factor 4a—adverse effects, asked teachers to identify areas that would be effected adversely by the placement of handicapped students in regular education classrooms. This factor had a possible value of zero through three, reflecting the effects on three areas. Factor 4b—class size and structure, asked teachers to indicate the effects on class size and structure when students with handicaps were placed in regular classrooms. Based on the six-point, forced-choice Likert scale, this factor had a possible value of one through six, reflecting the effects on placement of handicapped students into regular classrooms in three areas.

5. Factor 5—adequate time asked teachers if they had sufficient time for carrying out the integration program. This factor had a possible value of zero through three, reflecting adequate time for planning, consultation, and instruction.

6. Factor 6—teacher input asked teachers about the effects of teacher input into the educational program of
students with handicaps who are integrated into the regular classroom; perceptions about special educators knowledge of the regular education classroom; and the appropriateness of the placement of special needs students within the schools. Based on the six-point, forced-choice Likert scale, this factor has a possible value of one through six, reflecting the effects of teacher input in four areas of the integration program.

The internal consistency of the questionnaire has been established based on two studies. Cronbach's alphas showed coefficients of 0.93 and 0.92 in Diebold (1986) and Diebold and Trentham (1987), respectively. These values indicate that the instrument was internally consistent.

Variables

**Independent Variables**

This study had one non-manipulated independent variable, educational level of school. The sample was divided into three categories: (a) elementary level, (b) middle level, and (c) secondary level.

**Dependent Variables**

The dependent variables were the differences between the principal's score and the teacher's score on each of the six factors from Diebold and Trentham's study (1987).
The factors were: (a) willingness to teach handicapped students, (b) knowledge of where to obtain help or information about students with handicaps, (c) feelings of confidence about skills in carrying out the integration program in the regular classroom, (d) effects of placement on the regular class program in terms of class size, classroom procedures, and benefits and/or disruptions of the educational process for both handicapped and nonhandicapped students, (e) sufficiency of time for carrying out the integration program, and (f) effects of teacher input into the educational program of students with handicaps who are integrated into the regular classroom, special educators' knowledge of the regular education classroom, and the appropriateness of the placement of special needs students within the schools.

Procedure

Data were collected from 90 randomly selected school districts from the state of Iowa. Using the Iowa Educational Directory: 1989-90 School Year (Slezak, 1989), a two-pass sampling procedure was utilized to randomly select the school districts and assign educational levels: (a) elementary, (b) middle, or (c) secondary. If a school district had more than one school at the assigned
educational level, the participating school was randomly selected using a table of random numbers. To ensure data collection from 30 school districts at each of the three educational levels, a list of 50 public school districts was generated for each educational level. The principals from the first 30 randomly selected public schools at each educational level were contacted by telephone to explain the nature of the research project, secure cooperation, and confirm willingness to participate (Appendix F and Appendix G). Those principals who chose not to participate were replaced by the random selection of a principal from the next school district on the remaining list of 50 school districts at that respective educational level.

Each participating principal was asked to supply a list of the regular education teachers under his/her direct supervision. Upon receipt of the regular education teacher faculty list, one regular educator was identified by random selection utilizing a table of random numbers and paired with the respective principal.

Initially, two written communications were mailed to each participating school. First, each principal received a letter of appreciation for participation, and a request and advance thank you for encouraging the regular educator
to complete and return the questionnaire (Appendix H). Secondly, the randomly selected teacher received a letter of explanation (Appendix I) and a questionnaire to be completed and returned in an enclosed stamped, addressed envelope.

Upon receipt of the teacher questionnaire, the second phase of the study began. The principal received a cover letter (Appendix J) which included the name of the teacher who was the focus of the responses to the survey, the questionnaire, a one dollar bill as a token of appreciation, and a stamped, addressed envelope for the return of the questionnaire. This sequential process reduced the opportunity for the principal to interact with the teacher regarding the content of the questionnaire.

At any point in the process when an appropriate response had not been received, a personal follow-up contact was made by telephone or written correspondence. If at any time the data could not be collected from the pair, that school district was eliminated and the complete procedure began again for the next successive school district on the respective educational level list. The process continued until a minimum of 30 pairs of responses were received in each of the educational levels.
Analysis

Tests for Hypothesis One

Hotelling's $T^2$ was used to test Hypothesis One, there is no difference between principals' predictions of regular classroom teachers' attitudes toward integration of students with handicaps and the attitudes expressed by those teachers. This test, a multivariate analog for the one-sample $t$ test, was used to compare the difference scores between building principals and regular education teachers with zero, the hypothesized difference, on each of the six factors: (a) Factor 1—willingness, (b) Factor 2—location of information, (c) Factor 3—confidence in skills, (d) Factor 4—effects on placement, (e) Factor 5—adequate time, and (f) Factor 6—teacher input. Each factor may also be referred to as a dependent variable. This analysis was selected to test the first hypothesis because the six dependent variables may be correlated, and Hotelling's $T^2$ allows all six dependent variables to be tested simultaneously.

If Hotelling's $T^2$ yielded a significant critical value, a Bonferroni procedure would be performed. This post-hoc procedure would compute confidence intervals to
identify which of the six dependent variables was significantly different from zero.

If statistical significance is reached on any factor at the .05 level, effect sizes will be computed for each factor by dividing the difference score (teacher score minus principal score) by the standard deviation of the teacher. The resulting effect size statistics will indicate whether there are meaningful differences between the teacher and principal in terms of practical significance.

Tests for Hypothesis Two

A multivariate analysis of variance (MANOVA) was used to test Hypothesis Two, there is no difference between elementary level, middle level, and secondary level school principals' predictions of regular classroom teachers' attitudes toward integration of students with handicaps and the attitudes expressed by those teachers. The MANOVA involved a one factor design with three educational levels of school: (a) elementary level, (b) middle level, and (c) secondary level, to compare the difference scores (teacher score minus principal score). If the MANOVA yielded a significant F ratio, an analysis of variance (ANOVA) would be performed on each of the six difference scores.
Scheffe's post-hoc tests would be used to test the statistical significance of the difference scores between particular school levels when warranted.
CHAPTER IV
ANALYSIS OF DATA

As the movement to integrate students with handicaps into regular education classrooms continues, regular education teachers are a critical component of the successful implementation of the integration process. Because building principals must assume responsibility for selecting the teachers who will be assigned integrated classrooms, this investigation determined the degree to which principals were able to predict the attitudes of regular education teachers toward the integration of students with handicaps.

Ninety-six public school districts, within the state of Iowa, were randomly selected and building principals confirmed that their school would participate in the investigation. Ninety-two pairs of teachers and principals from the 96 schools participated in this investigation yielding a return rate of 95.8%. Missing data invalidated seven questionnaires; therefore, 85 pairs composed the completed data set for analysis. Responses from the 85 pairs of teachers and principals represented the three
educational levels: (a) 28 elementary level pairs, (b) 28 middle level pairs, and (c) 29 secondary level pairs.

**Statistical Procedures**

**Hypothesis One**

There is no difference between principals' predictions of regular classroom teachers' attitudes toward integration of students with handicaps and the attitudes expressed by those teachers.

Using SAS (1985), Hotelling's $T^2$, a multivariate analog for the one sample $t$ test, was used to compare the difference in perception scores between building principals and regular education teachers on each of the six dependent variables. These factors were: Factor 1—willingness, the willingness of regular education teachers to teach students with handicaps; Factor 2—location of information, knowledge of where to obtain help or information about students with handicaps; Factor 3—confidence about skills, feelings of confidence about personal skills in carrying out the integration program in the regular classroom; Factor 4—effects on placement divided into two parts: Factor 4a—adverse effects, and Factor 4b—class size and structure when students with handicaps are integrated into regular education classrooms; Factor 5—adequate time,
sufficiency of time for carrying out the integration program; and Factor 6--teacher input, effects of teacher input into the educational program of students with handicaps who are integrated into the regular classroom; perceptions about special educators knowledge of the regular education classroom; and the appropriateness of the placement of special needs students within the schools. Factor 4 was composed of two components, thus, the total number of factors was seven in the analyses. Hotelling's $T^2$ allowed the seven factors to be tested simultaneously. It was hypothesized that the difference between the teacher's score and the principal's score would be zero for each of the seven factors. The test statistic for Hotelling's $T^2 = 67.34$ which was greater than the required critical value of 16.21, so the first hypothesis was rejected at the .05 level of significance (see Table 1).

The rejection of the null hypothesis indicated that the seven difference scores were not all equal to zero. In order to identify which of the difference scores on the seven factors were significantly different, the data were analyzed using a Bonferroni post-hoc procedure. The results showed that the difference scores between teachers and principals were significant on Factors 2--location of
information, Factor 3—confidence about skills, Factor 5—adequate time, and Factor 6—teacher input (see Table 1).
In Table 2, the means and standard deviations for both the teachers and the principals are presented.

Table 1
Differences Between Teachers' and Principals' Scores on Factors 1-6 and the Bonferroni Results

<table>
<thead>
<tr>
<th>Factor</th>
<th>Difference</th>
<th>Bonferroni</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Willingness</td>
<td>-0.59</td>
<td>NS</td>
</tr>
<tr>
<td>2. Location of information</td>
<td>-1.99</td>
<td>SIG</td>
</tr>
<tr>
<td>3. Confidence about skills</td>
<td>-1.07</td>
<td>SIG</td>
</tr>
<tr>
<td>4a Adverse effects of placement</td>
<td>0.02</td>
<td>NS</td>
</tr>
<tr>
<td>4b Effects on class size/structure</td>
<td>-0.09</td>
<td>NS</td>
</tr>
<tr>
<td>5. Adequate time</td>
<td>-0.69</td>
<td>SIG</td>
</tr>
<tr>
<td>6. Teacher input</td>
<td>0.48</td>
<td>SIG</td>
</tr>
</tbody>
</table>

Note. SIG = significant at the .05/7 level.
NS = not significant at the .05/7 level.
Table 2
Means and Standard Deviations for Teachers and Principals on Factors 1-6

<table>
<thead>
<tr>
<th>Factor</th>
<th>Range of possible scores</th>
<th>Teachers</th>
<th>Principals</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>M</td>
<td>SD</td>
</tr>
<tr>
<td>F1</td>
<td>0-8</td>
<td>5.28</td>
<td>2.53</td>
</tr>
<tr>
<td>F2</td>
<td>0-8</td>
<td>4.20</td>
<td>2.82</td>
</tr>
<tr>
<td>F3</td>
<td>0-5</td>
<td>1.99</td>
<td>1.74</td>
</tr>
<tr>
<td>F4a</td>
<td>0-3</td>
<td>0.77</td>
<td>0.85</td>
</tr>
<tr>
<td>F4b</td>
<td>1-6</td>
<td>2.84</td>
<td>0.57</td>
</tr>
<tr>
<td>F5</td>
<td>0-3</td>
<td>0.60</td>
<td>0.94</td>
</tr>
<tr>
<td>F6</td>
<td>1-6</td>
<td>3.24</td>
<td>0.82</td>
</tr>
</tbody>
</table>

Note.  
F1 = willingness
F2 = location of information
F3 = confidence in skills
F4a = adverse effects on placement
F4b = effects on class size/structure
F5 = adequate time
F6 = teacher input

To better understand these significant differences, effect sizes were computed by dividing the differences by the standard deviation for the teachers. The effect sizes
for the four significant factors were -0.71, -0.61, -0.73, and +0.59, respectively for Factor 2—location of information, Factor 3—confidence about skills, Factor 5—adequate time, and Factor 6—teacher input. These are rather large effect sizes (Cohen, 1977) indicating there are meaningful differences between teachers and principals on these factors.

**Hypothesis Two**

There is no difference between elementary level, middle level, and secondary level school principals' predictions of regular classroom teachers' attitudes toward integration of students with handicaps and the attitudes expressed by those teachers.

A multivariate analysis of variance (MANOVA) was used to compare the seven difference scores (teacher score minus principal score). The MANOVA involved a one factor design with three educational levels. The multivariate analysis of variance to test Hypothesis Two was not significant, multivariate $F(14, 152) = 1.45, p < .14$. It can be noted that the data indicated no differences between these three groups on the seven difference scores (see Table 3). In Table 4, the means and standard deviations for both teachers and principals are presented by educational level.
Table 3

Means Difference Scores and Standard Deviations for Teachers and Principals on Factors 1-6 by Educational Level

<table>
<thead>
<tr>
<th>Educational Level</th>
<th>Factor</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elementary</td>
<td>F1</td>
<td>-1.11</td>
<td>3.88</td>
</tr>
<tr>
<td></td>
<td>F2</td>
<td>-2.50</td>
<td>2.71</td>
</tr>
<tr>
<td></td>
<td>F3</td>
<td>-1.00</td>
<td>2.11</td>
</tr>
<tr>
<td></td>
<td>F4a</td>
<td>-0.18</td>
<td>1.09</td>
</tr>
<tr>
<td></td>
<td>F4b</td>
<td>0.05</td>
<td>0.83</td>
</tr>
<tr>
<td></td>
<td>F5</td>
<td>-0.43</td>
<td>1.23</td>
</tr>
<tr>
<td></td>
<td>F6</td>
<td>0.09</td>
<td>0.75</td>
</tr>
<tr>
<td>Middle</td>
<td>F1</td>
<td>-0.21</td>
<td>2.77</td>
</tr>
<tr>
<td></td>
<td>F2</td>
<td>-1.82</td>
<td>2.54</td>
</tr>
<tr>
<td></td>
<td>F3</td>
<td>-0.82</td>
<td>2.20</td>
</tr>
<tr>
<td></td>
<td>F4a</td>
<td>-0.07</td>
<td>1.18</td>
</tr>
<tr>
<td></td>
<td>F4b</td>
<td>-0.18</td>
<td>0.68</td>
</tr>
<tr>
<td></td>
<td>F5</td>
<td>-0.71</td>
<td>1.24</td>
</tr>
<tr>
<td></td>
<td>F6</td>
<td>0.78</td>
<td>0.74</td>
</tr>
<tr>
<td>Secondary</td>
<td>F1</td>
<td>-0.45</td>
<td>2.75</td>
</tr>
<tr>
<td></td>
<td>F2</td>
<td>-1.66</td>
<td>3.21</td>
</tr>
<tr>
<td></td>
<td>F3</td>
<td>-1.38</td>
<td>2.53</td>
</tr>
<tr>
<td></td>
<td>F4a</td>
<td>0.31</td>
<td>0.81</td>
</tr>
<tr>
<td></td>
<td>F4b</td>
<td>-0.14</td>
<td>0.79</td>
</tr>
<tr>
<td></td>
<td>F5</td>
<td>-0.93</td>
<td>1.62</td>
</tr>
<tr>
<td></td>
<td>F6</td>
<td>0.58</td>
<td>0.90</td>
</tr>
</tbody>
</table>

Note. F1 = willingness
F2 = location of information
F3 = confidence in skills
F4a = adverse effects on placement
F4b = effects on class size/structure
F5 = adequate time
F6 = teacher input
Table 4

Means and Standard Deviations for Teachers and Principals on Factors 1-6 by Educational Level

<table>
<thead>
<tr>
<th>Factor</th>
<th>Range of possible scores</th>
<th>Teachers</th>
<th>Principals</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>M</td>
<td>SD</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Elementary</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>F1</td>
<td>0-8</td>
<td>4.82</td>
<td>2.64</td>
</tr>
<tr>
<td>F2</td>
<td>0-8</td>
<td>3.86</td>
<td>2.75</td>
</tr>
<tr>
<td>F3</td>
<td>0-5</td>
<td>2.04</td>
<td>1.71</td>
</tr>
<tr>
<td>F4a</td>
<td>0-3</td>
<td>0.61</td>
<td>0.83</td>
</tr>
<tr>
<td>F4b</td>
<td>1-6</td>
<td>2.77</td>
<td>0.61</td>
</tr>
<tr>
<td>F5</td>
<td>0-3</td>
<td>0.75</td>
<td>0.93</td>
</tr>
<tr>
<td>F6</td>
<td>1-6</td>
<td>2.88</td>
<td>0.65</td>
</tr>
<tr>
<td>Middle</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>F1</td>
<td>0-8</td>
<td>5.64</td>
<td>2.35</td>
</tr>
<tr>
<td>F2</td>
<td>0-8</td>
<td>4.43</td>
<td>2.69</td>
</tr>
<tr>
<td>F3</td>
<td>0-5</td>
<td>2.00</td>
<td>1.54</td>
</tr>
<tr>
<td>F4a</td>
<td>0-3</td>
<td>0.68</td>
<td>0.67</td>
</tr>
<tr>
<td>F4b</td>
<td>1-6</td>
<td>2.79</td>
<td>0.58</td>
</tr>
<tr>
<td>F5</td>
<td>0-3</td>
<td>0.43</td>
<td>0.84</td>
</tr>
<tr>
<td>F6</td>
<td>1-6</td>
<td>3.55</td>
<td>0.80</td>
</tr>
<tr>
<td>Secondary</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>F1</td>
<td>0-8</td>
<td>5.38</td>
<td>2.62</td>
</tr>
<tr>
<td>F2</td>
<td>0-8</td>
<td>4.31</td>
<td>3.06</td>
</tr>
<tr>
<td>F3</td>
<td>0-5</td>
<td>1.93</td>
<td>1.98</td>
</tr>
<tr>
<td>F4a</td>
<td>0-3</td>
<td>1.00</td>
<td>1.00</td>
</tr>
<tr>
<td>F4b</td>
<td>1-6</td>
<td>2.95</td>
<td>0.53</td>
</tr>
<tr>
<td>F5</td>
<td>0-3</td>
<td>0.62</td>
<td>1.05</td>
</tr>
<tr>
<td>F6</td>
<td>1-6</td>
<td>3.29</td>
<td>0.86</td>
</tr>
</tbody>
</table>

Note.  F1 = willingness  
F2 = location of information  
F3 = confidence in skills  
F4a = adverse effects on placement  
F4b = effects on class size/structure  
F5 = adequate time  
F6 = teacher input

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.
Summary

In summary, based on the data collected from teachers and principals in Iowa and analyzed using Hotelling's $T^2$, Hypothesis One, there is no difference between principals' predictions of regular classroom teachers' attitudes toward integration of students with handicaps and the attitudes expressed by those teachers, was rejected. The results of the follow-up tests (Bonferroni procedure) showed there is a difference between principals' predictions of regular classroom teachers' attitudes toward integration of students with handicaps and attitudes expressed by those teachers. Significant differences resulted on Factor 2—location of information, Factor 3—confidence about skills, and Factor 5—adequate time where principals overestimated regular education teachers' responses. In contrast, Factor 6—teacher input was also significant, but principals underestimated regular educators' responses on this factor.

The second hypothesis, there is no difference between elementary level, middle level, and secondary level school principals' predictions of regular education classroom teachers' attitudes toward integration of students with handicaps and the attitudes expressed by those educators,
was not rejected. Results from the MANOVA showed there was no difference between elementary level, middle level, and secondary level school principals' predictions of regular classroom teachers' attitudes toward integration of students with handicaps and the attitudes expressed by those teachers.
CHAPTER V

SUMMARY AND CONCLUSIONS

Summary

Legal, financial, and social forces are exerting pressure on schools to integrate special needs students into regular classrooms. Those students who have previously been educated in special schools and in resource rooms can be expected to appear with increasing frequency in regular classrooms (Larrivee, 1982). The integration of special needs students into regular education classrooms was sanctioned with the passage of Public Law 94-142. This trend toward integration has continued to gain momentum and various models have emerged: Regular Education Initiative, unified educational system, inclusive schools. Regardless of the model, a "free and appropriate" education in the "least restrictive environment" has provided the legal foundation for the education of all students.

As public schools move toward the inclusion of special needs students, the building principal plays an instrumental role in providing for a successful and effective, integrated environment (McDonnell & Hardman, 1989). Their responsibility encompasses the educational
program, procedures, and practices within their buildings. The effective schools research supports the importance of the principal in providing quality education through: (a) strong leadership, (b) clearly defined mission and goals, (c) a belief that all students can learn, and (d) a focus on improving instructional programs while simultaneously providing staff support and resources (Blum, 1986). Within the school culture, the leadership of the building principal is critical as educators and central administrators seek to expand the educational setting for the inclusion of students with handicaps.

Strong leadership provides the support for teachers to implement new programs through the change process. Those teachers are the means for transforming new philosophies, procedures, or theories into practice; they are vital links to the successful integration of students with handicaps into regular classrooms (Stainback & Stainback, 1989). What transpires between the teacher and the students cannot be mandated or imposed by others. Teacher actions, reactions, and interactions have a greater impact on the successful integration of students with handicaps than either administrative edict or curricular mandate (Larrivee, 1982).
Teachers assume a central role in the integration process, but principals, by virtue of their leadership roles, are ultimately responsible for the vision, the development, and supervision of adaptive programs for handicapped students in regular classrooms (Bogdan & Biklen, 1985). Because implicit and explicit teacher responses to handicapped students reflect their personal attitudes, building principals must be aware of the attitudes regular education teachers possess concerning the integration of handicapped students. When decisions are made without knowledge of teacher attitudes, administrative decisions result in inappropriate placement and poorly implemented programs (Vergasson, Smith, & Wyatt, 1974).

**Significance of Findings**

This study investigated the ability of principals to predict the attitudes of regular education teachers concerning integration. Two major hypotheses were generated and tested. The research hypotheses were:

1. There is no difference between principals' predictions of regular classroom teachers' attitudes toward integration of students with handicaps and the attitudes expressed by those teachers.
2. There is no difference between elementary level, middle level, and secondary level school principals' prediction of regular classroom teachers' attitudes toward integration of students with handicaps and the attitudes expressed by those teachers.

During the spring semester of 1990, public school districts in the state of Iowa were randomly selected from three educational levels: (a) elementary, (b) middle, and (c) secondary. The data were collected from questionnaires completed by the teachers assessing their attitudes toward the integration of students with handicaps into regular classroom settings, and from the questionnaires completed by the principals predicting the attitudes of the selected regular education teacher within their building.

These data were analyzed using Hotelling's $T^2$ to compare the difference in perception scores between building principals and regular education teachers on each of the six dependent variables (factors). These factors were: Factor 1—willingness, Factor 2—location of information, Factor 3—confidence about skills, Factor 4—effects on placement, Factor 5—adequate time, and Factor 6—teacher input.
Based on the results of Hotelling's $T^2$ with the level of significance established at the .05 level, the first hypothesis, there is no difference between principals' predictions of regular classroom teachers' attitudes toward integration of students with handicaps and the attitudes expressed by those teachers, was rejected. This indicated that not all six difference scores, teacher score minus principal score, were equal to zero. Using a Bonferroni post-hoc procedure, the difference scores between teacher and principals were significant on Factor 2—location of information, Factor 3—confidence of skills, Factor 5—adequate time, and Factor 6—teacher input. The results did not indicate statistical significance on Factor 1—willingness, and Factor 4—effects on placement.

With respect to Factor 2—location of information, principals rated the eight responses higher than regular education teachers. Teachers were less sure of where to get help or information concerning students with handicaps than principals perceived. This indicates that principals assume that regular education teachers know where to obtain help or information about students with handicaps when they are lacking in this knowledge. In the initial stages of the integration process, the principal may need to clearly
identify the availability of all potential resources, and define the appropriate channels to access those resources. Being unsure of resources that can provide assistance in terms of help and information about students with handicaps can be an obstacle to the integration process.

Factor 3—confidence about skills assessed the confidence of teachers regarding their skills in the areas of: (a) setting goals and objectives, (b) measuring achievement, (c) managing behavior, (d) adapting of materials and activities, and (e) developing Individualized Education Programs. Principals' scores were higher than regular educators when predicting the responses on these five components. Principals, then, assume teachers have a higher level of confidence about the integration of students with handicaps; in reality teachers are not as confident about their skills in carrying out the integration program within their regular classrooms. This assumption could place teachers in anxiety producing situations because principals have overestimated the teachers' personal confidence in their skills to instruct and manage an integrated classroom.

On Factor 5--adequate time, principals' responses were higher than their regular education teacher counterparts.
Principals perceived that the teachers had more time to carry out the integration process than teachers expressed. Therefore, teachers may be reluctant to participate in the integration of students with handicaps into regular classrooms due to concern over time requirements for planning, consultation, and instruction. If this assumption is correct, principals must recognize this need for additional planning, preparation, consultation, and instructional time to ensure the successful integration of students with handicaps and positive experiences for all students.

Teacher involvement and ownership in educational programs are vital considerations for program success. Factor 6—teacher input, revealed that teachers' responses were higher than the principals' predictions of those responses. Teacher responses indicated that they felt their input impacted the integration program more than the principals perceived. The effects of teacher input into the educational program of students with handicaps who were integrated into the regular classroom was viewed more positively by teachers than principals.

With regard to Factor 1—willingness and Factor 4—effects on placement, principals more accurately
predicted the responses of regular educators. The accurate perceptions of principals about the effects of placement of students with handicaps in the regular class programs will provide common ground on which to explore and design appropriate integration strategies. Knowing the willingness of regular educators to teach handicapped students will greatly facilitate the integration process. Ultimately, knowledge about willingness will lead to the identification of additional "least restrictive environments," where the placement of students with handicaps in appropriate regular education classrooms will increase the probability of successful experiences for all students and teachers.

A MANOVA, used to test the second hypothesis, showed there was no difference between elementary level, middle level, and secondary level school principals' predictions of regular classroom teachers' attitudes toward integration of students with handicaps and the attitudes expressed by those educators. These results indicate that principals, regardless of educational level, are equally accurate at predicting the six attitudes of the regular education teachers within their buildings.
This investigation expanded a line of research which began with Diebold (1986), and Diebold and Trentham (1987). The purpose of all three investigations was to acquire information to assist educators and administrators as they continue to pursue integration placements for handicapped students in terms of a "free and appropriate" education in the "least restrictive environment." The previous research was conducted to examine special educator's perceptions of regular education teacher's attitudes concerning integration. The results of both studies indicated that special educators consistently underestimated the regular education teacher's willingness to teach handicapped students (Diebold, 1986; Diebold & Trentham, 1987).

The results of the research conducted by Diebold in 1986 indicated that special educators' predictions were not significantly different from regular educators' responses on five of six factors: Factor 2--knowledge of where to obtain help or information about students with handicaps; Factor 3--feelings of confidence about skills in carrying out the integration program in the regular classroom; Factor 4--effects of the placement of students with handicaps on the regular education program; Factor 5--sufficiency of time for carrying out the integration
program; and Factor 6—the effects of teacher input into the educational program of students with handicaps who are integrated into the regular classroom, special educators' knowledge about the regular education classroom, and the appropriateness of the placement of special needs students within the schools. With respect to Factor 1—willingness, there was a difference. Special educators underestimated the willingness of regular educators to teach students with handicaps.

**Recommendations for Practice**

The findings of previous research studies, viewed in conjunction with the findings of the present investigation, were used to generate the following insights and recommendations. Because principals are better predictors than special educators, of the willingness of regular educators to teach students with handicaps, principals should take the initiative in the identification of those regular education teachers who can best provide regular class placement opportunities for students with handicaps. Special educators, on the other hand, appear to be better predictors of regular educators attitudes regarding: (a) knowledge of where to obtain help or information about students with handicaps; (b) feelings of confidence about
skills in carrying out the integration program in the regular classroom; (c) sufficiency of time for carrying out the integration program; and (d) the effects of teacher input into the educational program of students with handicaps who are integrated into the regular classroom. Both principals and special educators are accurate predictors about regular education teachers' attitudes dealing with the effects of placement of handicapped students on the regular education classroom.

The integration of students with handicaps into regular classrooms is a complex process. The results of this study, along with that of Diebold (1986), provide empirical support for the use of a team concept in the integration process. A collaborative effort by principals, special educators, and regular education teachers capitalizes on the strengths and expertise of each of these three groups of professionals; therefore, the development of integration strategies within the regular classroom and the school will be enhanced. The formation of an integration team composed of principals, special educators, and regular educators has the potential for promoting cooperation, collaboration, and shared responsibility in the integration process. Each must have respect for the
unique contribution made by other members of the team and provide assistance for meeting student needs.

The initiation of any change process behooves those ultimately in charge to know the strengths, needs, and apprehensions of those at the forefront of implementation. Accurate perceptions about those who will carry out the change, provide the foundation on which to develop the program. Principals are knowledgeable about the regular education teachers' willingness to work with students with handicaps in integrated classrooms. They can accurately identify those teachers with positive attitudes about integration; thereby, providing appropriate placement for handicapped students in regular education classrooms. Principals accurate predictions about willingness of regular educators enables them to place students with handicaps in settings in which integration provides the optimum potential for social and academic growth. The identification of potential integrated classrooms and the placement of handicapped students with willing teachers is paramount; this accurate analysis is a prerequisite of successful integrated classrooms.

Once the student with handicaps is placed in a regular classroom, the integration process has only begun. New and
unexpected challenges emerge from integrated classrooms. Teachers are confronted with a myriad of questions, decisions, and problems viewed from a different perspective. Considerations emanating from personal philosophy, ultimate purposes, effective practices, and appropriate procedures must be addressed. As teachers struggle to resolve the personal and professional challenges encountered in the integration process, principals may not be aware of the conflict. Principals overestimate the ability of teachers to locate help and information regarding students with handicaps. Principals overestimate the regular educators confidence in personal skills for teaching in an integrated classroom, and principals overestimate the regular education teachers' concept of sufficient time for carrying out the integration process. False assumptions, based on these inaccurate predictions, can lead principals to believe that once initiated, the integration process will be maintained and sustained. Inaccurate perceptions about regular education teachers' attitudes will result in dissonance and various forms of resistance during the integration process; thus, jeopardizing the success of integration.
As teachers pursue information and help with specific questions, embark on situations that challenge their confidence in personal skills, and encounter time constraints in carrying out the integration process, special educators can provide a primary source of support. Based on the accurate perceptions of special educators in regard to these areas, the integration process can be facilitated through increased dialogue and assistance.

Integration teams comprised of regular educators, special educators, and principals increase the probability of successfully developing, implementing and maintaining an integration program. Collaboration among these professionals can be used to identify student and teacher needs, and propose solutions to ensure these needs are appropriately addressed. Principals can accurately identify teacher attitudes about integration and place students appropriately with willing teachers. Special educators can serve as a support group to facilitate the integration process. With the support, staff development, and resources provided by principals and special educators through integration teams, regular education teachers can maintain program balance and provide the best education for all students, handicapped and nonhandicapped.
Further Research

To continue this line of research, it is recommended that further study should be conducted to focus on school level investigations of matched triads: principal, special educator, and regular educator to verify the findings of this investigation and those of Diebold's (1986) study. Both the principal and the special educator should predict the same regular education teacher's attitudes toward the integration of students with handicaps. The results of this research would determine whether principals and special educators can accurately predict the attitudes of regular education teachers; therefore, capitalizing on the accurate predictions of both the principal and the special educator, the implication of the results would aid in providing assistance and support for regular education teachers in the integration process. In addition, the resulting information could be used as a basis for appropriate staff development and inservice programs for the careful planning, implementation, and evaluation of the integration process.

Because principals overestimate the teachers' responses to the adequacy of time for carrying out the integration program, further study should be conducted to
identify realistic time expectations and demands for teaching integrated classrooms in inclusive schools. This information would provide valuable input into the restructuring process of public schools.

In addition, principals overestimated teachers' confidence about their personal skills in teaching in integrated classrooms. Further study should be conducted to investigate and identify teacher skills necessary for the successful integration of students with handicaps. The results would have implications for administrators in providing support and inservice for regular education teachers involved in the integration process.
REFERENCES


Kunzweiler, C. (1982). Mainstreaming will fail unless there is a change in professional attitude and instructional structure. Education, 102, 284-288.


Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.


Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.


Flow Chart

* Professional concern about integration
* Limited knowledge
  * Analyze PL 94-142 and amendments
  * Study special education literature
* Communication with Dr. Diebold

1.10 Principals' Perceptions About Regular Education Teachers' Attitudes Toward Integration of Students with Handicaps

2.10 Principals must know and understand regular education teacher's attitudes toward integration
  2.101 Leadership role
  2.102 Provide support and inservice for teachers
  2.103 Placement of students with handicaps

3.10 How well are principals able to predict the attitudes of regular education teachers regarding the integration of students with handicaps?

3.20 Are there differences in the ability to predict attitudes of teachers toward integration by elementary level principals, middle level principals, and secondary level principals?

4.10 There is no difference between principals' predictions of regular classroom teachers' attitudes toward integration of students with handicaps and the attitudes expressed by those teachers.

4.20 There is no difference between elementary level, middle level, and secondary level school principals' predictions of regular classroom teachers' attitudes toward integration of students with handicaps and the attitudes expressed by those teachers.

5.10 Responses of the sample will accurately represent those of the population

5.20 Respondents will clearly understand the questions on the instrument

5.30 Respondents will answer honestly and responses will accurately reflect their attitudes and perceptions

6.10 Location limited to the state of Iowa

6.20 Limited to building principals, not assistant principals, associate principals, or curriculum directors

6.30 Limited to public school districts not located in AEA 3, 6, 13, & 15 involved in "Integration Proposals" with the DOE

6.40 Time limited to spring term of 1990

6.50 Sample size limited to a random sampling of the defined population

7.10 PL 94-142, amendments, and integration

7.20 Unified educational system

7.30 Collaboration

7.40 Teacher attitude

7.50 Effective schools research

7.60 Administrative leadership
8.10 Dr. Karen Gans grants permission to use instrument

9.10 Format teacher questionnaire
   9.101 Revisions
   9.102 Print ready

10.10 Format principal questionnaire
    10.101 Revisions
    10.102 Print ready

11.10 Compose cover letter to teacher

12.10 Compose communications to principals
    12.101 Telephone introduction to principals
    12.102 Thank you to principals
    12.103 Cover letter to principals

13.10 Human Subjects Review Board grants permission

14.10 Random selection of public school districts
14.20 Assignment of educational level
    14.201 Elementary
    14.202 Middle
    14.203 Secondary

15.10 Telephone contact and introduction to principals
    15.101 Confirm participation
    15.102 Request list of regular education teachers

16.10 Permission granted for school participation

17.10 Receive list of regular education teachers
17.20 Random selection of regular education teacher
18.10 Mail thank you to principal
19.10 Mail cover letter and questionnaire to teachers
20.10 Receive completed questionnaire from teacher
21.10 Mail cover letter and questionnaire to principal
22.10 Receive completed questionnaire from principal

23.10 Prepare data for analysis
23.20 Examine and select appropriate analyses

24.10 If Hotelling's $T^2$ is significant at the 0.05 level
    24.101 Bonferroni procedure

25.10 If MANOVA is significant at the 0.05 level
    25.101 ANOVAs
    25.102 Scheffe's Test

26.10 If statistically significant at the 0.05 level, reject the null hypothesis
26.20 If not statistically significant at the 0.05 level, fail to reject the null hypothesis

27.10 Summarize literature, procedures, and analysis
28.10 Formulate conclusions and recommendations
APPENDIX B

Human Subjects Review Board Consent
March 12, 1990

Ms. Susan Kay Sherwood
Curriculum and Instruction
University of Northern Iowa
Cedar Falls, IA 50614

Dear Ms. Sherwood:

Your project, "Principals' Perceptions about Regular Education Teachers' Attitudes Toward Integration of Students with Handicaps in Iowa", which you submitted for human subjects review on February 19, 1990 has been determined to be exempt from further review under the guidelines stated in the UNI Human Subjects Handbook. You may commence participation of human research subjects in your project.

Your project need not be submitted for continuing review unless you alter it in a way that increases the risk to the participants. If you make any such changes in your project, you should notify the Graduate College Office.

If you decide to seek federal funds for this project, it would be wise not to claim exemption from human subjects review on your application. Should the agency to which you submit the application decide that your project is not exempt from review, you might not be able to submit the project for review by the UNI Institutional Review Board within the federal agency's time limit (30 days after application). As a precaution against applicants' being caught in such a time bind, the Board will review any projects for which federal funds are sought. If you do seek federal funds for this project, please submit the project for human subjects review no later than the time you submit your funding application.

If you have any further questions about the Human Subjects Review System, please contact me. Best wishes for your project.

Sincerely,

Norris M. Durham, Ph.D.
Chair, Institutional Review Board

cc: Dr. John Somervill, Graduate Dean
Dr. Mary Nan Aldridge
APPENDIX C

Permission to Utilize Questionnaire
I hereby grant permission for Susan Kay Sherwood to use the
teacher questionnaire, an instrument designed to identify
teacher attitudes and concerns relevant to the process of
integrating handicapped children into regular classrooms, in
her dissertation "Principals' Perceptions About Regular
Education Teachers' Attitudes Concerning Integration".

[Signature]

December 9, 1989

(name)

(date)
APPENDIX D

Teacher Questionnaire
Survey of Teachers' Experiences With, and Attitudes Toward Integration of Students With Handicaps

Directions: Please answer the following questions by using a check mark [√], or filling-in the answer where requested.

The following three items refer to students with diagnosed impairments.

Do you currently have in your classes, students with: (Please check all that apply.)

[ ] Communication disorders [ ] Learning disabilities
[ ] Emotional disturbances [ ] Mental retardation
[ ] Hearing impairments [ ] Orthopedic problems
[ ] Health impairments [ ] Visual impairments

Have you ever taught, students with: (Please check all that apply.)

[ ] Communication disorders [ ] Learning disabilities
[ ] Emotional disturbances [ ] Mental retardation
[ ] Hearing impairments [ ] Orthopedic problems
[ ] Health impairments [ ] Visual impairments

Would you be willing to teach, students with: (Please check all that apply.)

[ ] Communication disorders [ ] Learning disabilities
[ ] Emotional disturbances [ ] Mental retardation
[ ] Hearing impairments [ ] Orthopedic problems
[ ] Health impairments [ ] Visual impairments

Which of the following types of impaired or disabled people have you known who have been successful or productive adults? People with: (Please check all that apply.)

[ ] Communication disorders [ ] Learning disabilities
[ ] Emotional disturbances [ ] Mental retardation
[ ] Hearing impairments [ ] Orthopedic problems
[ ] Health impairments [ ] Visual impairments

On the following page are some statements with which some teachers agree while others may disagree. Please respond to the statements based upon your observations about most cases, though it is recognized that there are always exceptions. For each statement, please circle whether you:

(SA) Strongly Agree (DS) Disagree Somewhat
(A) Agree (D) Disagree
(AS) Agree Somewhat (SD) Strongly Disagree

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.
<table>
<thead>
<tr>
<th>(SA) Strongly Agree</th>
<th>(AS) Agree Somewhat</th>
<th>(D) Disagree</th>
<th>(SD) Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>(A) Agree</td>
<td>(DS) Disagree Somewhat</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1. I feel that handicapped students are placed in regular classrooms without adequate preparation of students or teachers. SA A AS DS D SD
2. My administration is supportive of teachers who have handicaps in their classroom. SA A AS DS D SD
3. The integration of handicapped students into regular classrooms can be beneficial to regular students. SA A AS DS D SD
4. Appropriate instructional materials for teaching handicapped children are readily available. SA A AS DS D SD
5. Support personnel such as consultants, resource teachers, and others are readily available to teachers who teach handicapped children. SA A AS DS D SD
6. Regular class teachers possess a great deal of the expertise necessary to work with handicapped students. SA A AS DS D SD
7. Many of the things teachers do with regular students in a classroom are appropriate to handicapped students. SA A AS DS D SD
8. The integration of handicapped students requires significant changes in regular classroom procedures. SA A AS DS D SD
9. When a handicapped child is placed in my room, the size of the class should be reduced. SA A AS DS D SD
10. I have input into the program and schedule of handicapped students who are placed in the regular classroom. SA A AS DS D SD
11. The students with handicaps in my class will eventually be successful adults, contributing to society. SA A AS DS D SD
12. Handicapped students can work on their own just as well as non-handicapped students. SA A AS DS D SD
13. Public schools should educate handicapped children. SA A AS DS D SD
14. My opinion toward the integration process is more positive now than when it first started. SA A AS DS D SD
15. Inservice regarding general aspects of handicapped students has been valuable to me. SA A AS DS D SD
16. Inservice regarding the integration of handicapped students has been valuable to me. SA A AS DS D SD

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.
Special educators acting as consultants have sufficient knowledge of the regular classroom to give valuable help in the integration process. SA A AS DS D SD

I am willing to work closely with other teachers in planning for the handicapped student. SA A AS DS D SD

If I have a new idea regarding programs for handicapped students, I feel I have the support of my principal in pursuing it. SA A AS DS D SD

Handicapped students are being placed in the educational setting most appropriate to their needs. SA A AS DS D SD

Placement of the handicapped student in the regular classroom: (Please check all that apply.)

[ ] Will hurt the educational progress of the handicapped student.
[ ] Means the regular educator must devote most of his/her attention to the handicapped child.
[ ] Would be disruptive to the other students.

I know where to get help or information regarding students with: (Please check all that apply.)

[ ] Communication disorders [ ] Learning disabilities
[ ] Emotional disturbances [ ] Mental retardation
[ ] Hearing impairments [ ] Orthopedic problems
[ ] Health impairments [ ] Visual impairments

As it pertains to the integration program, I have adequate: (Please check all that apply.)

[ ] Instructional time [ ] Planning/preparation time [ ] Consultation time

I feel confident with my skills in the following areas in relation to handicapped students: (Please check all that apply.)

[ ] Setting goals/objectives
[ ] Measurement of achievement
[ ] Behavior management
[ ] Adaptation of materials and activities
[ ] Developing Individualized Education Programs

Approximately how many times a month do you professionally consult or confer with a special education teacher? (If less than once a month, please enter a zero (0).)

______ Times a month

Approximately how many inservice workshops have you participated in where information was provided about special conditions relating to handicapped students?

______ Number of workshops

-- (OVER, PLEASE) --
Approximately how many in-service workshops have you participated in where information was provided about the integration of handicapped students into regular education classrooms?

_____ Number of workshops

Do you know regular education teachers who have had success integrating handicapped students into the regular classroom? [ ] Yes [ ] No

Have you personally had success with integrating handicapped students into the regular classroom?

[ ] Yes [ ] No [ ] Have not integrated such students into classroom.

Do you think that full-time regular classroom placement can benefit students with: (Please check all that apply.)

[ ] Mild handicapping conditions?
[ ] Moderate handicapping conditions?
[ ] Severe handicapping conditions?

In order to have a better understanding of the teachers participating in this study, we would appreciate your answering the following background information questions.

What grade(s) do you teach? ________________________________

What subject(s) do you teach?

For approximately how many years have you taught:

  Regular education classes? _____ Years
  Special education classes? _____ Years
  Handicapped students? _____ Years

What is the highest level of education you have obtained at this time?

[ ] Bachelor's degree
[ ] Work beyond a bachelor's degree
[ ] Master's degree in: _______________________________________
[ ] Work beyond a master's degree
[ ] Doctorate in: ____________________________________________

What was your undergraduate major? (Please be specific:)

What is your sex? [ ] Female [ ] Male

-- THANK YOU FOR PARTICIPATING IN THIS STUDY --
APPENDIX E

Principal Questionnaire
Directions: Below are some of the survey items sent to:
Using the codes shown below, please circle the extent of agreement or disagreement you think this teacher would give to the following statements. If you are "not sure" about a statement because of "exceptions to the rule," please respond according to how you think this teacher would respond most of the time.

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>SA</td>
<td>Strongly Agree</td>
</tr>
<tr>
<td>A</td>
<td>Agree</td>
</tr>
<tr>
<td>AS</td>
<td>Agree Somewhat</td>
</tr>
<tr>
<td>DS</td>
<td>Disagree Somewhat</td>
</tr>
<tr>
<td>D</td>
<td>Disagree</td>
</tr>
<tr>
<td>SD</td>
<td>Strongly Disagree</td>
</tr>
</tbody>
</table>

I feel that handicapped students are placed in regular classrooms without adequate preparation of students or teachers. SA A AS DS D SD

My administration is supportive of teachers who have students with handicaps in their classroom. SA A AS DS D SD

The integration of handicapped students into regular classrooms can be beneficial to regular students. SA A AS DS D SD

Appropriate instructional materials for teaching handicapped children are readily available. SA A AS DS D SD

Support personnel such as consultants, resource teachers, and others are readily available to teachers who teach handicapped children. SA A AS DS D SD

Regular class teachers possess a great deal of the expertise necessary to work with handicapped students. SA A AS DS D SD

Many of the things teachers do with regular students in a classroom are appropriate for handicapped students. SA A AS DS D SD

The integration of handicapped students requires significant changes in regular classroom procedures. SA A AS DS D SD

When a handicapped child is placed in my room, the size of the class should be reduced. SA A AS DS D SD

I have input into the program and schedule of handicapped students who are placed in the regular classroom. SA A AS DS D SD

The students with handicaps in my class will eventually be successful adults, contributing to society. SA A AS DS D SD
<table>
<thead>
<tr>
<th>(SA) Strongly Agree</th>
<th>(A) Agree</th>
<th>(AS) Agree Somewhat</th>
<th>(DS) Disagree Somewhat</th>
<th>(D) Disagree</th>
<th>(SD) Strongly Disagree</th>
</tr>
</thead>
</table>

Handicapped students can work on their own just as well as non-handicapped students.  
SA A AS DS D SD

Public schools should educate handicapped children.  
SA A AS DS D SD

My opinion toward the integration process is more positive now than when it first started.  
SA A AS DS D SD

Inservice regarding general aspects of handicapped students has been valuable to me.  
SA A AS DS D SD

Inservice regarding the integration of handicapped students has been valuable to me.  
SA A AS DS D SD

Special educators acting as consultants have sufficient knowledge of the regular classroom to give valuable help in the integration process.  
SA A AS DS D SD

I am willing to work closely with other teachers in planning for the handicapped student.  
SA A AS DS D SD

If I have a new idea regarding programs for handicapped students, I feel I have the support of my principal in pursuing it.  
SA A AS DS D SD

Handicapped students are being placed in the educational setting most appropriate to their needs.  
SA A AS DS D SD

FOR THE FOLLOWING ITEMS, PLEASE USE A CHECK MARK [✓].

In your opinion, this teacher would be willing to teach students with: (Please check all that apply.)

- [ ] Communication disorders
- [ ] Emotional disturbances
- [ ] Hearing impairments
- [ ] Health impairments
- [ ] Learning disabilities
- [ ] Mental retardation
- [ ] Orthopedic problems
- [ ] Visual impairments

In your opinion, this teacher would think that the placement of the handicapped student in the regular classroom: (Please check all that apply.)

- [ ] Would hurt the educational progress of the handicapped student.
- [ ] Means the regular educator must devote most of his/her attention to the handicapped child.
- [ ] Would be disruptive to the other students.
In your opinion, this teacher would know where to get help or information regarding students with: (Please check all that apply.)

[ ] Communication disorders  [ ] Learning disabilities
[ ] Emotional disturbances  [ ] Mental retardation
[ ] Hearing impairments  [ ] Orthopedic problems
[ ] Health impairments  [ ] Visual impairments

In your opinion, as it pertains to the integration program, this teacher would feel she/he had adequate: (Please check all that apply.)

[ ] Instructional time
[ ] Planning/preparation time
[ ] Consultation time

In your opinion, which of the following areas do you think this teacher would feel confident in, in relation to handicapped students: (Please check all that apply.)

[ ] Setting goals/objectives
[ ] Measurement of achievement
[ ] Behavior management
[ ] Adaptation of materials and activities
[ ] Developing Individualized Education Programs

How do you think this teacher would respond to the statement: I think that full-time regular classroom placement can benefit students with: (Please check all that apply.)

[ ] Mild handicapping conditions?
[ ] Moderate handicapping conditions?
[ ] Severe handicapping conditions?

This ends your impressions of how you think this teacher would answer the above items. We would now appreciate your answering the following background information questions.

As principal, what level(s) does your supervisory role include: (Please check all that apply.)

[ ] Elementary  [ ] Middle/Junior High School  [ ] High School

How many regular teachers do you supervise? ______ Teachers

For approximately how many years have you been a school principal? ______ Years

In your school, approximately how many students have: (If you are not able to estimate a number, please enter a question mark (?).)

____ Vision Impairments  ____ Orthopedic Problems
____ Communication Disorders  ____ Health Impairments
____ Learning Disabilities  ____ (Are) Mentally Retarded

(OVER, PLEASE)
Approximately how many inservice workshops have you participated in where information was provided about special conditions relating to handicapped students?

______ Number of workshops

Approximately how many inservice workshops have you participated in where information was provided about the integration of handicapped students into regular education classrooms?

______ Number of workshops

Do you know regular education teachers who have had success integrating handicapped students into the regular classroom?

[  ] Yes [  ] No

As a school principal, have you personally had success with integrating handicapped students into the regular classroom in your building?

[  ] Yes [  ] No [  ] Have not integrated such students into regular classroom.

Do you think that full-time regular classroom placement can benefit students with: (Please check all that apply.)

[  ] Mild handicapping conditions?
[  ] Moderate handicapping conditions?
[  ] Severe handicapping conditions?

What is the highest level of education you have obtained at this time?

[  ] Bachelor's degree
[  ] Work beyond a bachelor's degree
[  ] Master's degree in: ________________________________
[  ] Work beyond a master's degree
[  ] Doctorate in: ________________________________

What was your major or area of emphasis for the highest degree you hold? (Please be specific:)

What is your sex? [  ] Female [  ] Male

-- THANK YOU FOR PARTICIPATING IN THIS STUDY --
APPENDIX F

Telephone Introduction to Principals
Hello, I'm Sue Sherwood, project director with the Department of Curriculum and Instruction at the University of Northern Iowa. We are conducting a state wide study of a sample of regular education teachers regarding their experience with, and attitudes toward the integration of students with handicaps. For the purpose of this study, "integration" refers to the involvement of student with mild/moderate/severe handicaps in regular class activities. The term integration encompasses mainstreaming, the primary placement of a pupil in the regular classroom for educational purposes. As the state of Iowa moves toward increased integration in public schools, the information gathered in this study will assist principals in providing inservice and support for teachers in their buildings.

At this point in time we are in the process of randomly selecting the teachers we will include in our study. In order for us to select a teacher from your school, we would appreciate your sending us a list of regular education teachers under your direct supervision in grades (1-6, 7-8, or 10-12). One teacher will be randomly selected and mailed a questionnaire about integration.

By your participation in this study you will be providing valuable information that will assist in the development of university and college programs in the preparation of educators and the inservice of educators presently in the field. This information will be shared with the Department of Education, school administrators, and teachers to assure that the movement toward integration of handicapped children in the state of Iowa will benefit all students.

Could you please give us an approximate idea of when we might be able to expect your list of regular education teachers because we are sampling throughout the state?

Thank you for your cooperation in this important matter.
APPENDIX G

Common Questions and Answers During Phone Conversations
What is this project all about?

This study is designed to identify principals' perceptions of regular education teachers' attitudes toward integration of students with handicaps. The information gathered in this study will assist the development of university programs in the preparation of educators and the inservice of educators presently in the field.

Who is paying for this study?

The project is being paid for cooperatively by myself and the University of Northern Iowa.

How will the project results be used?

The results of the study will be used by university faculty, school administrators, teachers, and others to assure that the movement toward integration of handicapped children in the state of Iowa will benefit all students.

How was I selected for this study?

You and your school district were randomly selected from the Iowa Educational Directory.

Confidentiality

Your responses will be held in confidence and will be used only in statistical tables.
APPENDIX H

Thank You to Principals
March 1990

Dear [Data Base Name]:

Thank you for agreeing to participate in our study dealing with the integration of handicapped students into the regular classroom setting. The questionnaire, letter and a self-addressed stamped envelope are being sent to [Data Base Address], the regular education teacher who was randomly selected for participation. Please encourage the completion and return of the questionnaire to the University.

If you have any questions regarding this matter, please contact our department. Thank you again for assisting us with this study.

Sincerely,

Susan K. Sherwood
Project Director
APPENDIX I

Cover Letter to Teachers
March 1990

Dear [Name],

We are conducting a study of Iowa teachers regarding their experience with, and attitudes toward the integration of students with handicaps. For the purpose of this study, "integration" refers to the involvement of students with mild/moderate/severe handicaps in regular class activities. The term integration encompasses mainstreaming, the primary placement of a pupil in the regular classroom for educational purposes. [Name] has endorsed the participation of [Name] in this study, and your name was selected at random from the list of teachers. The information gathered in this study will assist in the development of university and college programs for the preparation and inservice of educators.

Enclosed is a brief questionnaire which we would appreciate your completing and returning in the postage paid envelope provided. Your answers are confidential and will be used only in statistical tables. The three digit number appearing on the last page of the questionnaire will enable us to contact those who have neglected to return the instrument.

By your participation in this study you will be providing valuable information which will be used by the Department of Education, school administrators, and teachers to assure that the movement toward integration of handicapped children in the state of Iowa will benefit all students. Upon conclusion of this study, a summary of the results will be made available to participants upon request.

We value your thoughts and opinions on this important matter and appreciate your completing and returning the enclosed questionnaire.

Sincerely,

Susan K. Sherwood
Project Director
APPENDIX J

Cover Letter to Principals
April 1990

Dear [Data Base Principal]:

We appreciate your participation in our study of Iowa teachers regarding their experience with, and attitudes toward the integration of students with handicaps. For the purpose of this study, "integration" refers to the involvement of students with mild/moderate/severe handicaps in regular class activities. The term integration encompasses mainstreaming, the primary placement of a pupil in the regular classroom for educational purposes. We received your list of regular education teachers and [Data Base Teacher] was randomly selected. We sent and received the completed questionnaire.

We are now beginning the second phase of the study. In this phase the supervising principal of each teacher who responded to the questionnaire will predict the responses of that teacher toward the integration process. The information gathered in this study will assist in the development of university and college programs for the preparation and the inservice of educators.

Enclosed is a brief questionnaire which we would appreciate your completing and returning in the postage paid envelope provided. Your answers are confidential and will be used only in statistical tables.

Through your participation in this study you will be providing valuable information which will be used by the Department of Education, school administrators, and teachers to assure that the movement toward integration of handicapped children in the state of Iowa will benefit all students. Upon completion of this study, a summary of the results will be made available to participants upon request.

We value your thoughts and opinions on this important matter and appreciate your completing and returning the questionnaire.

Sincerely,

Susan K. Sherwood
Project Director

P.S. I know that this is in no way an adequate fee,
But have a cup of coffee and a doughnut on me!