

PLACE IN RETURN BOX to remove this checkout from your record.
TO AVOID FINES return on or before date due.

DATE DUE	DATE DUE	DATE DUE
JUN 18 1997		
JUN 18 1998		
SEP 04 2001		

MSU Is An Affirmative Action/Equal Opportunity Institution

c:\circ\datedue.pm3-p.1

PERCEPTIONS OF GENERAL AND SPECIAL EDUCATORS AND ADMINISTRATORS
TOWARD AGREEMENT WITH THE GOALS AND ACCEPTABILITY OF PROCEDURES
OF THE REGULAR EDUCATION INITIATIVE

Volume I

By

Jane C. Davis

A DISSERTATION

Submitted to
Michigan State University
in partial fulfillment of the requirement
for the degree of

DOCTOR OF PHILOSOPHY

Department of Counseling, Educational Psychology
and Special Education

1989

7181009
6001816

ABSTRACT

PERCEPTIONS OF GENERAL AND SPECIAL EDUCATORS AND ADMINISTRATORS TOWARD AGREEMENT WITH THE GOALS AND ACCEPTABILITY OF PROCEDURES OF THE REGULAR EDUCATION INITIATIVE

By

Jane C. Davis

The Regular Education Initiative (REI) is a growing movement to merge general, remedial, and special education into a unified system of instruction. The focus of the REI is to reduce the unintended effects of separate programs which have resulted in fragmented, disjointed, and isolated services. All resources such as staff, materials, and methods would be "pooled" or shared and thus benefit all students, including students with learning problems. This shared responsibility for students with learning problems is the essence of the Regular Education Initiative.

If the REI proposals are enacted, they will have a profound effect on the way instructional services are delivered to special needs learners. These students would spend the majority of time, if not all, in the general education classroom. The REI is not, however, a movement to take away services. The support of special and remedial education will still be present, but provided in different organizational and staffing patterns. This initiative has been advanced at the federal level and supported by many professionals in the academic community. There is a paucity of data, however, on the perceptions of general and special

educators and administrators toward the REI. More specifically, do they agree with the goals, and do they accept the procedures?

A random sampling of 400 general educators, 400 special educators, and 400 administrators in Michigan was sent a questionnaire. The return rate was 51%. Information gained through the questionnaire concerned the three groups' beliefs toward REI goals and procedures, required technical assistance, and factors which might inhibit and promote REI proposals.

Results indicated that there is general agreement with the REI goals and procedures among all groups. There are significant differences, however, among general educators, special educators, and administrators at the classroom, building, and system levels. Information about these differences in beliefs can inform policy makers as they begin experimenting with trial REI efforts.

To my mother, Marion G. Davis,
and to my Friends, Donna and Tony Reyna,
who have always been there for me

ACKNOWLEDGEMENTS

I would like to express my deepest regard to my advisor and friend, Dr. Don Burke. His personal warmth and encouragement for the past two years of my doctoral study have sustained me. I have the distinction of being Dr. Burke's last doctoral student as he will be retiring. He can be assured that his impact on my life and on many previous students' lives will always be treasured.

I extend my gratitude to Dr. Larry Maheady for his initiation and guidance and of this study. Dr. Maheady unselfishly gave many, many hours of his time reviewing my work and offering advice. I am indebted to his interest and support throughout the long, stressful months of formulating the design and conducting the research. More important, Dr. Maheady's optimism concerning the potential of instructional practices for special needs learners will be remembered long after this study is forgotten.

By listing the following names, I do not mean to diminish everyone's important contribution. I hope they know that their support meant a great deal to me: Fran Barger, Nancy Bonkowski, Chery Esch, Dr. Don Freeman, Dr. Bill Frey, Ned Hubble, Alice Noel, Dr. Sam Moore, Dr. Susan Peters, Lynn Sumpter, Dr. John Wagner, Carol Weickmann, and Judy Winn.

A very special thank you to the Michigan Association for Retarded Citizens and Special Education Services, Michigan Department of Education for their contribution. I am proud to have had their patronage.

TABLE OF CONTENTS

	Page No.
Chapter I - THE PROBLEM	1
Introduction	1
Problem	5
Purpose of Study	10
Research Questions	11
Significance of Study	12
Definitions	13
 Chapter II - LITERATURE REVIEW	 18
Organization of Schools	20
Restructuring of General and Special Education: Toward a Paradigm Shift	46
Values, Beliefs, Attitudes and Organizational Change	105
 Chapter III - METHODOLOGY	 132
Setting Population and Sample	132
Selection of Survey Technique	136
Instrument Development	140
Distribution and Collection of Questionnaire . .	162
Coding of Data	181
Treatment of Data	181

TABLE OF CONTENTS continued

	Page No.
Chapter IV - RESULTS	193
Question 1: Do education professionals agree with the goals of the Regular Education Initiative (REI)?	193
Question 2: Do education professionals accept the procedures of the Regular Education Initiative (REI)?	223
Question 3: What levels of assistance are needed for REI procedures to be implemented? .	247
Question 4: Is there a relationship between agreement with the goals of REI and acceptance of REI procedures?	250
Question 5: What factors will inhibit and promote agreement with the goals of REI and acceptance of REI procedures?	253
Chapter V - DISCUSSION, CONCLUSIONS, AND RECOMMENDATIONS . . .	273
Introduction	273
Question 1: Do education professionals agree with the goals of the Regular Education Initiative (REI)?	275
Question 2: Do education professionals accept the procedures of the Regular Education Initiative (REI)?	288
Question 3: What levels of assistance are needed for REI procedures to be implemented? .	294
Question 4: Is there a relationship between agreement with the goals of REI and acceptance of REI procedures?	296
Question 5: What factors will inhibit and promote agreement with the goals of REI and acceptance of REI procedures?	296
Conclusions	302
Recommendations	307

TABLE OF CONTENTS continued

	Page No.
APPENDIX A	320
Goals of the Regular Education Initiative (REI)	321
Procedures of the REI	327
Levels of Assistance Needed to Implement Procedures	338
Pragmatic Barriers to REI	345
Conceptual Barriers to REI	346
Affective Barriers to REI	347
Factors Which Promote the REI	348
APPENDIX B	350
Cover Letter	350
Questionnaire	351
Telephone Permission	357
Follow-up Postcard	357
Follow-up Cover Letter	358
Human Subjects Approval	359
LIST OF REFERENCES	360

LIST OF TABLES

		Page No.
Table 1	Return Rate of Questionnaires Following First Mailing	166
Table 2	Return Rate of Questionnaires Following Second Mailing.	167
Table 3	School Level Assignment of General Educators, Administrators, and Special Educators	168
Table 4	General Education Experience of General Educators, Administrators, and Special Educators	169
Table 5	Special Education Experience of General Educators, Administrators, and Special Educators	170
Table 6	Education Level of General Educators, Administrators, and Special Educators	171
Table 7	Role of Special Educators at Assigned Positions . .	172
Table 8	Inservices with Special Needs Learners by General Educators, Administrators, and Special Educators.	173
Table 9	Extent of Schools' Readiness with General-Special Education Collaboration by General Educators, Administrators, and Special Educators	174
Table 10	Personal Participation with General-Special Education Collaboration by General Educators, Administrators, and Special Educators	175
Table 11	Personal Satisfaction with General-Special Education Collaboration by General Educators, Administrators, and Special Educators	176
Table 12	Number and Percentage of Non-Respondents and Respondents by Geographic Region	180
Table 13	Variables Coded for Factors which Inhibit REI Efforts in Respondents' Schools	187
Table 14	Variables Coded for Factors which Promote REI Efforts in Respondents' Schools	189
Table 15	Mean Agreement with Goals of the REI by Groups. . .	194
Table 16	Analysis of Variance on Mean Agreement with Goals for General Educators, Administrators, and Special Educators	195

LIST OF TABLES (continued)

Page No.

Table 17	Mean Agreement with Clusters of Goals by Groups . .	196
Table 18	Analysis of Variance on Mean Agreement of Goal Clusters with General Educators, Administrators and Special Educators	197
Table 19	To Integrate Special Learners Most of Time in General Classrooms by Groups	199
Table 20	To Increase Instructional Time in General Education by Group Agreement	200
Table 21	Use Instructional Methods Effective for Special Education in General Classrooms by Groups. . . .	201
Table 22	Use Instructional Methods Effective for General Education with Special Learners by Groups. . . .	202
Table 23	Provide Additional Assistance Without Labeling Special Learners Impaired by Groups.	203
Table 24	Spend more Time Altering Instructional Practices to Teach Special Learners Than Assessing Them by Groups	204
Table 25	Reduce Social Stigma by Providing Increased Opportunity for Social Interactions in General Classrooms by Groups	205
Table 26	Empower Principals to Control all Programs by Groups	206
Table 27	Coordinate Curricular Activities Between General and Special Education by Groups.	207
Table 28	Increase Collaborative Teaching Arrangements Among General and Special Educators by Groups	208
Table 29	Negotiate New Roles Among Staff for Sharing Responsibility for Special Learners by Groups. .	209
Table 30	Pool Instructional Resources into One Unified Delivery System by Groups	210
Table 31	Increase Teacher's Ability to Instruct Diverse Learners by Groups	211
Table 32	Develop Administrative Policies that Provide Incentives for General Educators to Teach Special Learners by Groups	212

LIST OF TABLES (continued)

Page No.

Table 33	Two Facotor Analysis of Variance on Education Professionals' Mean Agreement with Goals of REI and Grade Level	214
Table 34	Two Factor Analysis of Variance on Education Professionals' Mean Agreement with Goals of REI and General Education Experience	215
Table 35	Two Factor Analysis of Variance on Education Professionals' Mean Agreement with Goals of REI and Special Education Experience	217
Table 36	Two Factor Analysis of Variance on Education Professionals' Mean Agreement with Goals of REI and Number of Inservices	218
Table 37	Two Factor Analysis of Variance on Education Professionals' Mean Agreement with Goals of REI and School Readiness	219
Table 38	Effect of Education Professionals' Participation in Collaborative Efforts and Mean Agreement with Goals of REI	220
Table 39	Two Factor Analysis of Variance on Education Professionals' Mean Agreement with Goals of REI and Satisfaction with Participation	221
Table 40	Analysis of Variance on Special Educators' Role and Mean Agreement with Goals of the REI	222
Table 41	Mean Acceptance of REI Procedures by Groups	224
Table 42	Analysis of Variance on Mean Acceptability of Procedures with General Educators, Administrators, and Special Educators	225
Table 43	Mean Agreement with Clusters of Procedures by Groups	226
Table 44	Analysis of Variance on Mean Acceptance of Procedure Clusters with General Educators, Administrators, and Special Educators	227
Table 45	Include Specialized Instruction (Braille, Sign Language) by Groups	230
Table 46	Make at Least Three Instructional Modifications Prior to Referring by Groups	231
Table 47	Fund Services by Block Entitlement by Groups	234

LIST OF TABLES (continued)

Page No.

Table 48	Provide Waivers for Performance by Groups	235
Table 49	Two Factor Analysis of Variance on Education Professionals' Mean Acceptance of Procedures of REI and Grade Level	237
Table 50	Two Factor Analysis of Variance on Education Professionals' Mean Acceptance of Procedures of REI and General Education Experience	238
Table 51	Two Factor Analysis of Variance on Education Professionals' Mean Acceptance of Procedures of REI and Special Education Experience	240
Table 52	Two Factor Analysis of Variance on Education Professionals' Mean Acceptance of Procedures of REI and Number of Inservices	241
Table 53	Two Factor Analysis of Variance on Education Professionals' Mean Acceptance of Procedures of REI and School Readiness	242
Table 54	Effect of Education Professionals' Participation in Collaborative Efforts and Mean Acceptance of Procedures of REI	243
Table 55	Two Factor Analysis of Variance on Education Professionals' Mean Acceptance of Procedures of REI and Satisfaction with Participation	244
Table 56	Analysis of Variance on Special Educators' Role and Mean Acceptance of Procedures of REI	245
Table 57	Summary of Significant Demographic Characteristics and Mean Agreement to REI Goals and Procedures..	246
Table 58	Levels of Assistance Needed to Implement REI Classroom Procedures (Cumulative Responses) by Groups	248
Table 59	Correlation (Pearson R) Matrix Between Mean Agreement with Goals of REI and Mean Acceptability of Procedures for All Groups	251
Table 60	Personal Agreement to REI by Groups	252
Table 61	Barriers to Implementation of the REI by Groups.	254
Table 62	Telephone Interviews with General Educators, Special Educators, and Administrators Concern- ing General-Special Education Collaboration	261

LIST OF FIGURES

Page No.

Figure 1	Respondents and Non-Respondents Identified by Geographic Region	179
Figure 2	Mean Agreement with Goals of REI by Years of General Education Experience for General Educators, Administrators, and Special Educators	216
Figure 3	Mean Acceptability of Procedures of REI by Years of General Education Experience for General Educators, Administrators, and Special Educators	239

CHAPTER I
THE PROBLEM
Introduction

Federal government officials and educators have advanced an "initiative" to create fundamental changes in the way children with learning problems are educated. Their shared concerns for the improvement of education for children with learning problems are a result of an accumulating body of evidence that suggests our present system is not succeeding completely. In response to the wide-ranging educational needs of these students and the challenge of educating an increasingly diverse student body, a number of "special" programs have been created (e.g., special, bilingual and compensatory education). As federal and state departments of education have increased instructional programs and related services, a second system of education has expanded. Why is this second system of education now being called into question?

Paradoxically, the efforts to expand educational opportunities by developing a variety of programs have become problematical. Among the more pressing issues are: (a) flawed classification and placement systems have led to the over-identification of students as handicapped, particularly in the category of learning disabilities; (b) fragmentation and lack of coordination of programs have resulted from the independent creation, administration, and separation of these programs from the

mainstream; (c) "pull-out" service delivery approach has reinforced the tendency to overlook the general educational programs as a possible site for improvement efforts; and (d) excessive costs of maintaining this second system have not been justified in light of such outcome measures as graduation and employment rates (for example, see Gartner & Lipsky, 1987; Hagerty & Abramson, 1987; Reynolds & Lakin, 1987; Will, 1986).

The Regular Education Initiative

These issues have provided the impetus to calls for reform. The federal government's initiative to make educating students with learning problems a "shared responsibility" is called the Regular Education Initiative of the Office of Special Education and Rehabilitative Services, U.S. Department of Education (Heller & Schilit, 1987). To bridge the gap between the two separate systems, special and general, educators were called upon to share responsibility for delivering coordinated and comprehensive services for all students based on educational needs rather than eligibility requirements for categorical programs. The term, "Regular Education Initiative" (REI), has become the rubric under which various notions of reform have been advanced.

In general, proponents for reform recommend that instead of the dual system of instruction, resources should be pooled into one unified delivery system to educate all students. By pooling such resources as personnel expertise and instructional technology, children with learning problems will be able to receive all of their instruction in the general education setting. REI is not, however, a movement to take away services. The support of special and remedial education will still be

present, but provided in different organizational and staffing patterns. Through a renegotiation of roles, specialists will become teacher consultants and provide services either indirectly through consultation or directly in the classroom through co-teaching arrangements. Support to the general education teacher will also be provided through building instructional teams. Building principals will be empowered to coordinate all instructional programs, special and remedial, for the benefit of the total student body. Through collaborative arrangements and staff development opportunities, REI proponents believe that their proposals can succeed. However, other professionals are skeptical.

Polarization of Views

Because the proposed measures suggest radical changes in the way special program services are delivered, the REI has become one of the "hottest" topics in special education today. As a result, debate has ensued between advocates of REI and opponents who question the underlying premises. Arguments against the REI include: (a) hard-won rights and financial entitlement may be in jeopardy as students are placed back in general education; (b) national reform reports did not indicate that general education was providing effective instruction to students with learning problems; (c) "microeconomics" of the system (e.g., class size, scheduling, resources) present barriers to organizational change; (d) there are insufficient data to demonstrate that instructional technology (e.g., peer tutoring, cooperative learning, Adaptive Learning Environments Model) can be effective with special needs students in the general classroom; and (e) the "excellence movement" may force special

needs students out of the general classroom as teachers strive to increase mean performance gains in order to comply with higher standards (see Kauffman, Gerber & Semmel, 1988; Lloyd, Crowley, Kohler, & Strain, 1988; McKinney & Hocutt, 1988).

Thus, although the field is divided on the issue of REI, there are "unarguable assumptions" which have been advanced to support a common reform agenda among all professionals.

A Common Agenda

Important to the implementation of REI is general agreement among supporters and critics with the underlying concepts supporting this movement. Kauffman, Gerber, and Semmel (1988) summarized nine "unarguable assumptions" against which few educators would be willing to mount arguments. These assumptions are: (1) There needs to be better integration and coordination of services for students who have difficulty in school. (2) The most effective and economical methods of serving handicapped students should be sought. (3) Students should be identified as needing special services only when necessary and placed with their non-handicapped peers to the maximum degree possible without denying the rights of other non-labeled students. (4) Special educators should focus their efforts on students with severe needs and not on students who can be taught successfully by classroom teachers. (5) Research on instruction and effective schools provides new research-based technology and suggests guidelines for reform. (6) Most educational practices which are appropriate for one group of students are appropriate for all students. (7) Some students fail because of inadequate instruction in

the classroom. (8) A cascade of services along a continuum of restricted placement to placement in the general classroom should be maintained and matched to the needs of students. (9) Identification of handicapped students and assessment procedures are difficult and controversial.

With these statements providing the basis for a common agenda, guidelines for reform are now in place. It appears to be more a matter of what direction practices will take rather than the possibility that the process may not occur at all. Yet there are arguable assumptions. This point leads to the problem investigated in this study.

Problem

Three Arguable Assumptions

In general, there are insufficient data to support three assumptions advanced in support of the REI. These arguable assumptions are: (a) General educators will agree to teach students with learning problems; (b) Special educators will support a return of special needs students back to general education classrooms; and (c) administrators will welcome the responsibility for combining separate programs into one unified delivery system of services. Thus, do these professionals agree with the goals of the REI and will they find them acceptable to implement?

Lack of Input from General Educators

Although the REI is referred to as a regular education initiative, the assumptions and proposals being advanced have originated from the field of special education. Discussions about the REI are lacking input

from general educators. "Yet it will be regular educators who implement the proposed changes. Their views are pertinent and necessary and must be considered in decisions about the initiative" (Keogh, 1988, p. 4).

McKinney and Hocutt (1988) also commented on the lack of general educator input:

Regular educators, who constitute the largest single group to be affected by these proposals, have not had significant input. Yet the successful implementation of these procedures is dependent upon the collaboration and support of regular educators. Based on this fact alone we would question the wisdom of implementing these proposals on the basis of anything except an experimental scale until we know the stance of support of our colleagues in regular education. (p. 15)

Through the years, general educators have relied on the second system to educate students with chronic learning problems. During the past 11 years, general educators have been told to comply with the mandates of PL 94-142 and to identify students who might have handicapping conditions. By referring these students for special education and related services, teachers were reassured that special students' "real" needs could be met. Through the repeated selling of special education's benefits, teachers have gradually believed in the efficacy of this delivery system. The rising incidence rate of the nation's special education population testifies to general educators' commitment to the task of referral. Thus, they have "referred out" believing that special education is the most beneficial placement and that special needs students cannot be serviced by anyone other than a specially trained professional.

Now, according to REI proponents, general educators need to be "reprogrammed" into believing that the general classroom is the best

place to educate students with learning problems. What are their attitudes to this change in service delivery? As Kauffman, Gerber, and Semmel (1988) reported, the attitudes of general educators have not been solicited. They stated:

Conspicuously absent from the literature supporting the REI are ... data reflecting attitudes of regular classroom teachers toward proposed changes in the structure of general and special education. ... Our concern, therefore, is that enough respect be shown for regular classroom teachers to ask them what they perceive, based on teaching practice, is feasible, desirable, and in the best interests of students. Aside from research of Walker and his associates, little attention has been given to this matter. (p. 9)

Mesinger (1985) also questioned the implicit assumption of the REI that general educators are in agreement with serving special needs students in the their classrooms through forming partnerships with special education and other special programs. He observed:

The reader of their (Stainback & Stainback, 1984) article will please note that any validation or corroborative statements made by so-called "regular educators" are conspicuous by their absence. Therein lies one of the rubs. We have thrown a wedding and neglected to invite the bride. (p. 513)

Many general educators feel mired and caught in an "excellence versus equity" trap (Sapon-Shevin, 1987; Shepard, 1987). They feel public pressure to improve the overall academic performance levels of students. How will they "accommodate" students with learning problems within their classes which may result in an overall decrease of achievement scores (Gersten, Walker, & Darch, 1988)?

Lack of Input from Administrators

Not only must the perceptions of general educators be sought, but also the perceptions of administrators (Davis, 1989; McKinney and Hocutt, 1988). Administrators have overwhelming demands such as scheduling, staffing, fiscal responsibilities, and parent and community relations. They may consider the added responsibility unrealistic given the many pressures. Some administrators are hostile to the long line of perceived top-down policy attempts to dictate and control program implementation. Another concern is the lack of proper training to assume the responsibility for restructuring services. Principals are faced with a difficult dilemma. On the one hand, they are being encouraged to assume greater advocacy for special education programs, while, at the same time, they must be sensitive to a backlash effect relative to the perceived favoritism being granted to children with special needs (Davis, 1989). Another question arises concerning the support administrators will give to providing scarce resources to implement REI efforts at the building level. Will administrators be willing to fund needed staff development and elicit staff commitment to accomplish the goals of REI? These questions must be answered in order to provide data to support the acceptance and feasibility of REI proposals.

Lack of Input from Special Educators

The input of special educators must be elicited as they are being asked to alter some very basic philosophical and educational beliefs and practices (Keogh, 1988; McKinney & Hocutt, 1988). Davis (1989) described their frustrations:

Many special educators are skeptical and untrusting of a regular education system they have been taught to suspect. They harbor feelings of guilt for abandoning their students and feel betrayed by former highly respected professors who seem to be suggesting a total "philosophical flip-flop." (p. 443)

After years of specialized preparation, will special educators be willing to accept the proposition that their services are not effective and entrust the education of students with learning problems to general educators? It should be emphasized that PL 94-142 guarantees rights to educational services for thousands of students who had previously been ignored, excluded, or badly served by a general educational system. Some special educators may perceive they are being asked to waive their advocacy role for the rights of handicapped children to obtain appropriate special education and related services. There is also the question whether special education teachers will accept the possible "second-order" status (Reynolds & Wang, 1983) as they become viewed as aides or unwanted consultants by general educators.

Acceptability of REI Procedures

Do general educators find REI procedures acceptable? If not, will they implement them? The literature on social validity and acceptability suggests not (Martens, Peterson, Witt, & Citrone, 1986; Witt, Elliot, & Martens, 1983). It seems that what professionals believe about a particular innovation may affect their decision to use and support it.

As Wolf (1978) observed:

If the participants don't like the treatment then they may avoid it, or run away from it, or complain loudly. And thus society will be less willing to use our technology, no matter how potentially effective it might be. (p. 208)

The most pressing reason for assessing acceptability is to increase the likelihood that innovative practices will be used and will be implemented as intended (Witt & Elliot, 1985). "Effective" procedures that are unacceptable to teachers and which are therefore not implemented, have a very low probability of benefitting anyone. An intervention that is not used is no intervention at all. Thus, it is important to begin to identify factors related to consumer use and acceptance of strategies proposed by the REI in order to realize the "shared partnership" between general and special educators.

However, it appears that specific factors describing the substance of REI are not well spelled out or tested. Keogh (1988) noted:

It is interesting that for the most part the financial, professional, administrative, and pedagogical implications of the initiative have not been presented in any detail. The effects on systems as well as individuals need discussion.
(p. 4)

Thus, the problem of insufficient data to answer the above concerns regarding general and special educators' and administrators' perceptions of the REI suggests a significant deficiency in the research literature. Goals and procedures must be definitively presented to educators and their responses systematically recorded. Moreover, without current knowledge of professionals' perceptions, efforts toward implementing REI proposals may be misguided.

Purpose of Study

The researcher's purpose in the study is to address the serious shortage of information concerning education professionals' (i.e., special and general educators and administrators) perceptions of the REI.

Specifically, three areas will be assessed: (a) educators' agreement with the goals of the REI; (b) educators' acceptance of procedures; and (c) educators' perceptions of needed assistance if procedures are to be implemented.

In order to investigate this problem of insufficient data concerning educators' perceptions toward the acceptability of goals and feasibility of procedures, the following research questions are posed.

Research Questions

1. Do education professionals agree with the basic goals of the REI?
 - (a) What is the level of agreement among the three groups (i.e., general and special educators and administrators)?
 - (b) Do significant differences exist among the three groups?
 - (c) What is the relationship between demographic and experiential background and the level of educators' agreement with the REI premises?
2. Do education professionals accept the procedures to implement REI proposals?
 - (a) What is the level of acceptability among the three groups?
 - (b) Do significant differences exist among the three groups?
 - (c) What is the relationship between demographic and experiential background and the level of educators' acceptance of procedures?
3. What levels of assistance are needed for REI procedures to be implemented?
 - (a) What are the needed levels of assistance among the three groups?
 - (b) Do significant differences exist among the three groups?
4. Is there a relationship between agreement with the goals of REI and acceptance of REI procedures?
5. What factors will inhibit and promote agreement with the goals of REI and acceptance of REI procedures?

Hypotheses

Several hypotheses are proposed for this study. The proposed null hypotheses are:

- Ho₁ There will be no significant differences among the groups in their levels of agreement with the goals of the REI.
- Ho₂ There will be no significant differences among the groups in their levels of acceptance of the procedures of the REI.
- Ho₃ There will be no significant differences among the groups in the levels of assistance needed to implement the procedures of REI.
- Ho₄ There will be no significant relationship between agreement with the goals of the REI and acceptability of procedures of the REI among groups.
- Ho₅ There will be no significant difference in factors which inhibit and promote the goals and procedures of the REI among groups.

Significance of Study

This study is important in two respects. First, it may contribute valuable information regarding educators' perceptions of and attitudes toward the Regular Education Initiative. More specifically, data will describe current attitudes toward education professionals' agreement with the goals and acceptability of procedures that REI proponents have advanced. Secondly, the data may be useful in studying issues reflecting receptivity or readiness to change. These issues include identifying: (a) technical assistance that will be needed to implement recommended REI procedures (e.g., in-service, consultation); (b) inhibitors to change (e.g., belief in the efficacy of the pull-out model of services); and (c)

factors which will facilitate change (e.g., agreement with the benefit of collegial collaboration). Through knowledge of those factors which may either inhibit or promote change, system- level efforts can be directed to logistically arrange the type of necessary actions supportive of change. For example, the Michigan Department of Education (MDE) may find that the data indicate a need to conduct more awareness sessions (e.g., holding conferences with prominent keynote speakers in the field of REI research) before embarking upon projects to implement the recommended procedures. Thus, information may impact on future planning considerations toward REI efforts.

Definition of Terms

Acceptability - Implies agreement, accord with REI proposals. Premises and procedures are in harmony with individually held belief system.

Belief system (of educators)- A possible influence, along with expectations, on instruction and student achievement. Personal belief systems are influenced by prior experience with diverse students, teachers' role definitions, knowledge of appropriate strategies and techniques, and support services available (Winfield, 1986).

Children with learning problems - This term is taken from Will's text "Educating Children with Learning Problems: A Shared Responsibility" (1986). It is used broadly to address children who are having learning difficulties, including those who are learning slowly; those with behavioral problems; those who may be educationally disadvantaged; and those with mild handicapping conditions such as mild specific learning disabilities, mild mental impairment, and emotional problems.

Collaborative programming - Planning which is done between specialists and general education teachers to provide a comprehensive program for students in the general classroom.

Education professionals - Includes both special and general educators as well as administrators (i.e., building principals)

Feasibility - Capable of being implemented or accomplished. The goals of REI can be accomplished given certain procedures. Certain technical assistance can increase acceptance or feasibility of implementation. In turn, the implementation of these procedures can lead to the accomplishment of the goals.

General/regular education - These two terms, general and regular, are used interchangeably in the literature. They describe the typical education which goes on in grades K-12. Teachers themselves, however, prefer "general education teacher."

Goals - The goals of the REI are the efforts which must be expended in order to make the realization of REI possible. In order to realize the overarching goal of integrating children with learning problems in the general education setting, there are enabling goals to make this process happen. Examples are: (a) collaboration between special and general educators; (b) knowledge and use of effective practices; and (c) administrative support given to resource allowances.

Integrative programming - Combining the resources of the various special programs (e.g., special, bilingual, and compensatory education) by servicing children with learning problems in the general classroom.

Intervention - An instructional strategy or method used to remediate a student's learning problem. Such instructional practices may be cooperative learning, reciprocal teaching, or guided practice.

Microeconomics - Describes the practical realities of the school which may interfere with administrative or organizational change. Such realities are class size, scheduling, preparation time, materials, and funding.

Procedures - Describes the efforts needed to implement the goals of the REI. These efforts include technical assistance (e.g., use of consultant to teach an effective strategy such as peer tutoring) and administrative help with the microeconomics (e.g., providing release time to allow training of staff to gain knowledge of effective practices).

Pull-out program - Any specially funded program separate from general education in which the student leaves the general classroom to attend. This program may include special, compensatory, or bilingual education classes.

Regular Education Initiative - Describes the movement to merge regular, remedial, and special education into a coherent system of instructional support. It is not a movement to reduce services; these services would be provided mainly as a support to the general education classroom in order to educate children with learning problems in the mainstream setting.

Second system - Refers to all the separate pull-out programs like Chapter 1 and bilingual and special education which have their own eligibility, certification, and funding mechanisms.

Special needs students - This group of students includes various categories for which the group frequency rates for experiencing educational difficulties are relatively high. These categories include migrant children, children with limited English proficiency, potential drop-outs, children who are drug and alcohol abusers, and children from below the poverty level. Also included are many children considered to be mildly handicapped. These children may be labeled educably mentally impaired, learning disabled, and emotionally impaired (those with less than severe problems). This term is defined the same as "children with learning problems."

Specialist - Educator who teaches in specialized areas of education other than general education. These areas include special, compensatory, and bilingual education.

Support staff - Specialists from the second system who provide help in the form of direct (e.g., co-teaching) or indirect (e.g., consultation) assistance to the general education teacher. Psychologists and counselors may also be part of the support staff.

Technical assistance - Assistance may be provided to the education professional through various resources ranging from unobtrusive to intrusive arrangements. At the end of the continuum is assistance given through in-services following by individual or team consultation and continuing to more intrusive assistance such as in-class modeling or demonstration.

Organization of the Dissertation

Chapter 2 will present a review of the literature to trace the historical, social, political, and economic issues leading to the Regular Education Initiative. Chapter 3 will describe the methodology employed to answer the study's research questions. Presentation and analysis of data will be included in Chapter 4. Chapter 5 will provide a summary as well as discussion of the results, conclusions, and recommendations.

CHAPTER II

LITERATURE REVIEW

Organizational change requires analysis of many facets of the system. This analysis includes structural and cultural frames of reference and subsequent responses to change demands. The way in which an organization structures itself, whether a machine or professional bureaucracy, determines its response to change. The response can either be a different and untried approach or one that merely alters previous practice. Thus, change can be accomplished by either restructuring or restandardizing organizational behavior. Does an organization have a choice? That is, is the inability of an organization to change a dysfunction in that it can but chooses not to change, or is there a mismatch between structure, function, and event?

In order to understand the call by many special educators, professionals, and public officials for a restructuring of the two systems, general and special education, into a unified single system, an examination of the school organization and its relation to special education will be presented. This examination will trace historical, political, and social factors that have led to the progressive inclusion of special needs learners into the general education system. Has this evolving organizational structure been an illusion, however? Children with learning problems continue to spend all or part of their day in

A. Organization of Schools

The organization of schools will be discussed using the construct of a paradigm. Kuhn (1970) postulated that science is governed by paradigms or frameworks for seeing the world about us and for providing the boundaries for investigation. When a paradigm can no longer explain phenomena under investigation, a new paradigm is needed. Thus, a paradigm shift occurs. Paradigms can be used to classify different ways of seeing the organizational realities of schools. Contemporary accounts seem to blur the distinctions between paradigms; no one paradigm is either sufficient or necessary for describing the organization of schools. However, are the prevailing paradigms responsive to the current call for a "restructured" educational system? Under this restructured system, special and general education would no longer be two separate systems. Gartner and Lipsky (1987) state:

There is an alternative to separate systems: a merged or unitary system. The conception of a unitary system requires a "paradigm shift," a fundamental change in the way we think about differences among people, in the ways we choose to organize schools for their education, and in how we view the purpose of that education.
(p. 388)

In order to examine the need for a paradigm shift, historical and prevailing organizational models will be discussed. Why are these models no longer adequate? What new models have been proposed? The ultimate test of an organizational model is its responsiveness to change from both within and without. But how does change occur? Should one examine the structure of the organization or the people within? In order to answer these questions, this first section will examine: (a) functionalist paradigm; (b) social paradigm; (c) reality of school

separate programs. Have previous reform efforts perpetuated a flawed system which will always exclude learners who do not match the structuring of schools? What reform measures does the current movement, Regular Education Initiative (REI), promise that will indeed lead to an integrated school system? Will efforts center on restructuring the system by an entirely different configuration or will efforts only lead to restandardization of the present dual system? Thus, this chapter will funnel issues pertaining to structure and processes of organizations in general, then to general education and special education as specific examples, and finally to professional members themselves. What are their beliefs about a reformed instructional system for students with learning problems - one system for all students?

In order to respond to these questions, the review will be comprised of three main sections. In the first section will be discussed the nature of organizational structures and its relation to school organization and change. The second section will address the relationship between school organization and the possibility of a restructured or unified instructional delivery system integrating general and special education. Finally, the third section will explore the place of beliefs and attitudes in shaping the performance required for creating the necessary change to enable the realization of the Regular Education Initiative. A summary will be provided at the end of each section.

This chapter is thus presented in three parts: (A) organization of schools; (B) restructuring of general and special education: a paradigm shift; and (C) values, beliefs, attitudes, and organizational change.

A. Organization of Schools

The organization of schools will be discussed using the construct of a paradigm. Kuhn (1970) postulated that science is governed by paradigms or frameworks for seeing the world about us and for providing the boundaries for investigation. When a paradigm can no longer explain phenomena under investigation, a new paradigm is needed. Thus, a paradigm shift occurs. Paradigms can be used to classify different ways of seeing the organizational realities of schools. Contemporary accounts seem to blur the distinctions between paradigms; no one paradigm is either sufficient or necessary for describing the organization of schools. However, are the prevailing paradigms responsive to the current call for a "restructured" educational system? Under this restructured system, special and general education would no longer be two separate systems. Gartner and Lipsky (1987) state:

There is an alternative to separate systems: a merged or unitary system. The conception of a unitary system requires a "paradigm shift," a fundamental change in the way we think about differences among people, in the ways we choose to organize schools for their education, and in how we view the purpose of that education.
(p. 388)

In order to examine the need for a paradigm shift, historical and prevailing organizational models will be discussed. Why are these models no longer adequate? What new models have been proposed? The ultimate test of an organizational model is its responsiveness to change from both within and without. But how does change occur? Should one examine the structure of the organization or the people within? In order to answer these questions, this first section will examine: (a) functionalist paradigm; (b) social paradigm; (c) reality of school

organization; (d) response to change demands; and (e) new approaches to school organization.

Functionalist Paradigm: Rational Perspective

Burrell and Morgan (1979) advanced the theory that most organizations are governed by a functionalist paradigm. The organization is seen as an objective, real entity composed of parts that can be analyzed. The organization operates in a stable, predictable, and manageable environment. Each part of an organization is rationally managed in order to make the whole a more productive unit. Bureaucratic theory provides the foundation for a functionalist paradigm.

The educational system has been dominated by the bureaucratic theory for structuring its organization, from approximately the beginning of the progressive era, 1921, and continuing to the 1940s (Haber, 1964). The factory model and bureaucratic model are two examples of a functionalist paradigm.

Factory Model

The factory model had its origin in the factory system of early America. Entering into the industrial age, schools, like small-craft families of the first half of the nineteenth century, gave way to mass production (Schmuck, 1980). Administration of schools by the local neighborhood changed to a formally elected school board and day-to-day affairs were managed by a professionally trained superintendent. One-room schools were replaced by much larger schools staffed by specialists at the elementary and secondary level (Lortie, 1975; Wise,

1979). Thus, school organization can be traced historically to the application of a factory system to a social system. What are the characteristics of this functional model?

The factory model refers to the concern for efficient, rational, goal-directed action. Frederick Taylor, an American engineer, is the name most notably associated with the "efficiency movement" and often called the "father of scientific management" (Taylor, 1948). Dedicated to the principles of rationalist management, Taylor was preoccupied with problems of increasing productivity. He soon focused his attention on the improvement of machinery and the productivity of the worker with the aid of a stop watch and tape measure. This model has a formal control system which includes the specification of required behavior through rules. Authority is delegated downward in such a manner that each level has adequate means to control the behavior of others below it (Herriott & Firestone, 1983). Guided by the efficiency principle of the factory model, managers ignored the human characteristics of workers. Another model considered this influence.

Bureaucratic Model

Writing about the same time as Taylor was Max Weber, a German sociologist, who contributed the first fully developed theory of bureaucracy. For Weber, bureaucracy was a descriptive term for characterizing what is now called formal, large scale, hierarchial organization form. Concerned with human frailty and the general unreliability of human judgment and passion, Weber developed a system of depersonalization. This system would rationally dispense solutions

without the friction of subjective coloring and human error (Bendix, 1960). The theories of both Taylor and Weber supported the concept that organizations were predesignated, omniscient machines and the worker was a passive, inert instrument, performing assigned tasks. Their difference in emphasis was that Weber emphasized the legal domination of "role" or position in a status hierarchy, whereas Taylor stressed the impersonal rationality of measurement. By the time of World War I, a "cult of efficiency" was borne. Scientific management was applied to almost every aspect of social life and, of course, to schools (Lane, Corwin, & Monahan, 1967).

The influence of scientific management on educational administration thus was no accident. At the turn of the twentieth century, progressive reformers viewed scientific management as a means to achieve their goal of social efficiency (Haber, 1964). Fiduciary boards were largely composed of business people who promoted business values and industrial organization on schools. Since graduate training in educational administration did not have a tradition of pedagogy and curricular matters, school administrators adopted the principles of scientific management without questioning their appropriateness to the school setting (Pfeffer, 1982). Whereas the emphasis in business was on things and output, in education this emphasis, in turn, could be applied in terms of rigid discipline, routinized drill and practice, and general acceptance of almost absolute authority (Lane, Corwin, & Monahan, 1967). Instead of becoming instructional leaders well-versed in curriculum and instructional techniques, school administrators became experts in

controlling and managing school organizations (Spring, 1980). Gross (1964) stated:

All the ancestors of administrative thought operated on the explicit premise that by the exercise of reason men could derive feasible and consistent means for attaining desirable ends. It was on this basis that they offered advice to rulers, concerned themselves with administrative education and studied formal organization. (p. 117)

In spite of efforts to reconceptualize training of school administrators, the traditional perspective of scientific management and the application of the factory model or machine bureaucracy continue to dominate the field of educational administration (Skirtic, 1987). Charges have been levied that educational administration is atheoretical and lacks disciplinary foundation (Sizer, 1973; Spring, 1980). Sizer (1973) stated: "It is not merely that we are loath to use theoretical evidence and philosophical concepts; it is even that we denigrate both" (p. 632).

In recent years, however, a number of educators and professionals involved in the study of organizational structures have come to doubt the efficacy of a machine bureaucracy. Such doubts generally arise from one or both of two beliefs: (1) machine bureaucracy does not accurately describe what happens within the organizational structure of a school system; and (2) given the reasons for a school's existence and the need to be responsive to societal changes, the bureaucratic model does not describe what should happen in schools (Scott & Smith, 1987; Schmuck, 1980). Schools must be flexible as they engage in transactions with the community and open to change. Instead, schools were considered to be closed systems, self-contained, and isolated.

Social Paradigm: Environmental Perspective

In the 1950s, a paradigm shift occurred. This time, emphasis was on the social dynamics of workers and the influence of environment on organizations. The message learned from the functionalist paradigm was that worker behavior did not conform to the formal rational structure of the organization; instead, behavior was determined by norms and values of the informal social structure as interaction occurred with the environment.

Systems Theory

Systems theory provides the foundation for a social paradigm. A system is simply defined as a complex of elements in mutual interaction. Systems may be open or closed. An open system is related to and exchanges matter with the environment while a closed system is characterized by an increase in entropy (Griffiths, 1964). Previous organizational theory was built upon the machine analogy and the idea of a closed system. Now a shift occurred and contained an environmental perspective and the idea of an open system.

Systems theory examined two aspects of organizations, social and technological structure. From a social psychology perspective, social systems theory focused on worker involvement in organizations, particularly on how to achieve more participative structures. This open systems perspective takes into account outside influences on worker motivation (Burrell & Morgan, 1979; Barnard, 1968). The simplest and most influential model using this approach was first proposed by McGregor (1960) who contrasted Theory X and Theory Y.

Theory X suggested that people were unwilling to work hard and shunned responsibility. Theory Y, on the other hand, implied that people were conscientious and hard-working. Later, Theory Z was advanced to explain Japanese success with participative management. The approaches of Theories Y and Z represented an advance over Taylor's mechanistic ideas. Managers attempted to incorporate workers into the organizational structure by using scientific methods to increase worker satisfaction. Coordination of the social dimension and technological dimension was done through roles and rules (Lawrence & Lorch, 1967).

In summary, a social paradigm concentrates on the process of organization rather than on its structure. By focusing on social aspects of an organization, the formalism of previous models was rejected. The concepts of structure, goals, and rationality were replaced by the idea of organizational members as actors. Members must select and attune themselves to different aspects of their surrounding environment. Thus, diversity within the functioning of an organization is caused by how individuals construct their own realities.

Schools Create Their Own Realities

Mintzberg (1979) proposed a theory to explain how professionals, operating within an organization configured like a machine bureaucracy, perform roles which contradict rational-technical expectations. Three perspectives will examine roles that professionals have created given the realities of school organization.

Configuration Perspective

Actors in the school organization perform work in a highly individual manner. These actors or professional bureaucrats do complex work that cannot be rationalized and formalized. Members of a machine bureaucracy, on the other hand, do simple work that is involved in standardization of work processes which achieves control through rules and regulations. Schools have been compelled to adopt a machine bureaucracy in order to be seen as legitimate and efficient. The basic problem is that a machine bureaucracy is inappropriate to the complex and often ambiguous work professional bureaucrats do. Although there is a great deal of uncertainty in doing complex work, the assumption is that uncertainty can be handled by each professional. Therefore, teachers are given discretion to make decisions that cannot be prescribed by predetermined events (Skirtic, 1987).

Institutional Perspective

Isolationism, fostered by teachers working alone in their rooms, also adds to this autonomous characteristic of professional relationships (Lieberman, 1988; Sarason, 1982). From his study of 38 schools, Goodlad (1983) reported that the classroom cells in which teachers spend much of their time appear symbolic of their relative isolation from one another and from sources of ideas beyond their experience. Feiman-Nemser and Floden (1986), after reviewing over 50 years of research on the cultures of teaching, also concluded that teachers use little research-based technical knowledge. Interactions with administrators, parents, and other teachers tend to express

teachers' desires to be left by themselves. Sergiovanni (1985) commented on this isolation and related argument to explain the working of a professional bureaucracy:

Within professional bureaucracies, professionals work alone. Further, professional bureaucracies are characterized by too much decentralization; thus, too much autonomy is given to individual workers. Within professional bureaucracies, there is little need for professionals to cooperate, to work together. Since they share a common socialization and possess standardized skills, it is assumed that they will diagnose problems similarly and apply the same standard treatments to these problems. Therefore, what would be the point of having them work together? (p. 4)

An organization structured according to a bureaucratic model will have tight connections between different levels of the hierarchy. In schools, however, such tight connections are not the rule. Often this lack of interdependency among professionals has been called "loose coupling" (Weick, 1982; Meyer & Rowen, 1977). Loose coupling has functional advantages as it allows: (a) organizational stability because changing events can be restricted to only one part of the system; (b) local adaptations without changing the entire system; and (c) organizational actors more control over events. Yet these strengths also become disadvantages in the school. What happens in one classroom has little influence on what happens in another. What administrators plan often has little impact on what teachers actually do in the classroom. Thus, each professional has considerably more latitude in carrying out tasks than would be the case in a machine bureaucracy.

From an institutional perspective, schools live with this basic contradiction: The mythic machine bureaucratic structure is decoupled from the actual professional bureaucratic structure. Formalism and proceduralism require conformity which takes time away from "real work"

(Skirtic, 1987). Since little or no formal procedure exists to govern activity within schools, schools operate according to a "logic of confidence" (Meyer & Rowen, 1977). Much of the work schools do is to reinforce this logic of confidence through rituals and rites of classification and evaluation.

Cultural Perspective

This approach focuses on how an organization establishes its culture through symbols, rites, and myths. Attention is drawn to the fact that whenever people gather, they engage in a form of communication that results in shared ways of viewing the world. Culture is the experienced collection of beliefs that are not readily changed through rational intervention. Schools contain unquestioned regularities that are held together by the "glue" of a school's culture (Sarason & Doris, 1979). How can a culture be managed? Deal and Kennedy (1982) argue that leaders can change a culture, not by following particular programs, but through manipulation of its values. Foster (1986) stated that it is problematic whether understanding the norms, mores, and relationships that govern behavior in an institution can mean that individuals can step outside those same governing rules and cause change.

Response to Change Demands: Rational-Technical and Social Approaches

In responding to dynamic environments, the above paradigms, functionalist (bureaucracy) and process (social), may make one of two types of changes, fundamental or incidental. Both paradigms suggest that organizations can be manipulated in some degree to affect change in

either the structure or the patterns of interaction within the organization. In schools, a fundamental change is one that requires a different type of response than what has been formerly standardized. An incidental response, on the other hand, requires the school to do something additional rather than altering a set of procedures (Skirtic, 1987). Two approaches to change are discussed, rational-technical and social process.

Rational-Technical Approach

A rational-technical approach assumes that rational members in the organization will act on evidence concerning the need for change, and that such change can be accomplished through a program dependent on data (Havelock, 1973). A change agent uses these data to identify problems, research alternatives, and then choose solutions. A rational expert provides a rational solution much in the same way as a doctor diagnoses a patient. Most rational-technical approaches to change in a machine bureaucracy are conducted through changes in rules and regulations that will affect the way work is accomplished. Unfortunately, the school becomes entrenched into more formalism which reinforces the machine bureaucracy (Mintzberg, 1979). Change occurs within an organization, but not change of an organization. Despite support from federal programs and funding, this approach to change never accomplishes its promises (Baldrige & Deal, 1983).

Social Process Approach

Social process approach to change rests on the assumption that change must begin on an individual and interpersonal level. Change can only result from change generated in individuals. The classic example of this model is Lewin's (1951) work on change. He presents three stages, unfreezing, changing, and refreezing. Unfreezing, states Schein (1969), assumes that significant behavior, beliefs, and attitudes are organized by one's self-image. Unfreezing occurs when the self image is disconfirmed; that is, when one's reality is not everyone else's reality. This disconfirmation leads to a situation in which change is possible. Basic assumptions and beliefs are reexamined as new information is accepted. Festinger (1957) terms this redefinition "cognitive dissonance" when actors review their values in a revised context. The last stage, refreezing, involves practicing the new image in different situations.

The process of "individualizing" rules and regulations occurs as a result of social process. Professional bureaucrats adhere to rules through individual interpretation. Weatherley and Lipsky (1977) termed professionals who apply their own discretion to formalized rules, "street-level bureaucrats." They describe this group:

These "street-level bureaucrats," as we have called them, interact directly with citizens in the course of their jobs and have substantial discretion in the execution of their work. ... To accomplish their required tasks, street-level bureaucrats must find ways to accommodate the demands placed upon them and confront the reality of resource limitations. They typically do this by routinizing procedures, modifying goals, rationing services, asserting priorities, and limiting or controlling clientele. ... These accommodations and coping mechanisms that they are free to develop form patterns of behavior which become the program that is "delivered" to the

public. In a significant sense, then, street-level bureaucrats are the policy makers..." (p. 172)

Incidental vs. Fundamental Change

Professionals are bound by the formalized configuration of school organization; they alone cannot make fundamental changes. Thus, school organizations undergo only incidental change and create the illusion they have changed. The loose coupling within the formal structure of schools (e.g., general education classrooms and categorical programs) only permits incidental changes such as added-on programs and specialists. Since these added-on changes are organized separately and purposefully decoupled internally, the organization, K-12, remains intact; only symbolically has change occurred (Meyer & Rowan, 1978; Zucker, 1981). The formalized machine bureaucracy is a nonfunctional structure as a means to control change in teacher behavior; thus, fundamental change can never occur (Skirtic, 1987).

Although structural shifts can occur (e.g., PL 94-142's mandate that handicapped students are to be educated in the least restrictive environment), resistance takes the form of clashes between advocates of the new paradigm and defenders of the old. Attempts to patch up the system incrementally only increase rituals and procedures (e.g., meetings and paperwork lead to more students referred to separate programs). The amount of resistance reflects the degree to which beliefs and values embedded in the change run counter to those in the prevailing paradigm.

It is not only resistance which thwarts change, but the nonadaptable social structure itself. The professional bureaucracy is an

inappropriate organizing principle to bring about innovation (Segiovanni, 1985; Skirtic, 1987; Schmuck, 1980). The professional bureaucracy as a performance organization is based upon the execution of predetermined, standardized programs. It is not a problem-solving organization designed to seek a creative solution to each unique situation. This application of standardized programs accounts for the "pigeonholing" process when new problems are forced into old pigeonholes (Mintzberg, 1979); thus, incidental change results. Things are done in certain ways precisely because they have always been done that way; to do otherwise would not make sense (Zucker, 1981).

What other consequences occur as a result of configuring schools as rational, technology-driven bureaucracies? A growing body of evidence suggests that reliance on the bureaucratic model can lead to consequences more detrimental than the failure of particular efforts at introducing change. Teacher response to policy changes introduced from the top down with little opportunity for teachers to make decisions, to employ their professional expertise, and to feel that they are making a meaningful contribution to the school often leads to teacher militancy, burn-out, alienation, negative employee relationships, and lack of commitment (Alphonso & Goldsberry, 1982; Bacharach, 1983; Cox & Wood, 1980; Kozuch, 1979; McNeely, 1983; Patterson, Purkey, & Parker, 1986).

Debate over appropriateness of paradigms to a specific organizational configuration, can be summarized by Astley and Van de Ven (1983) as they review major debates in organizational theory. Three main points are: (1) Are organizations functionally rational, technical systems or are they socially constructed, subjectively meaningful

enactments of individual action? (2) Are changes in organizational forms explained by internal adaptation or by environmental forces? (3) Are organizations neutral, technical instruments engineered to achieve goals or they manifestations of a wider society? These perspectives include those based on rational structure and those involving social processes. Approaches to understanding these issues should include an analysis of micro-processes to discover how individuals construct their own realities and belief systems in order to understand the relationship between organization and society. New paradigms have been offered, however, which integrate the social reality of schools with an organizational structure to support effective use of resources and innovation.

Promise of New Approaches: Schools as Nonrational Structures

Four organizational models have been proposed which address the deficiencies of historical paradigms and their applicability to schools. They are: (a) new science of organization; (b) nonrational model; (c) cooperative bureaucracy; (d) adhocracy or problem-solving approach. Following a description of these proposed approaches, similarities in the models will be discussed. The discussion will focus on their appropriateness to the social and structural regularities of the school and conclude with the promise of a new paradigm to answer the call for reform.

New Science.

Ramos (1981) proposed a "new science of organization." He stated that organizational theory is naive because it fails to recognize alternative ways of organizing that meet the diverse needs of a society. He proposed a "multicentric" society; that is, a society that allows one to contribute in a variety of ways and makes personal growth and satisfaction a primary goal. According to Ramos, the individual has value. In this paradigm, a reconstructed organization would be both productive for the organization and satisfying for the members as individuals are encouraged to develop and share their expertise. This model differs from the bureaucratic and social systems paradigms because the individual is not manipulated through regulations or programs. As an example in schools, staff development activities would be emphasized, and individual teachers' skills would be recognized and utilized for the total school's instructional improvement.

Nonrational Model.

Patterson, Purkey, and Parker (1986) describe four major beliefs underlying their nonrational model: (1) Goals are defined and decisions are made through a process of compromise among competing interest groups; (2) power can and should be accessible to everyone within the organization, rather than concentrated in those at the top of the organizational ladder; (3) those closest to the action (e.g., teacher, principal) are those best equipped to determine what needs to be done; and (4) school district's primary function is to offer support to individual schools, rather than to impose specific courses of action.

The following four beliefs provide the basis for understanding the difference between the bureaucratic or rational model and nonrational model in issues concerning organizational goals, power sharing, decision-making, relationships between the organization and external environment, and the teaching process.

Organizational goals. According to the bureaucratic model, goals are determined through a rational assessment of the organization's needs and are pursued uniformly by all members of the organization. According to the nonrational model, goals are determined through the process of making compromises among the conflicting claims of various elements within the organization. Instead of all elements working together to accomplish an agreed-upon set of goals, different elements may pursue different goals separately.

Power-sharing. In the bureaucratic view, power is finite and is concentrated at the top of the organizational pyramid. In the nonrational view, power is limitless. Any individual or group within the organization can attain power in proportion to the amount of information, resources, and support that an individual or group can acquire.

Decision-making. According to the bureaucratic model, all data pertinent to a particular issue are gathered and decisions are made on the basis of what options will ensure the achievement of goals. According to the nonrational model, decision-making is the product of compromise among a myriad of conflicting interests. Decisions tend to be made on the practical basis of what is feasible, rather than on the ideal basis of what is most desirable. March and Simon (1958) contrasted satisfactory versus optimal standards in problem-solving activity. Most

decision-making is concerned with the discovery and selection of satisfactory alternatives rather than optimal alternatives. To satisfice is to accomplish tasks at acceptable levels; optimizing reflects an ideal condition in which maximum resources are available and all alternative choices of behavior are compared. There are boundaries to rationality, however. In practice, optimizing is replaced by satisficing.

External environment. The bureaucratic model regards the organization as a closed system. If staff and administrators do their jobs effectively, outside forces will not interfere. The nonrational model accepts that outside forces can and should play a role in determining what happens within the schools.

Teaching process. According to the bureaucratic view, some single teaching technology, discoverable through rational means, will produce the best possible educational outcomes for students. In contrast, the nonrational model assumes that there is no best way to teach all subjects to all students. Consequently, schools are provided with resources they need so that teachers will be able to explore those teaching avenues that offer the most promise for their students.

Cooperative Bureaucracy

Sergiovanni (1985) argues that the most appropriate model for schools is the cooperative bureaucracy. There are two key elements to this model. One key element of the cooperative bureaucracy is the idea that tight and loose structuring are not mutually exclusive. Schools resemble a machine bureaucracy by making clear to members certain nonnegotiable imperatives to which all are expected to adhere. At the

same time, they resemble the professional bureaucracy by allowing workers wide discretion as to how they will function day by day as imperatives are followed. The other key element of a cooperative bureaucracy is the necessity for people to work together to be successful. In a cooperative bureaucracy, teachers do not function as bureaucrats following standardized procedures. Neither do they function as autonomous professionals, each applying individual expertise independently of colleagues. Rather, work is arranged in such a fashion that they are encouraged to work together and share together as they plan, diagnose, teach, and evaluate. Thus, clearly defined school goals can be accomplished through allowing teachers individual discretion to meet those goals as well as through cooperative arrangements to solve problems; these goals, then, are not mutually exclusive.

Examples of a cooperative bureaucracy are already present in schools. Collaboration, a norm that must be present in a cooperative bureaucracy, does not just happen, but involves training (Leggett & Hoyle, 1987; Sharon & Sharon, 1987) and describes a range of practices. These practices that can involve a handful of teachers or an entire faculty. Although collaboration can be encouraged by formal programs, it cannot be imposed on a faculty. Collaboration depends on the voluntary effort of educators to improve their schools and their own skills through teamwork. Rosenholtz (1988) defines collaboration as the "extent to which teachers engage in help-related exchange" (p. 5).

Because the collaborative school is a composite of beliefs and practices, it is easier to describe than to define. Characteristics of the collaborative school are: (a) belief that quality of education is

largely determined by what happens at the school site; (b) conviction that instruction is most effective in a school environment characterized by norms of collegiality and continuous improvement; (c) belief that teachers are responsible for the instructional process and accountable for its outcomes; (d) use of a wide range of practices and structures that enable administrators and teachers to work together on school improvement; and (e) involvement of teachers in decisions about school goals and means for implementing them (see Johnson & Johnson, 1987; Lieberman, 1986; Little, 1982; Purkey & Smith, 1983; Rosenholtz, 1988; Slavin, 1987).

Peer-oriented systems can be embraced by the more inclusive term "cooperative professional development" (Glatthorn, 1987). Cooperative professional development is a process by which small teams of teachers work together using a variety of methods and structures for their own professional growth. Five of these practices include: (a) professional dialogue, (b) curriculum development, (c) collegial consultation, (d) peer coaching, and (e) action research. Professional dialogue occurs when groups of teachers meet regularly for guided discussion of their own teaching as it relates to current developments in education. Dialogue centers around planning before and after instruction, interactive thoughts and decisions while teaching, and the teacher's own theories and beliefs (Buchmann, 1985; Clark & Peterson, 1986). Curriculum development is a cooperative enterprise by which they may operationalize, adapt, or enrich a district-mandated curriculum (Glatthorn, 1987). Collegial consultation process involves a cycle of observations and conferences whereby the consultant helps the teacher improve practice and

the teacher helps the consultant improve consulting skills (Goldsberry, 1986). The peer supervision model which uses elements of clinical supervision to help both teacher and peer supervisor grow professionally has not been as successful (Goldsberry, 1984; McFaul & Cooper, 1984). Peer coaching follows and builds upon staff development and uses a peer interaction process (Saphier & Gower, 1982). The process follows and builds upon staff development, in which teachers learn about the theoretical foundation of the skill, observe and analyze the skill being demonstrated, and practice the skill with feedback. Joyce and Showers (1981) recommend as many as 30 trials for the teacher to achieve executive control of a new model of teaching. Action research is a collaborative effort by teams of teachers to identify an important problem, make decisions about specific research questions, carry out the research design, and then use the results to design an intervention (Corey, 1953; Lieberman, 1986; Tikunoff, Ward, & Griffin, 1979).

Although little data have been gathered that the above cooperative approaches result in improved student behavior (Glatthorn, 1987; Little, 1982; Rosenholtz, 1988), other benefits have been noted. Cooperation among adults promotes greater social support, higher self-esteem, and positive interpersonal relationships (Johnson & Johnson, 1987; Kagan, 1985; Roper & Hoffman, 1986).

Adhocracy or Problem-Solving Approach.

Although disorder appears apparent when conceptualizing schools as loosely-coupled systems, Weick (1985) argued that order is not completely lacking. A more appropriate depictor for schools might be

"underorganized systems." According to Weick, there is some order in spite of the ambiguity of schools. Anyone who can create more order can bring about change. Thus, the very underorganized nature of schools is the characteristic most responsible for change. Ambiguity is reduced when people perceive that they can act to make things happen.

The people who can make things happen gain power. The values of these powerful people affect the organization and what it can become (Weick, 1985). New sets of values are infused into the organization and become a source of innovation. Thus, a paradigm shift occurs. Confident, resolute people can tighten the loose couplings in an underorganized system by encouraging interactions (Weick, 1985).

People who proactively make a difference in what schools can be think and act like problem-solvers and inject problem-solving values. Mintzberg (1979) stated that problem-solving organizations act like adhocracies. Unlike bureaucratic structures organized according to standardization which create loosely coupled arrangements among professionals, adhocracies create reciprocal arrangements. Professionals work cooperatively to solve problems and seek a creative solution to each need. Innovation occurs at the individual professional level. This search for new solutions which characterizes an adhocracy is in contrast to a professional bureaucracy which forces new problems into old pigeonholes (Mintzberg, 1979).

Boleman and Deal (1984) also suggested that a problem-solving approach be applied to organizations. Organizations should be viewed from different frames or ways of seeing; that is, not one frame but all frames, structural (e.g., Weber, Taylor models), human resource (e.g.,

Theory Y), symbolic (e.g., cultural rites and rituals), and political (e.g., systems theory). Individuals should switch across frames to gain new insights and options.

Organization of Schools: Toward a Paradigm Shift

In examining the above newly-proposed approaches, what commonalties do they have? It appears that all four paradigms place value on individual action. Individuals, sharing power, operate in reciprocal relationships to solve problems. Rather than emphasizing "one best way" to solve a problem, these models emphasize creativity and cooperation. There are no fixed solutions or hierarchy of roles to govern problem-solving. Open to ideas, willing to try new options, individuals are committed to questioning fundamental regularities and are confident that they can make a difference. In contrast to paradigms which result in only incidental change, a collaborative problem-solving paradigm questions the very organization itself.

Schmuck (1977) stated that the ultimate goal of an organization is its ability to effectively respond to changing conditions in the environment. He suggested four standards that measure adaptability. They are the organization's ability to: (1) recognize and mobilize to solve problems; (2) command a variety of resources; (3) respond quickly; and (4) assess to see if goals are being met. Through this paradigm shift, school organizations can be responsive to students' needs and professionals can work cooperatively as problem-solvers (Skirtic, 1987).

A component of a critical inquiry paradigm is termed "organizational learning" (Argyris & Schon, 1979). There is a basic difference between

what individuals say and do. Argyris and Schon (1979) call attention to this difference. How people cognitively interpret their behavior (i.e., theory-of-action) may not be the same as their actual behavior (i.e., theory-in-action). Thus an individual may say and truly believe that individual differences should be valued, but continues to act as if all students should perform the same and be "on grade level." Error correction, involving feedback loops, occurs in two ways. A single loop identifies an error and goes back to correct it. For example, in order to account for individual differences, a teacher may feel it is necessary to refer a student to a separate program. A double loop corrects the error but then loops back to correct the source of the error or the "governing variable." For example, if teachers value the norm of individual differences, then there must be some avenue of accommodating these differences within the classroom. Thus, a problem-solving paradigm forces individuals to open up underlying norms for analysis and to discuss possible alternative responses to entrenched behaviors.

Will this proposed paradigm shift answer the new reform proposals advanced by proponents of the Regular Education Initiative? Before answering this question, special education's "progressive inclusion" into the mainstream of general education will be discussed from an historical perspective. The evolution of witnessing handicapped students who were formerly excluded in separate institutions and now presently included in general education classrooms can only be regarded as a positive, major achievement. There were unintended consequences, however. Bureaucratic paradigms which produce only incidental changes can also be applied to the organization of special education as a

separate system. What were these changes and unintended consequences, and how do they relate to the call for a fundamental change or revision of school organization?

Summary

The organization of schools was discussed using the construct of a paradigm. Historically, school organization was governed by a functionalist paradigm. Schools were seen as rational structures operating in a stable, predictable, and manageable environment. One model defined schools as factories which could be efficiently run by scientific managers. Bureaucratic theory provided the basis for administrators to apply standardized rules and enforce hierarchical authority roles. Another theory defined schools as systems. The social dimension of professionals as actors within a structure was coordinated with the technological dimension of the bureaucratic model. Together, these two theories supported the assumption (myth) that schools were objective, functional structures subject to rational management.

Part of the myth of schools as rational structures was the assumption that professional bureaucrats would use their discretionary power within the limits imposed by standardized rules. Because of professional bureaucrats' isolation due to the nature of their work and structure of the school, autonomy led to "decoupling" from the bureaucratic configuration. This loose coupling prevented interdependency among professionals. Schools were recognized as having a culture all their own with unique norms and relationships that could not be managed by a rational-technical approach.

Approach to change is conceived quite differently using a rational paradigm. When thinking of schools as a machine bureaucracy, change is accomplished through rules and regulations. This rational-technical approach will not work, however, in a professional bureaucracy. Instead of altering practices, schools undergo incidental change through preservation of existing standards. Added-on changes are organized separately and purposefully decoupled from the organization giving the illusion of fundamental change.

Since neither the machine or professional bureaucracy are appropriate to match the realities of schools' function, structure, and responsiveness to change, other approaches have been suggested. The commonality of such new approaches as cooperative bureaucracy and adhocracy is the focus on individual action. Members operate in reciprocal relationships as they collaboratively problem-solve. This paradigm emphasizes the questioning of existing regularities by creating new responses.

The stage is set to bring into question the existing regularity of the dual system, general and special education. Special education has been the outcome of incidental change by operating within a bureaucratic model. As part of an increasingly diverse population, more students with learning problems have been identified and more programs have been created. Consequences of these added-on changes have elicited a call for reform. A paradigm shift has been proposed: the necessary restructuring of general and special education.

B. Restructuring of General and Special Education: A Paradigm Shift

From an historical perspective, it is argued that special education has served as a legalizing device by which school organizations could cope with the shifting demands of their institutionalized environment. Special education became decoupled and became a separate system. The Regular Education Initiative calls for an end to the dual systems of education by creating a unified system. This section will discuss three main points: (a) organization of special education from an historical perspective; (b) consequences of historical organizational paradigms; (c) proposed paradigm shift to bring about fundamental change in the way schools are organized; (d) procedures to implement the goals of the REI; and (e) characteristics of a restructured system.

Historical Perspective: Progressive Inclusion

Kauffman (1981) stated that educators have paid little attention to their history. By not looking back and assessing events, educators are doomed to repeat the past. It is appropriate to examine how special education has evolved and to note indices that might point to warning signs about present proposals. Kauffman (1981) has warned that bandwagons go to funerals, too.

Public support for education dates back to the mid-1600s in the United States. The first laws enabled the Commonwealth of Massachusetts to tax its populace and to assume responsibility for schooling. Education continued to be the responsibility of the states; this responsibility was confirmed by the Tenth Amendment to the Constitution. By law, education is also compulsory. Compulsory education was legally

effective in all states by 1918. The democratic ideal of providing both free and compulsory education for the mass of society was unheralded. No other country held out that promise (Kauffman, 1981). As social institutions, schools were designed to serve individuals' well-being through equality of opportunity, as well as other rights guaranteed in the Constitution.

Era of Asylums

How did handicapped children fit into this free and compulsory educational system? The history of handicapped students' gradual or "progressive inclusion" into the general education system (Wang, Reynolds, & Walberg, 1986) can be traced through five eras. In the first era, the early years of the Republic, there were no public provisions for the handicapped. These individuals were either isolated or "stored away" in poorhouses or other charitable centers, sent to asylums, or remained at home. It was estimated that as late as 1850, 60 percent of the inmates of the poorhouses consisted of the deaf, blind, insane, and "idiots" (Kirk & Gallagher, 1986; Reynolds, 1982).

Era of Education

The second era was more optimistic. This era of education was marked by the belief that handicapped students could be educated rather than placed at the fringes of society to be cared for. During the period of 1817 to the beginning of the Civil War, many states established residential schools for the deaf, blind, mentally retarded, orphaned, and others. Leaders and reformers of this period such as Horace Mann, Samuel

Howe, Dorothy Dix, and Thomas Gallaudet, gave impetus to the establishment of such presently well-reknown residential schools as the American School for the Deaf and Perkins Institution for the Blind. These institutions offered both training and a protective environment, often providing services for the entire life span of the individual.

Era of Disillusionment

The third era was ushered in by the Industrial Revolution. Industrialization provided a structure to organize the growing numbers of students in an efficient and economical manner. Schools adopted a lock-step linkage of class-graded instruction, and classes were organized in sequential yearly units. Efficiency of instruction was obtained through placing students by age and achievement in groups. Due to large numbers of immigrants, African-American families migrating north, and compulsory attendance laws, it soon became evident that some students were not able to keep up. Adjustment outside of this industrial model had to be made (Sarason & Doris, 1979). The solution was to remove these children from the general classrooms and to provide them with special education in separate classrooms. Since the 1900s, the special class model has been organized in most school districts (Kirk & Gallagher, 1979).

The special class and special day school movement developed slowly. During the first half of the 20th century, most children who were visibly different or who had learning problems, were permitted to attend school for minimum periods. Children who progressed slowly were forced to repeat grades until they became embarrassingly oversized in comparison to

their classmates. Others were simply dropped from or "pushed out" of the schools (Renolds, in press). Tyler (1987) reports that as late as 1910 more than half of the children dropped out of school before completing sixth grade. Unfortunately, since most of the special classes quickly became convenient placements for an assortment of children who could not be managed elsewhere, they became known as a "dumping grounds" for all types of children who did not fit the system (Hoffman, 1975; Sarason & Doris, 1979).

The acknowledgement that schools were not for everyone led to the uncomfortable prospect of dealing with failure. It is interesting to note, however, that this failure was readily transferred to students and not to schools. As such, the concept of "deviancy" became part of educational decision-making as early as the 1900s. By separating the physically, mentally, or morally deviant into special classes, they did not interfere with the proper training of the more capable and tractable (Van Sickle, 1908-1909). The intention, however, was not to better serve the "deficient" but to remove those students who interfered with the education of the norm or mass of students. The exclusion of students was viewed as being in their best interests. As E. R. Johnson (1908) stated in a speech to the National Education Association:

The only thing to do is to give them the best care and training possible. Keep them in the special classes until they become too old for further care in school, and then they must be sent to the institution for safety. (p. 115)

Thus, although there was a realization that general education classes were not for everyone, the early educational system still

followed the mandate of providing a free education for all. Deviancy could be accommodated by simply placing it outside regular programming.

The general neglect of atypical children which marked this era and continued to the end of World War II was not a deliberate and callous deprivation, perhaps, but an outgrowth of certain pervasive ideas of the time. The lethargy of the early 1900s toward the education of mentally impaired students may be attributed to the widespread misinformation on genetics and criminal tendencies. I. N. Kerlin espoused a type of social Darwinism. He stated that handicapped individuals were aggressive and volatile and should not have the same rights as others and thus should be segregated (Hallahan & Kauffman, 1978). H. H. Goddard published The Kallikak Family: A Study of the Heredity of Feeble-mindedness (Goddard, 1912), in which he tried to demonstrate the heritability of intellectual deficits and criminality. Along with his work and others, a fright reaction was produced which led to the passage of sterilization laws by some state legislatures (Kauffman, 1981).

Thus, events in the first half of the 20th century can be summarized in light of the social and economic history of the era. The eugenics scare, development of intelligence tests, immigration of people with differing customs and values, rise of organized labor and accompanying child labor laws, rapid advance of technology, proliferation of theories of psychology, and visibility of disabled World War I veterans and need for rehabilitation all were factors contributing to the growth of special education. These factors affected how people thought about the measurement and meaning of difference, human potential, role of

handicapped in society, prevention and cure of defects, and causes of behavior (Kauffman, 1981).

Era of Optimism

The fourth era, beginning at the end of World War II until approximately 1980, was marked in contrast by optimism. At midcentury, a majority of the states had legislation providing for the education of handicapped children. Yet it was clear that on a national scale, only a small percentage were being provided adequate education (Kauffman & Hallahan, 1976). The remarkable growth of special education since 1950, both in numbers of teachers, students, and dollars and diversity of services, can be understood in the context of powerful social, legal, and economic forces.

One of the strong social influences on special education has been parent groups. Such organizations as the National Association for Retarded Children (now the National Association of Retarded Citizens), founded in 1950, and the organization in 1963 of the Association for Children with Learning Disabilities discovered that they could apply political pressure for legislation. Much of the credit for federal and state legislation for exceptional children must be given to parent advocates rather than to professional groups (Dybwad, 1980). For example, parent advocacy groups saw in the civil rights movement, which led to court cases involving racial discrimination, that the rights of minorities found protection in law. Parent advocates saw a similar denial of educational rights which applied to handicapped children. It was not long after court decisions which removed barriers to schools and

other public institutions (e.g., Brown v. Board of Education decision of 1954 which prohibited maintenance of "separate but equal" schools) that advocates for exceptional children began pressing for legal action on their behalf (Kauffman, 1981).

In response to the social and political activities of parent advocacy groups, the federal government entered the field of special education in various ways. For example, in 1957, supports were provided for research and leadership training in the area of mental retardation. In 1963, these supports were extended by Congress to cover almost all exceptionalities except giftedness. In 1966, a new Bureau of Education for the Handicapped (BEH) was established to administer to the expansion of new programs. In 1976, BEH distributed more than \$200 million to state departments of education, colleges, and local school systems for a broad variety of programs. Under legislation passed in 1975, Public Law 94-142, the federal role was considerably expanded. All these developments were stimulated mainly by parent advocacy groups (Reynolds, 1982).

Nevertheless, professional organizations and activities from 1950 until the present must also be recognized for their contribution to the positive direction of special education. The Council for Exceptional Children and its divisions, which separated from the National Education Association in 1974, has been an effective lobbying group. There has been a proliferation of journals, texts, tests of intelligence and achievement, curriculum materials, and research on special education (Hallahan & Kauffman, 1978). During the 1960s, the trend toward more humanistic consideration of handicapped children was noted. Special

educators in the United States investigated developments in the education of exceptional persons in other parts of the world. From the Scandinavian countries came the principle of "normalization"; that is, the education of handicapped students in the "normal" environment of the nonhandicapped. Prompted by humanistic psychology and social reformers, special educators initiated "open" education for the handicapped, "alternative" schools for the delinquent, and "humanistic" education for the emotionally disturbed (Kauffman, 1981; Reynolds, 1982).

A shift in the mission of schools occurred in the early 1960s. This shift was first spurred by the Goldberg and Cruickshank debate (1958) which brought the issue of public school responsibility for the education of trainable mentally retarded children in the public forum. While Cruickshank held that these children were neither entitled to nor capable of benefiting from education, Goldberg held that placement in the best educational environment was their right. Ten years later in a landmark article, Dunn (1968) addressed the issue of service delivery to mildly handicapped students, asserting that, "A better education than special class placement is needed for socioculturally deprived children with mild learning problems who have been labeled educable mentally retarded" (p. 5). This time the concern was the ethics and efficiency of the special class model itself.

The political climate was greatly altered by the Kennedy and Johnson administrations. These years were monumental ones for legislation and bureaucratization and its effect on special education. The Kennedy administration brought a renewed commitment to the handicapped. President Kennedy established the President's Panel on Mental

Retardation, which led to further federal programs and appropriations, providing for personnel training, regional resource centers, model programs, and other services. A division was created by congressional action in 1965, Division of Handicapped Children and Youth, and later renamed Bureau of Education for the Handicapped in 1967. Legislation was initiated which had far-reaching effects on human service programs and brought a growing trust in government to solve society's ills (Dybwad, 1980; Kauffman, 1981).

As an extension of the civil rights movement which pursued equal opportunities across racial boundaries, a "mainstream movement," beginning in the 1950s, pursued equal opportunities for handicapped children to enter the mainstream of regular education (Wood, 1989). The principles of equal opportunity and notion of inferiority inherent in segregated educational settings, provided the impetus for numerous court decisions and legislation. The 1967 landmark decision of *Hobson v. Hanson* ruled that using a tracking system to place children is discriminatory. *PARC v. Commonwealth of Pennsylvania* (1972) case established the right to a free and appropriate education for all mentally retarded children in Pennsylvania and that parents dissatisfied with their children's placement have the right to a hearing. Shortly thereafter, the court ruling in *Mills v. Board of Education of the District of Columbia* (1972) supported the right to education for all children considered mentally retarded, physically handicapped, emotionally or behaviorally disordered. Moreover, the *Mills* case established the mandate for a hearing prior to classification or

exclusion from an educational program. Wyatt v. Stickney (1972) ordered that an individual education plan be provided for every individual in a special setting and that a program be designed to meet the needs of each handicapped student.

As attention to the individual rights of the handicapped student continued to grow, legislation was passed. Section 504 of the 1973 Rehabilitation Act, Public Law 93-112, disallowed the exclusion of any handicapped person from vocational programs receiving federal funds. In 1974, Section 111a of Public Law 93-516 amended this act, requiring any recipient of federal funds to provide equal employment services for handicapped persons. Court decisions, legislation, in combination with arguments of Goldberg and Dunn and the writings of Wolfensberger (1972) on the concept of normalization, served as the springboard for the passage of Public Law 94-142. In 1975, the Education of the Handicapped Act, PL 94-142, brought into the schools and into general education classes, handicapped children and the guarantee of a free appropriate education with related services.

The intent of PL 94-142 was to make the educational experience as nearly normal as possible. The law's provision of "least restrictive environment" meant that the student was to be educated in the most normal setting that still met identified educational needs. Wood (1984) stated:

The concept of the least restrictive environment is based on the premise that many creative alternatives exist to help the regular educator serve children with learning or adjustment problems within the context of a regular class setting.
(p. 11)

As a result, many students formerly in self-contained classrooms were reassigned or "mainstreamed" either full-time or part-time in the

general education classroom. The mainstreaming model replaced the traditional special class model as the accepted organizational approach (Skirtic, 1987).

Since the mid-1970s, there has been considerable emphasis on placing students with mild handicapping conditions into "mainstream" environments. The resource room model required special and general education teachers to work cooperatively with one another as special needs students were ferried across one system to the other. There is no need, however, for this type of interdependency in a loosely coupled system. The resource room model did not fulfill the intent of bridging the dual systems (Skirtic, 1987).

Factors contributing to the shift in placing students in mainstream settings include: (a) the least restrictive environment philosophy embodied in the regulations of PL 94-142; (b) desire to avoid class action lawsuits; and (c) similarities between students who have mild handicapping conditions and the general student population (Wood, 1989; Ysseldyke & Algozzine, 1982). Presently, the majority of students with handicaps spend more than half of their day in general classrooms. This time spent with nonhandicapped peers ranges from 77 percent for students who are labeled learning disabled to 92 percent who are speech impaired (U.S. Department of Education, 1988).

Era of Uncertainty

The era of optimism that spawned the greatest inclusion of handicapped children in the public school setting and regular education classroom ended in disillusionment. The present-day era, beginning in

1980, might be called the era of uncertainty. The 1980s has been a period of fervent reexamination. This national inquiry has been a far-reaching enterprise characterized by the intensity of debate, range of instructional and social/political issues addressed, and the composition of groups concerned about the quality of schooling. The educational system in general, and special education in specific, has come under scrutiny.

Educational system under scrutiny. There have been approximately 30 national and 300 state reports which have examined the quality of American education (Cross, 1984). Such reports as "A Nation at Risk" compiled by the National Commission on Excellence in Education, "Barriers to Excellence: Our Children at Risk" written by the National Coalition of Advocates for Children, and the Heritage Foundation Report (May 11, 1984) all cited the need for improvement in the following areas: (a) establishment of clear educational goals in the local, state, and federal sectors; (b) level of measurable, meaningful student performance; (c) competence and training of current teachers; (d) curricular content and instruction available to all students at all levels of education; and (e) accountability of school systems for public investment of money (Hagerty & Abramson, 1987; Sapon-Shevin, 1987).

In the late 1970s, extensive research focused on "school effectiveness" with the goal of identifying schools which were effective in providing quality education for all students. Ron Edmonds (1979), a pioneer of the School Effectiveness movement, wanted to demonstrate that socioeconomic factors need not affect the ability of students to succeed in school. Children can learn, despite their socioeconomic conditions, if

schools were more effective. Edmonds believed that schools had the capability to educate children. The real question was whether schools would make that choice to educate them. Edmonds was guided by the principle that school improvement must involve both quality and equity; that is, the results of school reform must benefit all students (Gartner & Lipsky, 1987).

The effective schools research identified five factors that characterize schools which have achieved both equity and quality: (a) high expectations for all students and staff responsibility for student learning; (b) instructional leadership by principal; (c) safe and orderly environment conducive to learning; (d) clear and focused mission shared by staff; and (e) frequent monitoring of student progress (Edmonds, 1979). Work on effective instructional techniques, including teacher-directed instruction, increased academic engaged time, use of reinforcement, curriculum-based assessment, and individual instruction has paralleled much of the effective schools research (Yates, 1985). Important to note is that the School Effectiveness movement concentrates its effort on the school, and empowers those who are part of that school setting to influence their students' own success. Education professionals are able to accept the basic belief that all students, regardless of circumstance, can learn. This belief guides how children are valued and what is expected of them. Essential to students' achievement are high expectations rather than "disabling attitudes" or belief that some children are incapable of managing their lives. (Lipsky & Gartner, 1989).

Special education under scrutiny. The same political and socio-economic factors underlying the call for school reform are also applicable to special education. Essentially, we are entering an era of increased demands on the school for qualified, literate graduates to enter a competitive world market, dwindling resources due predominately to a large federal deficit, and a rapidly diversifying population. Concerns mount as limited benefits of special education are compared to costs. Moreover, these concerns are expected to escalate due to the changing pattern of demographics in our country.

Legislators, economists, and business people are concerned with the increasing "literacy gap." One out of every four students drops out of school. The incidence is 10% greater for special education students who drop out of high school at an average rate of 312 students a day (U.S. Department of Education, 1988). A national illiteracy rate of 17% has cost businesses and taxpayers \$20 billion in lost wages, profits, and productivity (Gorman, 1988). Increased demands for social services, increased crime, and reduced constructive social and political participation are also consequences of an illiterate population (U.S. Department of Education, 1988).

Research shows that students who are mildly handicapped and capable of being mainstreamed are at the greatest risk of dropping out, especially those identified as learning disabled, mentally retarded, emotionally handicapped, hearing, speech, and health impaired (Lichtenstein, 1987). Of the exiting students, 43% graduate with diplomas and 17% graduate with certificates of completion. Taken

together, handicapped students who graduate with a diploma or certificate represent approximately 60% of the exiting population (U.S.

Department of Education, 1988). As part of the educational reform movement with increased emphasis on rising academic standards and course requirements, students who experience difficulty in school may be more inclined to drop out (McDill, Natriello & Pallas, 1985; Shepard, 1987). The major consequences of dropping out of school for handicapped students include poor employment potential, fewer opportunities for further education, and lower earnings of those employed (Edgar & Levine, 1987).

For those handicapped students who remain in school, how effective are special education programs? These programs were historically organized separately from general education in the belief that students will benefit from unique curriculum and smaller classes staffed by specially trained teachers using special materials. However, an emerging body of data indicates that segregated, special education programs have not demonstrated significant benefits (Carlberg & Kavale, 1980; Cegelka & Tyler, 1970; Epps & Tindal, 1987; Glass, 1983; Kavale & Glass, 1982; Leinhardt & Pallas, 1982; Madden & Slavin, 1983; Semmel, Gottlieb, & Robinson, 1979; Ysseldyke, 1987). Weiner (1985) reported a meta-analysis of 50 recent studies comparing the academic performance of mainstreamed and segregated students with mild handicapping conditions. The mean academic performance of the integrated group was in the 80th percentile, while the segregated students' scores were in the 50th percentile.

Many special education programs are organized according to categories of disabilities. The assumption is that particular methods of instruction are required for different disabilities. Are there

differences, however, among instructional practices? Researchers have compared categories of mildly handicapped students on a variety of educationally relevant variables, including achievement (Idol-Maestas, Lloyd, & Lilly, 1981; Marston, 1986;), academic responding and engaged time (O'Sullivan, Marston, & Magnusson, 1987; Ysseldyke, Christenson, Thurlow, & Skiba, 1987; Ysseldyke, Thurlow, Christenson, & Weiss, 1987), grouping arrangements and educational tasks (Ysseldyke, Christenson, Thurlow, & Bakewell, in press; Ysseldyke, Thurlow, Christenson, & McVicar, 1988). Results from all of these studies indicated very few significant differences among categories of mildly handicapped students for any of the dependent variables. In addition, research concerning psycholinguistic training (e.g., perceptual-motor, auditory processing) has failed to demonstrate that academic performance is improved when instruction is geared to a medical model of remediating deficits found within a student (Arter & Jenkins, 1979).

If there are few significant differences among categories for educationally relevant variables, are there differences in practices between special and general education? Recent studies of mild/moderate special education students have failed to find qualitative differences in practices between special and general education. For example, few differences have been found for time-on-task, curriculum adaptation, teaching strategies, or uses of advanced technology (Lipsky & Gartner, 1989). Madden & Slavin (1983) concluded that full or part-time placement in general education was more beneficial for students' achievement, self-esteem, and emotional adjustment. Fundamentally, some investigators have argued that there are not two methodologies, one

unique for "special" learners and one for "normal" learners. All students share a range of characteristics and instructional needs which call for a variety of effective instructional practices. (Bogdan, 1986; Reynolds & Lakin, 1987; Sarason, 1982; Stainback & Stainback, 1984).

As a result of these outcomes which demonstrate the limited benefits of special education, increasing costs of special education services have come under scrutiny. During the 1977-78 school year, the "added cost" of special education was calculated to be \$7 billion nationwide. (Kakalik et al., 1981). An extension of the Rand study indicated an expenditure of \$11.8 billion during 1983-84. In 1985, the federal contribution through PL 94-142 grants was over 1 billion and costs of Chapter 1 programs were over 4 billion dollars (U.S. Department of Education, 1985). Although most of the special education population are enrolled in resource rooms and spend approximately 80% of their time in regular education, it still costs an average of 2.3 times more to educate a handicapped student than a nonhandicapped student. An average of \$5,243 is spent per student in resource programs and \$6,913 per student in self-contained programs ("Cost of educating," 1988).

The promised federal contribution to these costs has never been met, however. The expected percentage was 40% of the average per pupil cost by 1985, but the current figure is around 8.5% with states providing 54% and local governments providing the difference (Gartner & Lipsky, 1987). During the Reagan administration, the federal share of the cost of education declined in general by more than 30 percent. When Reagan took office, seven million of the more than eleven million disadvantaged

students eligible for Chapter 1 received services. In 1988, only five million of the fourteen million eligible received help (Hentz, 1988).

The rising incidence rate and consequent cost of providing services have been examined. Of the 4.4 million students being served in special education programs, an overwhelming number are described as mildly handicapped (U.S. Department of Education, 1988) and constitute 90% of the handicapped population (Hallahan, Keller, & Ball, 1986; Shepard, 1987). The category of learning disabilities has received the most attention, having increased 142% in the past ten years. This category represents 44% of the total special education population and 5% of the school-age population (U.S. Department of Education, 1988). Researchers report that this incidence is unnecessarily high due to the vagaries of assessment and eligibility practices (Gerber, 1984; Gartner & Lipsky, 1987; Stainbach & Stainbach, 1984; Shepard & Smith 1981; Wang, Reynolds, & Walberg, 1987; Ysseldyke & Algozzine, 1982). Ysseldyke, Algozzine, Shinn, and McGue (1982) reported that there was no defensible system for differentiating students who are learning disabled when compared to other low achieving students.

In addition to this special education population, there exists a larger group of students, approximately 10-20% of the total school population who are being served in separately funded federal programs (Will, 1986). These students' low achievement is thought to be caused by poverty, cultural disadvantage, and/or low English proficiency. This larger group of special needs students is thought to be the result of changing demographics nationwide.

Increased demand for special programs. The changing pattern of demographics in the United States offers the probability that increased demand for special programs will continue. Students attending public schools today are "different" than the preceding generation. There is greater cultural diversity. By the end of this century, one out of every three children will be non-white. Hispanics are the fastest growing minority and will compose 24% of the population by the year 2000, outdistancing African-Americans who will make up 15% of the population. One out of every four children are living at or below the poverty level. Students come from homes with changing family patterns as well. In 1955, 60% of households consisted of a working father and a housewife mother. In 1985 that pattern represents only 7% of households. Almost 60% of children spend part of their childhood in single-parent families headed by women. The U.S. ranks first among industrialized nations in rates of teen-age pregnancy. About 80% of teen mothers drop out of school. More than half of all African-American children born in 1982 were from unmarried mothers and half of them were born of a teenager. In addition, large numbers of children come from homes where they are abused or their parent may be alcoholic or other drug-addicted (Hodgkinson, 1985; Townsend, 1987).

These changing patterns present a broader socio-economic range than ever before, making larger social and instructional demands upon the schools and reducing expectations of the home environment. Socio-economic status has been a determinant factor as to whether a child receives special education services and graduates from school (Butler & Singer, 1987; Reschley, 1987). Traditionally, these demands have been

met by a bureaucratic response of adding specially funded programs. Because of the greater needs and numbers of these children (and consequent costs), many professional educators state that it may be inappropriate to rely on current approaches (Stainback & Stainback, 1984; Wang, Reynolds, & Walberg, 1987; Will, 1986).

Unintended Consequences: Call for Reform of Special Education

What happened to the promises generated by PL 94-142, hailed the "Bill of Rights of the Handicapped?" A report from the Assistant Secretary, Office of Special Education and Rehabilitative Services commented on several unintended consequences as a result of the law's expansion of special education programs: (a) fragmented approaches ("Many students who require help and are not learning effectively fall 'through the cracks' of a program structure based on preconceived ideas of eligibility ..."); (b) dual system ("The separate administrative arrangements for special programs contribute to a lack of coordination, raise questions about leadership, cloud areas of responsibility, and obscure lines of accountability within schools."); (c) stigmatization of students (producing in students "low expectations of success, failure to persist on tasks, the belief that failures are caused by personal inadequacies, and a continued failure to learn effectively"); and (d) placement decisions becoming a battleground between parents and schools (Will, 1986a).

A range of unintended consequences occurred primarily because PL 94-142 evoked the traditional bureaucratic paradigm to structure special education. The law promoted a medical view of disability which

characterizes disability as inherent in the individual. Eligibility criteria, based on categorical labels of deficits, provided the rationally-conceived regulations to see who was "in" and who was "out." Categorization of students according to various disabilities such as learning disabled, mentally retarded, and emotionally disturbed set into motion additional regulations for teacher preservice and certification. This labeling of students according to federal guidelines provided a useful, rational distinction between those students handicapped and those nonhandicapped (Bogdan, 1986; Gartner & Lipsky, 1987).

A compelling reason to question the consequence of a dual system of education, special and general, has been the lack of coordination among separately defined programs. This problem has been termed "disjointed incrementalism" (Wang & Birch, 1984). As Fuchs and Fuchs have explained:

The effect of disjointed incrementalism in the schools is that overlapping programs are spawned to serve low achieving students, excessive rules and regulations decrease school efficiency and flexibility to deal with individual students, frequent removal or pull-out of pupils from the regular program creates discontinuity in the instructional process, and it supports the myth of differentness in students necessitating different teaching practices and curricula. (p. 115)

Thus, it appears that PL 94-142 has fostered an unusual paradox. During more than a decade following its passage, significant gains have been made for integrating handicapped students in the public schools. The paradox, however, is that while the law is the driving force behind the integration of handicapped students into the mainstream of general education, it also contained side-by-side regular-special education structure with separate funding bases, administrative and instructional staff, categories of students, and service delivery systems of education.

Incidental change was introduced into the school organization. The machine bureaucracy of the school responded to the law's mandates by introducing the necessary add-ons of categorical programs while still preserving the traditional K-12 general education system (Lipsky & Gartner, 1989; Skirtic, 1987).

What about the professional bureaucracy? How did they respond to PL 94-142? Many teachers perceived PL 94-142 to be an imposition and viewed its implementation as an externally based intrusion into their professional status (Brooks, 1982). School officials spent considerable time attempting to influence the attitudes of teachers involved. The majority of the literature concentrates on the knowledge and skill levels of the teacher, their attitudes toward the handicapped student, and the technical aspects of complying with the law (Gans, 1985).

Yet, as a loosely coupled bureaucracy with discretionary "power" to passively resist this change, minimal compliance to PL 94-142 was given (Dublinske, 1978). Examples of passive resistance included "batch processing" the IEP with the same information written on all of the forms (Firestone, 1979) and using "canned" IEPs (Educational Advocates Coalition, 1980). Some IEPs were written in line with what teachers and schools could offer rather than what services were needed (Morsink, 1979; Weatherley & Lipsky, 1977). The magnitude of the workload often forced specialists to shortchange the assessment process. When assessments could not be bypassed, they were routinized. Meetings became cursory, and parent signatures were obtained on blank forms to cut down the time required to get the signed educational plans returned (Weatherley & Lipsky, 1977).

The rational-technical approach to implementing PL 94-142 has become obscured by actual practice conducted by professional bureaucrats. In spite of large amounts of data collected, data are not important in decision making. Though team members use a large number of tests in making decisions, it has been demonstrated that decisions do not change as a function of numbers of devices used (Algozzine, Ysseldyke, & Hill, 1982). Rather, decision makers make decisions primarily to confirm the referring teacher's judgment about the student (Mehan, 1984; Ysseldyke, Algozzine, Richey, & Graden, 1982;). The significance of the act of referral is reflected in the referral to placement pattern. Algozzine, Christenson, & Ysseldyke (1982) reported that of those students referred, 92% are tested; of those tested, 73% are declared eligible and placed in some kind of special education program. Referral, it appears, is the most important decision in the referral to placement process. Referral sets in motion a search for pathology that most often results in finding pathology (Sarason & Doris, 1979; Ysseldyke, 1987). Thus, the expensive psychological assessment process initiated by referral more often than not confirms the classroom teacher's initial decision yet contributes little information for use in teaching or independent problem identification (Gerber & Semmel, 1984; Shinn, Tindal, & Spira, 1987). While it might be reasonable to conclude that teachers are extremely accurate in their decisions to refer students, Ysseldyke (1987) argued that classification of normal students as handicapped is a more plausible hypothesis. It has been reported that as many as 80% of low-achieving students may be classified as handicapped (Ysseldyke, Algozzine, & Epps, 1983).

The lack of uniformity of assessment practices across districts has been noted. Shepard and Smith (1981) described the characteristics of students identified as learning disabled in Colorado. They found that fewer than half of their sample of 800 students exhibited behaviors characteristic of, or test scores consistent with, criteria for being called learning disabled in Colorado. Perlmutter and Parus (1983) noted in their research of 14 school districts that there was little uniformity in test selection, extent of testing, and cutoff scores on tests used in classification of students. Although the technical adequacy of the psychometric instruments that are used to satisfy PL 94-142's various evaluation protection criteria is noted (Galagan, 1985; Glass, 1983; Scriven, 1983; Ysseldyke, 1987), their usage is further compounded by the vagaries of the procedural process when implemented by members of the multidisciplinary team, who as professional bureaucrats, provide their own individualization of regulatory procedures.

This gap between an ideal model of rational decision making and actual practice has been noted by Mehan (1984). He states that scientific reasoning as a model of everyday reasoning may not be appropriate in formal organizations like schools. Decision makers do not have unlimited access to unlimited resources presupposed by rational decision-making models. Organizational constraints such as availability of programs, space, and funding, together with prior experience, lead educational decision-makers to reduce the range of alternatives and ratify actions taken earlier at the referral stage. Procedures thus become routinized. Such organizational routines and institutional practices structure the decision-making situations and narrow the

possibilities in terms of decisions made to address instructional delivery of services to children with learning problems. Mehan (1986) concluded that, "Differential educational opportunity seems to be more of an unintended consequence of bureaucratic organization than it is a matter of individual or collective intention" (p. 390).

The adequacy of the traditional paradigm concerning the structure of special education can be examined when looking at the nonadaptability of the professional bureaucracy and its relationship with school organization.

Adequacy of Traditional Paradigms in Structuring Special Education

The segregated special class is the outcome of insulating the traditional educational system from the change demands created by the external environment (Skirtic, 1987). At the beginning of the century, change demands were thrust upon the school when new populations of students, children of the working class, economically disadvantaged, and immigrant families, could not be assimilated into the prevailing paradigm of the general education system (Lazerson, 1983; Sarason & Doris, 1979). The separate class placement signaled change; that is, new populations were accommodated into the school system. However, the traditional paradigm was preserved. These special classes were decoupled from the rest of general education, an event which led to protest and litigation. The passage of PL 94-142 followed. The law used the existing decoupling device to regulate special education, however, and again protestations were heard. Instead of providing equality of opportunity to a free appropriate education system, the charge of discrimination was levied

against special education programs. This time, overrepresentation of minority children in special classes was the issue (Heller, Holtzman, & Messick, 1982; Maheady et al., 1983; Reschly, 1984; Tucker, 1980). In response to this problem, the National Academy of Science (NAS) concluded that placement in special education classes was less important than the kind of instruction that was provided. The authors of the NAS report endorsed the notion of effective practices such as direct instruction as an alternative to special education placement (Heller, Holtzman, & Messick, 1982). In general, it appeared that special education was being used again as a legitimating system to cope with needs of populations of students the general education system was failing to meet (Skirtic, 1987).

Integrating special needs students, who originally could not fit into the pigeonholes of a traditional machine bureaucracy, back into the general education system via "mainstreaming" has had debatable results (Carlberg & Kavale, 1980; Madden & Slavin, 1983). Bogdan (1983) in his review of both successful and unsuccessful mainstreaming programs concluded:

We have come to understand them (mainstreaming failures) not as indications that disabled children are inherently incapable of success in mainstream classrooms. Rather, these supposed failures of mainstreaming are problems of organizational arrangements, internecline politics, and a lack of will and skill of school personnel. (p. 428)

The least restrictive environment mandate of PL 94-142 has necessitated close working relationships between general and special educators (Carpenter, 1980; Diebold, 1980; Morsink, 1979). Although a critical factor for successful integrative programming, cooperative working relations are not found in loosely coupled arrangements of a standardized

bureaucracy (Weick, 1976). Standardization of skills, which enables teachers to work independently as performers, is achieved through training and acculturation in the organization. The consequence of this structuring is isolation (Bogdan, 1983; Stainback & Stainback, 1984; Will, 1986). Special and general educators have not shared their expertise or resources; this shared responsibility, however, is the essence of mainstreaming efforts (Will, 1986). In fact, special educators have unwittingly relieved general educators of responsibilities for teaching low-achieving students (Shepard, 1987). Lortie (1978) has commented on this breakdown of professional relationships:

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

The important point is that PL 94-142 can never realize its goal of an appropriate education in the least restrictive environment due to the current organization of schools. Rather than a rationally organized and coordinated system, services are delivered on the basis of social pressure and administrative convenience (Wang, Reynolds, & Walberg, 1986). Skirtic (1987) commented, " ... [PL 94-142] fails to recognize school organizations as professional bureaucracies, requires them to be adhocracies, and approaches implementation as if they were machine bureaucracies" (p. 34). For example, multi-disciplinary teams of general and special educators are required to collaborate reciprocally, problem solve, and reach decisions concerning an appropriate program for a

student. Schools are not organized to be adhocracies, however, without total reorganization. Instead, the law forces schools to be machine bureaucracies through introducing new rules and regulations and fails to recognize the loose coupling of professional bureaucracies and consequent arbitrary decision-making. Because schools cannot undergo the rational-technical change possible in a machine bureaucracy, fundamental change can never occur (Skirtic, 1987).

In summary, it is indeed a paradox that the very law which was to bring about equality of educational opportunity for all handicapped students, resulted in a system that promoted classification of students and hence stigmatization, competition and duplication of efforts among professionals, reduction in range of curricular offerings in special education classes, referral of "deviant" students out of general education classrooms, parental confusion and frustration, reduction in role of building principal, and spiraling costs to fund a second delivery system for a rapidly expanding population of special needs learners (Gartner & Lipsky, 1987; Stainback & Stainback, 1984; Wang, Reynolds, & Walberg, 1986; Will, 1986). As one of the drafters of PL 94-142, Walker (1987), noted:

If the law has been massively successful in assigning responsibility for students and setting up mechanisms to assure that schools carry out these responsibilities, it has been less successful in removing barriers between general and special education. It did not anticipate that the artifice of delivery systems in schools might drive the maintenance of separate services and keep students from the mainstream. (p. 102)

Reform Proposal: Toward a Restructured Educational System

Due to unintended consequences of PL 94-142, a paradigm shift has been proposed. This paradigm shift would bring about a restructured educational system (Reynolds, Wang, & Walberg, 1986). Although researchers do not deny that some students have learning problems, it is the flawed system or "backstage efforts to maintain order" (Tropea, 1988) for addressing those problems that has been challenged. The sociological, political, and cultural theories of "deviance" providing the paradigm that undergird the organization and conduct of the second system is defective (Bogdan, 1986 ; Gartner & Lipsky, 1987; Skirtic, 1987; Stainback & Stainback, 1984). Guess and Thompson (in press) stated:

The assumption is, of course, that once having identified the problems associated with the disability, the environment can be arranged, controlled, or otherwise manipulated to bring about the desired change in the student. This organization, variously referred to as "prescriptive," "remedial," "let's fix it," and so on, always carried with it the (at least) implicit assumption that persons with disabilities are somehow less than normal, or at its worst, "deviant."

This restructured system, therefore, cannot be another bureaucratic revamping of the present organization by creating more special programs or more redefinitions of categorical labels. Instead of incidental change, fundamental change is needed. Skirtic (1987) argues for reform which will create fundamental change:

... current school organization creates - and can do nothing but create - students with mild disabilities as artifacts of the system, and furthermore, [current] efforts to reform the system - without replacing it with an entirely different configuration - do little to eliminate mild disabilities or their effects, produce even more students with mild

disabilities, and create a new and largely hidden class of student casualties. (p. 3)

Given the variety of critiques of the current organization of special education services, it is not surprising that current reform proposals range across a broad spectrum. Some proposals seek to bridge the gap between the two parallel systems (Will, 1986); others attempt to blend aspects of each together (Wang & Reynolds, 1985), and yet others call for an end to dual systems (Gartner & Lipsky, 1987; Pugach, 1986; Stainback & Stainback, 1984). Collectively, these proposals fall under the rubric, Regular Education Initiative, a term used initially by U.S. Department of Education Assistant Secretary Madeleine Will (1985).

Although varying degrees of change in creating a unified educational system are evidenced in reform proposals, several common goals of the REI have been identified. These goals include: (1) integrate special learners in general education classrooms for most, if not all of the time; (2) provide additional assistance to special learners without labeling them as "impaired"; (3) increase collaborative teaching arrangements among general and special educators; (4) increase instructional time for special learners by reducing disruptions and transition time between special and general classrooms; (5) pool instructional resources (e.g., money and personnel from separate programs); (6) increase teachers' ability to instruct diverse learners; (7) develop administrative policies that provide incentives for general educators to serve special needs learners; (8) reduce social stigma by providing increased opportunity for social interactions in general education classrooms; (9) empower principals to control all programs and resources at building level; (10) use instructional methods effective for

general education with special learners; (11) use instructional methods effective for special education with special learners in general education classrooms; (12) use professionals' time to alter instructional practices rather than initiate costly assessment which contributes little information to use in teaching; and (13) negotiate new roles among staff (e.g. specialist as co-teacher with general educator, psychologist as consultant) for sharing responsibility for special learners (see Algozzine & Maheady, 1986; Bickel & Bickel, 1986; Biklin, 1987; Bogdan & Kugelmass, 1984; Epps & Tindal, 1987; Fine & Asch, 1988; Gartner & Lipsky, 1987; Idol, 1986; Pugach, 1987; Reynolds & Lakin, 1987; Sansone & Zigmond, 1986; Slavin, 1986; Stainback & Stainback, 1984; Viadero, 1988, Reynolds, Wang, & Walberg, 1987; Will, 1986).

Factors Important to Successful Integrative Programming

Why are these goals leading to "full access to the mainstream" (Skirtic, 1987) expected to succeed when the research on mainstreaming has shown no conclusive results of its effectiveness (Research on the Effectiveness of Mainstreaming, 1987)? Previous research tried to isolate factors important to "successful mainstreaming." In their review of 120 studies on mainstreaming, Lipsky and Gartner (1989) identified two sets of factors: (1) adequacy of the preparation and appropriateness of the identification of students to be mainstreamed, and (2) activities in the mainstreamed class, including organization of the environment, adaptation of curriculum, and teaching strategies. Schubert and Glick (1981) pointed to five important factors: (1) open, honest communication; (2) strong administrative support; (3) attitudes of

helping all students achieve their full potential; (4) schedule flexibility; and (5) appropriate placement criteria. The majority of these factors could be considered pragmatic; that is, environmental variables/resources (Kauffman, Gerber, & Semmel, 1987). These microeconomics include structuring opportunities for communication, support, schedule flexibility, administrative changes, and curricular materials.

Another avenue of research on increasing effectiveness of mainstreaming focused on the professional bureaucracy's willingness to change. Many teachers viewed the mandate to mainstream as an externally based intrusion into their domain. This resistance lent support to the paradigm that change cannot occur without addressing the perceived needs of its members (Brooks, 1982; Dublinske, 1978; Lieberman & Miller, 1981). As concerns of general educators were studied, increased attention was paid to attitudes, and attitudes became linked with "willingness to teach" (Hirshoren & Burton, 1979; Graham, Hudson, Burdo, & Carpenter, 1980). If changes could be made to cause teachers to be satisfied with handicapped children in their room, researchers theorized, then the integration process would be more effective (Budoff, 1972; Dodd, 1980; Larrivee & Cook, 1979; Yaffe, 1979). Five areas of research were explored: (a) confidence in knowledge and skills; (b) support and support services; (c) confidence in appropriate placement; (d) classroom management concerns; and (e) demographic variables such as educational degree, teaching level, classroom size, and locale. Two of these factors, significant to integrative programming efforts, are discussed.

Knowledge and skills. One of the most significant factors important to the integration of handicapped students has been the degree of knowledge and skills of special and general educators (Larrivee & Cook, 1979). With knowledge comes increased perceptions of competence (Glass & Meckler, 1972; Stephens & Braun, 1980). This train of research next connected teacher competence with willingness to accept handicapped children into the classroom, and with positive attitudes and high expectations came success (Larrivee & Cook, 1979; Murmane, 1981).

Unfortunately, personnel preparation to teach special needs learners has been inadequate (Blackhurst, Bott, & Cross, 1987; Gear & Gable, 1979; Pugach, 1986) causing personal insecurity toward meeting the needs of special learners (Guskin & Guskin, 1970). The problem of doubting one's own expertise has, in turn, been transferred to perceptions of competence about other groups, regular and special educators and administrators (Aiello, 1979; Gear & Gable, 1979; Graham et al., 1980; Ringlaben & Waller, 1981). Often these doubts about other group's skill level are confirmed (Burrello & Sage, 1979; Carpenter, 1980; Iriarte, 1980). For example, special educators' preparation programs are seldom based on working with high school youth, and special educators are often seen as lacking training at the high school level (Miller, Sabatino, & Larsen, 1980). Unfortunately, both general and special educators have indicated difficulty in receiving appropriate inservice training and resources (Childs, 1981; Dixon, Shaw, & Bensky, 1980; Hudson, Graham, & Warner, 1979; Voeltz, Bailey, Nakamura, & Azama, 1979).

Support. The second factor identified as most effective to mainstreaming efforts was the teacher's perception of support services

including administrative support (Brooks, 1979; Budoff, 1972; Dodd, 1980; Larrivee & Cook, 1979; Pugach, 1982; Sivage, 1980; Stephens & Braun, 1980). In the current literature on school effectiveness, administrative support is also cited as being a critical factor (Edmonds, 1979; Lieberman & Miller, 1981). This support must contain visible evidence as well as verbal statements (Arends, 1982; Lieberman & Miller, 1981; Longo, 1982). Arends (1982) stated that due to the uncertainty generated by change, administrators must provide steadiness and clarity. By creating new roles and job descriptions, structure is again introduced. Support can include such resources as time, money, status, or space as long as it is valued by each organizational member.

As part of supportive services, collegial support has been cited as essential to the integration process. (Larrivee & Cook, 1979; Nadler & Shore, 1980; Shotel, Iano, & McGettigan, 1972; Sivage, 1980). However, the majority of general educators have felt that sufficient resources and support services are not available (Hudson, Graham, & Warner, 1979; Wasserman, 1979). For example, many teacher educators view consultation as an integral part of the education of teachers for special learners, but available data suggest that this practice is not happening. Special educators spend little of their time consulting (Evans, 1980; Idol-Maestas & Ritter, 1985; Sargeant, 1981). Even graduates from programs specifically designed to train special education consultants have few opportunities to consult with general educators on a regular basis (Idol-Maestas & Ritter, 1985).

Thus, it appears that although many environmental and "teacher concern" factors important to successful integration of special learners

into general education have been cited, inconclusive evidence still exists as to whether mainstreaming has been successful. How, then, is the current initiative to fully integrate special educators into the general education system going to be different?

Mainstreaming vs. REI: Is There a Difference?

The REI differs from a mainstreaming approach to integrating special learners into the second system. Whereas mainstreaming involves ferrying the student across one system to the next; the REI proposes that the barrier between two systems be replaced with one integrative delivery system. In order to achieve this unified system, two factors are identified as critical to its success: (a) collaboration among regular and special educators to ensure shared responsibility for children with learning problems (Lipsky & Gartner, 1987; Reynolds, Wang, & Walberg, 1987; Will, 1986) and (b) use of data-based instructional intervention models adapted from the effectiveness work in general education (Edmonds, 1979) to special education (Bickel & Bickel, 1986; Goodman, 1985; Jewell, 1985; Peterson, Albert, Foxworth, Cox, & Tilley, 1985; Reynolds & Lakin, 1987).

Collaboration among special and general educators. The concept of shared responsibility between general and special educators for handicapped students was the hallmark of PL 94-142. Formerly, special education had been the domain of special educators; now, improved communication was required to span the parallel systems of general and special education (Ammer, 1984; Gans, 1985; Lilly & Givens-Ogle, 1981;

Salend, 1984). General educators were expected to participate in the development of an Individualized Education Program, adjust their teaching methods to ensure achievement of the goals set forth, and interact with students' families and other professionals (e.g., psychologists, social workers, special educators) in ways they had never been required to do before (Spodek, 1982). Simultaneously, an increase in students labeled mildly handicapped began. This increase created a dilemma; as classroom teachers were being asked to become more responsible for handicapped students, they were referring greater numbers as being potentially eligible for special education. Gallagher (1976) was prophetic in his comments made over ten years ago:

The implementation of PL 94-142 may well produce one of those painful paradoxes all too familiar to education: At the precise moment that there should be a major investment in the support mechanisms of development, demonstration, training, and technical assistance, these mechanisms may be shunted aside in favor of total preoccupation with service delivery. (p. 148)

A viable support system was one of the key components of a plan designed for the reintegration of handicapped students (Mann, 1976). Mainstreaming was depicted as an "evolutionary concept of mutual responsibility" (Mann, 1976, p. 27). As a result, it seemed reasonable for special educators to suggest that support services be provided to classroom teachers to help them meet the special needs of these mainstreamed students (Bauer, 1975; Evans, 1980; Friend, 1984; Gans, 1985). Yet, as discussed, this support was not realized. The present challenge, stated Will (1986a) is to "search for ways to serve as many children as possible in the regular classroom by encouraging special education ... to form partnership with regular education" (p. 19). The

REI proposes the breaking down of barriers between general and special education by "renegotiating" traditional roles. (Wang, Reynolds, & Walberg, 1986). That is, all educators may assume such roles as consultant, co-teacher, or participant of a building instructional team. Building principals are encouraged to develop ownership of special programs and to view them as part of the school's total instructional delivery system subject to the same accountability as general education (Will, 1986a). The underlying theme of role flexibility is collaboration among educators as they problem solve to reach decisions about students' instructional needs.

Procedures to Implement the REI

How will collaborative efforts between special and general education be organized? What instructional technology, critical to the implementation of the REI, have been identified to empower general educators to instruct diverse learners? Procedures are categorized in three areas: (a) collaborative efforts at the building level; (b) effective practices at the classroom level; and (c) policies at the system level. In order to accomplish these procedures, technical assistance must be provided.

Shared Responsibility: Building Level Support

Several approaches to "shared responsibility" are presented. These building level strategies are used to support the general education setting in order to meet the diverse needs of learners. Reciprocal problem-solving characterize the interactions among education

professionals. These approaches are: (a) consultation; (b) teacher assistance team and prereferral intervention model; and (c) co-teaching.

Consultation. Increasingly, many professionals have been concerned about the quantity and quality of interaction between regular and special educators (Idol, Paolucci-Whitcomb, & Kevin, 1986; Wiederholt, Martinez, & Harris, 1985; Vasa, Steckelburg, & Ronning, 1982). One alternative to facilitating this relationship is to use the special education teacher or other support personnel as a consultant or consulting teacher. There is some disagreement on the precise role that consultants should assume or what procedures should be used (Polsgrove & McNeil, 1989). Some experts define this role along a continuum in which the consultant provides temporary direct service to a client on one end, and on the other, collaborates with consultees to effect changes in the client's functioning (Bergen & Tombari, 1976; Hops, Beickel, & Walker, 1976). Others view consultation as a triadic service delivery system involving the exchange of information from the consultant to consultee and student (Idol- Maestas, 1983;). Disagreement also exists concerning appropriate objectives of the process. Some consultation practices concern improving client's general skills for dealing with all students, and others involve collaboratively developing strategies for changing a particular student's behavior (Keller, 1981).

There is considerable debate, however, on the effectiveness of this model. Medway and Updyke's (1985) meta-analysis of consultation studies and reviews by Mannino & Shore (1975) Medway (1982), and West and Idol (1987) have indicated a positive effect of consultation in changing consultees' and clients' behaviors and attitudes. Other studies report

different results. Miller and Sabatino (1978) compared the effectiveness of teacher consultation and direct service delivery system in relation to the academic achievement of 547 children. They found that children in neither system made significant academic gains over a one year period. Lloyd, Crowley, Kohler, and Strain (1988) posed several questions concerning the viability of the model: (a) What extent is the success of teacher consultation due to the interventions used versus the process itself? (b) How acceptable are the interventions recommended in consultations? (c) What is the role of the consultant relative to academic instruction? (d) How long should services be engaged? and (e) Are schools able to make the necessary changes?

In addition to the need for further research study, some experts believe that the model itself may not be tenable due to many identified barriers. Haight (1984) and Johnson, Pugach, and Hammitte (1988) have conducted an extensive review of the teacher consultant literature and cited the following barriers: (a) insufficient time and overwhelming caseloads; (b) insufficient role definition; (c) lack of consideration for multiple responsibilities; (d) inadequate approval criteria; (e) lack of preparation; and (f) regulations regarding special education funding.

Another important variable is the difference in perceptions general and special educators have of each other. Friend (1984) found that although special educators and administrators shared the same perceptions of teacher consultants' competencies, general educators consistently assigned lower ratings to the importance of competencies for teacher consultants. Differences among the three groups on four competencies were: (a) systematic evaluation of intervention effectiveness; (b)

explanation of the consultant's view of the referral problem; (c) regular scheduling of conferences; and (d) including regular class teachers in planning and implementation of programs. According to Friend, expectations for consulting teachers were unreasonable and concluded, "It is questionable ... whether this tremendous range of tasks can be successfully managed by a single professional" (p. 249).

Because of different perceptions, the concern has been raised that general educators may not be as willing to implement interventions resulting from the consultative process as expected (Reisberg & Wolf, 1986). How can we explain this apparent conflict? Aspects of this conflict can be explained by: (a) credibility of special educators in relation to the general education classroom; (b) match between the thinking of special education consultants and classroom teachers; (c) problem of the hierarchy of education professionals; and (d) knowledge base of general and special educators.

Classroom teachers often perceive that consultants have difficulty understanding the demands of a general education classroom (Pugach & Raths, 1987). While special education teachers may have great credibility in small, individualized settings, they are not typically faced with the unusual demands and pressures of the general classroom. Moreover, when consultants begin to work primarily in a prereferral intervention capacity and not exclusively with students in special education, their ability to make sense of the general education environment is taxed. Interventions suggested are generally those that emanate from special education; that is, they have an individual

orientation based upon behavioral technology and data-based instruction (Idol, 1986).

A related issue is the attitude of general and special educators toward each other's abilities. Special and general educators alike have expressed concern over the lack of training for classroom teachers in methods such as individualized instruction, behavior modification techniques, and usage of specialized materials (see Aloia & Aloia, 1982; Furey & Strauch, 1983; Johnson & Johnson, 1980; Ringlaben & Price, 1981). Furey and Strauch (1983) found that general educators rated their own abilities higher than special educators did, and conversely, special educators rated their own abilities higher. Such dissonance is a stumbling block to effective communication.

Another aspect to the credibility issue involves the match between suggestions for classroom interventions initiated by consultants and general educators' understandings of those interventions (Abidin, 1975; Gans, 1985). It may be that ideas emerging from the consultative process are workable, but general educators may feel that they "belong" to special education. Thus, teachers may be far more willing to attempt new strategies if the strategies appear to be close to their own way of understanding education and the problems they are confronting (Rosenfield, 1985).

A third aspect concerns the hierarchy of professionals. Since the passage of PL 94-142, general educators have had a modest role in instructional planning for handicapped students (Spodek, 1982). Implicit in this experience is the message that their understanding of the student is limited by their expertise. The question is whether this message will

differ as they interact with special educators on behalf of students with learning problems. Consultation must be conceptualized as a collaborative relationship with joint responsibility for problem solving in order to dispel uneven status. As Gans (1985) has cautioned, "The needs of the regular educator must be viewed as different, not deficient" (p. 195).

Differences in knowledge base between special and general educators are the fourth barrier to effective collaboration. Presently, preservice special education candidates receive coursework in consultation. If both groups are to engage in consultation, training must be given to special and general educators (Allen-Meares & Pugach, 1982; Prasse & Fafard, 1982). However, instructional training has traditionally been unique for special educators. Pugach and Whitten (1987) conducted a survey of methodological content of preservice training and found that the most commonly taught methodologies for special education teachers were applied behavior analysis, direct instruction, and curriculum-based assessment. Preparation also included metacognitive strategy training and cooperative learning.

It appears that the use of behavioral techniques continues to be the preferred model and purview of the special educator. Lack of preservice training in these techniques on the part of general educators often results in resistance to the use of behavioral strategies within the classroom (Abidin, 1975; Rosenfield, 1985). Thus, the methods special educators are most likely to propose are those that are least likely to be accepted in the general classroom. However, methodologies like metacognitive strategies and cooperative learning are currently

being integrated into general education preparation. As knowledge bases diverge less, professionals may have more of a common knowledge base to use in collaborative problem-solving.

Conceptual barriers to collaborative consultation stem from a belief that special education teachers are in the best position to understand the classroom. This restrictive viewpoint is the greatest deterrent to effective implementation of consultation. Johnson, Pugach, and Hammitte (1988) state:

The power of the dissonance between the view of the world held by general and special educators does not seem to have been well anticipated. ... As long as consultation remains the province of teachers who are not part of the general education community, breaking down the barrier will be a difficult, if not impossible, goal. (p. 45)

Teacher assistance team. Recognizing that consultation need not be the province of special educators and that general educators possess equally viable skills, the teacher assistance team (TAT) model has been suggested to aid in collaborative problem-solving. This model provides a building level, peer problem-solving group for teachers. The purpose of the team is to generate more efficient and effective service to students by making the general education teacher both the referral agent and responding support system (Chalfant, Pysh, & Moultrie, 1979). The teacher assistance team is based upon the following premises: (a) Regular educators have valuable skills and knowledge to assist others; (b) teachers can resolve more problems working together than alone; and (c) large number of students at one time or another experience educational problems which can be resolved without referral to special education. The composition of the team is dependent on the staffing pattern of the school, but core members are generally classroom teachers.

The intent, however, is not to use specialists as primary members although they can be called for support if requested. The team's responsibilities include delineating and clarifying the problem, brainstorming to suggest recommended interventions, and selecting those strategies preferred by the referring teacher. A meeting is again scheduled to assess the status of the problem.

Graden, Casey, and Christenson (1985) developed a prereferral intervention model based on the teacher assistance team concept of collaborative problem-solving. The goal of the prereferral intervention system is to implement systematically intervention strategies in the regular classroom and to evaluate the effectiveness of those strategies before a student is formally referred for consideration for special education placement. The model includes consultation provided individually, then, if necessary, by a consulting team. At each step, the consultant(s) and teacher work together to define and document the nature of the instructional difficulty. They then develop plans for implementation and systematic evaluation of intervention strategies to alleviate the problem. As a rule, different strategies are tried three or more times until it is demonstrated that a referral for individual assessment is needed. Graden, Casey, and Christenson (1985) have offered evidence that the success of the model seems most likely when implementation is faithful to all concepts and when general educators can feel "ownership" and perceive the recommended strategies to be reasonable and potentially effective.

Co-teaching. Co-teaching is a direct and complementary outgrowth of the collaborative consultation model described by Idol, Paolucci-

Whitcomb, and Nevin (1986). Bauwens, Hourcade, and Friend (1989) define co-teaching:

Co-teaching (or cooperative teaching) refers to an educational approach in which general and special educators work in a coactive and coordinated fashion to jointly teach academically and behaviorally heterogeneous groups of students in educationally integrated settings (i.e. general classrooms). (p.18)

Both the general and special education teachers are simultaneously present in the general classroom, maintaining joint responsibility for specified classroom instruction. While some teacher specialization of subject or content areas and skills may occur, decisions on specific teacher assignments and duties are based on individual teachers' skills and strengths. For example, most general educators are knowledgeable about curriculum and skilled in large group management. Special educators, on the other hand, have developed expertise in targeting areas of difficulty within a curriculum and analyzing and adapting instructional strategies. Thus, two professionals working together can bring an array of skills to the fully integrated classroom.

Teaching has been reported as a lonely profession with few opportunities to discuss curriculum or instructional ideas with colleagues (Klein, Pasch, & Frew, 1979; Sarason & Doris, 1979). Through co-teaching, general and special educators function as a professional team, an approach receiving support from participating teachers. Scott and Smith (1988) found that teachers who work in collaborative settings report enhanced levels of enjoyment of work and perceive themselves as more effective in the delivery of instruction. In discussing their two-year project using co-teaching, Bauwens, Hourcade, & Friend (1989)

report that anticipated barriers of greater workload, resistance to cooperative relationships, and time-consuming procedures were never realized. Professionals found, instead, that duplication of instruction in separate settings was minimized, roles and responsibilities developed naturally as particular needs were identified, and once cooperative arrangements were in place, requirement for lengthy planning sessions was minimal.

Instructional Technology: Classroom Level

In a restructured setting, effective practices would characterize education for all students. The importance of effective instructional practices in the context of setting is underlined by Lloyd (1984) who stated that it makes more sense to organize instruction on the basis of "skills students need to be taught than on categorical labels" (p. 14). In a restructured setting, teachers are not bound by their perceived limitations to teach diverse learners. Instead they are guided by the belief expressed by Algozzine and Maheady (1986a):

There is value in the evidence that substantial student improvements occur when teachers accept the responsibility for the performance of all their students and when they structure their classrooms so that student success is a primary product of the interaction that takes place there. (p. 488)

In a report by the National Academy of Sciences (Heller, Holtzman, & Messink, 1982), the authors pointed out that the "main purpose of assessment in education is to improve instruction... [and] a significant portion of children who are experiencing difficulties in the classroom can be treated effectively through improved instruction [in the general classroom]" (p. 72). They continued in their report that in planning

instruction for students with learning problems, attention should be directed to specific features of instruction identified as fostering academic growth. Thus, attention is turning from looking at deficits within the student (medical model) to looking at instructional variables within the ecology of the classroom (Hobbs, 1980).

Do teachers have the "instructional technology" to foster academic growth of diversified learners? A special issue of Exceptional Children (Algozzine & Maheady, 1986) highlighted instructional practices effective with special needs learners. These practices were grouped under the following headings: (a) teacher-directed classrooms; (b) peer-directed lessons; and (c) student-directed learning. Together, they provide a repertoire of instructional options from which teachers may select. Several of these options are presented.

One teacher-directed approach to reading, Exemplary Center for Reading Instruction, found that student learning increased under the following conditions: (a) pupils are provided with greater amounts of instructional time; (b) teachers positively reinforce their students for increasing oral reading speed and accuracy; (c) students are taught to display overt, rapid, and accurate responses to teacher directives; (d) teachers provide a supervised practice time for students and require high levels of student mastery; (e) teachers increase rates of particular teaching behaviors; and (f) instruction is introduced in a three-step process of demonstration, prompt, and practice. These conditions underlie many teacher-directed approaches (Reid, 1986).

Peer-directed approaches include peer tutoring and cooperative learning. Peer tutoring programs involve one student as tutor and

another as tutee. Benefits come through increases in social responding, social initiations, and length of exchanges as well as individualization of task and additional opportunity to respond (Delquadri, Greenwood, Whorton, Carta, & Hall, 1986). Another peer-directed approach, cooperative learning, has demonstrated success in accommodating student diversity in instruction. Students of differing ability levels work together in small groups toward group goals which foster interdependence. Success is dependent upon collaboration and group learning (Johnson & Johnson, 1986; Slavin, 1987).

Student-centered strategies involve such cognitive strategies as self-monitoring and self-questioning. These strategies lead to student ownership of the learning process (Anderson-Inman, 1986; Palinscar, 1986). Deschler and Schumaker (1986) commented on the goal of learning strategy instruction: "The overall intent ... is to teach students skills that will allow them not only to meet immediate requirements successfully, but also to generalize these skills to other situations and settings over time" (p. 584).

There is a growing body of practices that build upon the data-based instructional intervention models from the school effectiveness movement. Practices effective for general education can, through adaptation, be effective for special needs learners (Bickel & Bickel, 1986; Goodman, 1985; Jewell, 1985; Peterson, Albert, Foxworth, Cox, & Tilley, 1985). Although some researchers have questioned the assumption that practices effective for general education are also effective for children with learning problems (Hallahan, Keller, McKinney, Lloyd, & Bryan, 1988), it

would appear that such practices could be regarded as benefiting all students (Greenburg, 1987).

Having assessed the effective instruction research, Bickel and Bickel (1986) identified practices which have implications for special needs learners. They observed that emerging from the research is the image of the teacher actively, directly engaged in the teaching-learning process. Resources like time and curriculum content are allocated and used in efficient ways. Students learn more because they have more opportunities to learn and are rewarded for their efforts. Students' goals and objectives are meaningful, clearly written, sequenced, and reviewed and updated periodically. Individual lessons are based on student progress data that are collected on a regular basis. Groups are established as a result of instruction; frequent shifts among groups occur during the school year. The authors conclude:

The basic implication, then, of the effective schools research is that there is a growing knowledge base about how to effectively organize schools and instruction that is relevant to both special and regular educators and that there is a growing rationale for special and regular educational programming to become more integrated at the school level ... (p. 497)

Other classroom level instructional practices identified for diverse populations in integrative settings are curriculum-based assessment (Lipsky & Gartner, 1987; Reynolds & Lakin, 1987; Wang, Reynolds, & Walberg, 1986; Will, 1986), computer-assisted instruction (Carnine, 1989), direct instruction (Engelmann & Carnine, 1982), behavior management and social skills training (Strain & Odom, 1986), and adaptive instruction (Wang & Walberg, 1985).

Two approaches combining the above practices are the Adaptive Learning Environment Model (ALEM) (Wang & Birch, 1984) and Integrated Classroom Model (ICM) (Affleck, Madge, Adams, & Lowenbraum, 1988). ALEM features student choice, task flexibility, systematic teacher monitoring, peer tutoring, student-initiated requests for assistance from teachers, a wide variety of curriculum materials, student self-responsibility, and task-specific instruction. Special and general educators co-teach and engage in management-related interactions and small group instructional activities. Another comprehensive approach is ICM which features direct instruction in small or whole groups followed by guided practice until a student is ready to work independently. Seatwork and curriculum are modified to meet students' needs. Cooperative learning is used to practice skills introduced by the teacher.

How are specific needs of such students who may be blind or deaf met in integrated settings? In a restructured school system, the special education teacher, trained in specialized skills such as the use of braille and sign language, would teach these skills in the general classroom (Pugach & Lilly, 1984; Stainback, Stainback, & Forest, in press).

System Level Policies

A restructured system incorporates a third level of change, system level, in which policy changes are directed toward traditional bureaucratic rules and regulations. Wang and Reynolds (1985) argue that "funding disincentives" discourage integrative planning due to current special education policies and funding practices. The current finance

dilemma, of course, is that both general education and special education dollars are in short supply. One aspect is that special education fiscal constraints have impacted the delivery of services to handicapped children and that the nature of this impact has been to place greater demands on general education (Hocutt, Cox, & Pelosi, 1984). Because of this fact, there may be greater need for general and special education interface and cooperative planning to limit duplication of effort and resources. Cooperative efforts seem most successful in those states where the funding formula for special education programs is based on the same foundation as general education funding (Greenburg, 1987).

Another approach proposed by Regular Education Initiative advocates involves a "waiver for performance" (Viadero, 1988). This approach would enable schools to pilot integrative initiatives without being hindered by federal and state regulations based on separate funding, staffing, and eligibility criteria. According to Reynolds and Lakin (1987), a more proactive approach is to use the Food and Drug Administration's (FDA) standards. In the FDA approach, the federal Department of Education would only promote demonstrably effective approaches to educating special needs learners and support research dedicated to the same purpose.

Reforms toward more integrated classroom models must be paralleled by changes in the structure of training programs and certified requirements. Such revisions will demand the cooperation and collective energies of university personnel, state, and local educational agencies, legislators, and advocates (Hagerty & Abramson, 1987). Unfortunately, the dual instructional system is perpetuated by a system of professional

preparation and certification that institutionalizes program and staff segregation.

Technical Assistance Needs

The necessary role changes among professionals in a restructured system necessitates technical assistance. The literature on successful mainstreaming programs suggested that technical assistance must accompany new demands placed on teachers to instruct special needs learners in the general education setting (Gallagher, 1976; Maher & Bennett, 1984; Ysseldyke & Algozzine, 1982). Kokaska (1976) stated more than a decade ago that "mainstreaming will change the roles of both the specialist and the regular class teacher and require different skills" (p. 77). What happens when technical assistance is not provided? Williams and Algozzine (1979) reported that lack of technical abilities affected teachers' willingness to work with handicapped children.

One personnel development outcome suggested by Wang, Vaughan, and Dytman (1985) concerned positive teacher attitudes about program implementation. They supported the use of the Adaptive Learning Environment Model, a "systematic staff development approach ... designed to support the programming and role changes required for greater accommodation of special needs students, as well as their general education peers ..." (p. 114). Johnson and Cartwright (1979) investigated general education teacher knowledge about attitudes toward handicapped students as impacted by: (a) information about handicapped children; (b) classroom experiences with handicapped children; or

(c) both information and classroom experience. While the study's results did not confirm that their combined specific experimental interventions were significantly more productive in positively affecting teacher knowledge or attitudes concerning mainstreaming, the researchers concluded that "information and experience in some form will make teachers more aware of the possible effectiveness of mainstreaming and more knowledgeable about the capabilities of handicapped children integrated in their regular classrooms" (p. 460).

In the reintegration of handicapped students, Warger and Trippe (1982) suggested that classroom teachers tend to object less to the reintegration of some types of handicapped students than to others, citing evidence that "students with emotional impairments seem to give teachers particular difficulty" (p. 247). They also suggested that one major goal in preservice training is overcoming negative attitudes toward students with learning difficulties. Preservice information complemented by supported classroom experiences seem to be one promising approach to impacting future general education teacher attitudes (Greenburg, 1987).

Such initiatives may reduce the role change pressures in the future; but, in the meantime, teachers must respond to their own and others' expectations concerning the quality of instruction provided. Salend (1984) has emphasized the extent to which efforts to provide instruction to diverse student populations are affected by the skills and attitudes of teachers. He suggested that no other area holds greater potential for effective general and special education interface than the area of personnel development. Through planning, content development,

follow-up, and evaluation processes, staff can gain considerable appreciation of the experiences, expertise, and situations of others.

Inservice training can be regarded as staff development activity embedded within a staff development system (Greenburg, 1987). This traditional approach, inservice education, is widely acknowledged not to influence organizational change (Howey, Matthes, & Zimpher, 1987). Some of the reasons for the lack of change may include: (a) using inservices to remediate a problem which has been improperly diagnosed (Brim, 1966; March, 1981); (b) lack of understanding regarding attitude formation and change (Guskey, 1986); (c) resistance to solutions which are not believed to be workable (Longo, 1982); and (d) perceived manipulation of attitudes (Tymitz-Wolf, 1982). Most school inservices directed toward changing teacher attitudes were either structured to change attitudes directly or to provide added information in the hopes that increased knowledge would change attitudes (Hutson & Silvernail, 1980; Voeltz, Bailey, Nakamura, & Azama, 1979). However, these approaches rarely accomplish such a task (Blumberg, 1980).

In an attempt to determine what type of staff development system would be associated with change, several efforts were undertaken. The four-year Rand Change Agent Study surveyed almost 300 change-agent projects to document the mutual adaptation process of school professionals and change efforts (Howey, Matthes, & Zimpher, 1987). The study found that schools implemented innovations in different ways, taking into consideration organizational forces, participant motivation, and political pressures unique to individual settings. Project success was directly related to teachers' willingness to work hard and achieve

project goals. Teachers' commitment, in turn, was directly related to the scope of change. The greater the change in terms of complexity and impact, the more motivated teachers were. The conclusion was reached that as teachers felt power to influence their profession, the more willing they were to do extra work. Administrators' motivation was a direct signal to teachers also. If the administrator was not committed to change, teachers were less committed.

Hall, Wallace, & Dossett (1973) developed a Concerns Based Adoption Model (CBAM) to provide a structure for staff development planning that focused on the process of change as a personal experience. This model looked at stages of change over time and levels of concern from a personal perspective. These stages of concern are: awareness, information, personal meaning, management, consequence, collaboration, and refocusing. The CBAM was used to explain the linkage between commitment and collaboration. Collaborative planning increased both long and short term success and appeared to contribute to broad-based commitment (Kanter, 1981). Other dimensions of the model have direct implication for staff development. In staff training it was found that specific skill training had only a short term effect. Teachers did not assimilate or personalize the skills. But staff support activities in the forms of peer coaching, demonstration, modeling, and teaming had strong positive and direct effects on longer term project outcomes. Thus, emphasis on embedded activities in the classroom and school context with direct staff support can bring about effective approaches to staff development (Howey & Vaughan, 1983; Joyce & Showers, 1981).

Characteristics of a Restructured School System

Programs of full integration (or nearly so) are being carried out in a few states such as Washington and Vermont, and in individual school districts, such as Johnson City and Syracuse, New York, and in Riverview School District, Pennsylvania (Lipsky & Gartner, 1989). In summarizing the steps necessary to achieve an integrated school, Knoll and Meyer (n.d.) identified three elements: (a) commitment, (b) planning, and (c) staff development, preparation, and training. The first element is critical. Taylor (1988) stated:

What distinguishes the programs [that work] is a strong belief in the value of educating children with severe disabilities alongside typical peers and preparing them to participate fully in community life. Integration works only when people are committed to it. (p. 48)

In response to the concern that a unified system will mean a return of special needs learners to an unchanged, unsupported classroom (McKinney & Hocutt, 1988), program designers have characterized the restructured system as a "refashioned mainstream" (Gartner & Lipsky, 1987). Common to these programs is the feature that while they provide integrated settings, diversified needs of learners are not ignored. Components of these programs may include: use of aides and support staff in the classroom, teaming between general and special educators, consultation and technical assistance to teachers, adaptation of curricula, and selection from a range of available specific learning strategies, such as cooperative learning and peer instruction. Also central to the design are new roles for teachers which include such factors as collaboration and consultation among teachers, greater variety of teacher-student interaction, greater teacher control over

their own time, elimination of narrow categorical responsibilities of teachers, collaborative school governance, and broader involvement with other adults, including support staff, outside resources, and parents (Lipsky & Gartner, 1989; Reynolds & Lakin, 1987; Stainback, Stainback, & Forest, in press). Collectively, these components which comprise a unified system characterize a collaborative paradigm of school organization (Slavin, 1987).

Summary

Although the history of special education has been reflected in a series of positive and negative eras, there has been, on the whole, a linear movement or progressive inclusion of special needs students into the mainstream of general education. Although this trend can be considered positive, current controversy surrounds the way dual instructional delivery systems, special and general education, are successfully educating diverse learners. Paradoxically, efforts to expand educational opportunities to special needs learners by developing a variety of programs have become problematical. Increased costs and limited benefits are two of these issues. Proponents for reform recommend that instead of two separate systems, resources should be pooled into one unified delivery system to educate all students. Realization of the goals of this reform movement, the Regular Education Initiative, would happen on three levels. Collaborative arrangements would occur at the building level, effective practices would be implemented at the classroom level, and policies to encourage trial efforts would be in effect at the system level. Technical assistance

through staff development would be provided to encourage role negotiation (i.e., special educator as consultant and general educator as co-teacher).

Can a restructured school be realized to bring about the REI's proposals? The history of special education has ebbed and flowed; previous attempts at reform have not had significant impact on the present structure of public education. Reform proposals have failed to understand school organization and adaptability and for that reason, present efforts may repeat the mistakes of the past. For example, if change is regarded as administrative directives whereby some special educators are directed to spend more time consulting or general educators are directed to alter instructional practices before referring, then only incidental change will result. Keogh (1988) cautioned:

It is unlikely that major improvements in educational services will come about if restructuring is limited to changes in administrative organization. What must be changed are the processes of education. This requires rethinking, not just restructuring ... [that is] the adoption of an attitude that questions rather than defends. (p. 22)

In a sense, PL 94-142 was a measure to correct a flaw in the special education system which was barring students from the general education system. But the corrective measure created unanticipated consequences and raised new ambiguities in the overall system. This time, some educators and public officials state the real flaw is in the general education system, and the call is for a reconstituted mainstream. Reform proposals are no longer directed toward correcting a flaw with the least amount of change; this time the overall system of education is challenged.

The present issue in the REI debate is the fact that it is calling the present paradigm into question. Recall that when technical information is used to indicate that the present paradigm is not working, change efforts can occur by either preserving the prevailing paradigm or by conservative efforts of correcting a recognizable flaw. Both efforts only lead to more flaws and thus create a cycle of repeated calls for change.

For schools to be responsive to students' needs and for professionals to work cooperatively as problem-solvers, a paradigm presented earlier is again introduced. People who can create an organizational paradigm by injecting it with a new set of values operate as adhocracies. The difference in this paradigm is that people with problem-solving values can make a significant difference. According to Skirtic (1987), people who act on their own values can affect what an organization can be. Teachers can affect student learning by the values they hold for student achievement and their own teaching performance. Principals can affect building climate by the value they place on high expectations for student achievement.

By infusing problem-solving values in the form of new expectations, former belief systems can be challenged and questioned. A culture of mutually reinforcing expectations and activities best represents a restructured school system. This school system is not restructured through structural or administrative changes, but restructured through a new belief system that challenges disabling attitudes. No longer would there be an education system that focuses on limitations of special needs learners, a teacher's incapacity to teach students because of a lack of

credentials, or instruction that is determined by the label attached to students. Lipsky and Gartner (1987) state:

The ultimate rationale for quality education of students in an integrated setting is based not only on law or pedagogy, but also on values. What kinds of people are we? What kind of society do we wish to develop? What values do we honor? The current failure to provide a quality education to all students and the perpetuation of segregated settings expresses one set of answers to these questions. To change the outcome, we need to develop another set of values.
(p. 389)

Thus, it appears that recognition of belief systems are important to the realization of the Regular Education Initiative. How can belief systems be described, and what affect will they have on attitudes of professionals who may be asked to implement the REI proposals? Moreover, can belief systems be measured to guide policy decisions?

C. Values, Beliefs, Attitudes and Organizational Change

It has been argued that teacher attitudes will directly influence the reconstruction of a unified instructional system (Keogh, 1987; Lipsky & Gartner, 1989; Walker & Lamon, 1987). Up to this point, research on attitudes has included the study of pragmatic variables (e.g., time, resources, support), affective variables or "willingness" to teach the handicapped (e.g., preference for disability category; concern for appropriate placement; effect on nonhandicapped), and conceptual variables (e.g., "special" skills and knowledge as domain of special educators). Proponents of the REI are calling for the replacement of traditional belief systems which foster disabling attitudes with new expectations and commitment toward quality education for all students.

For example, decision-makers must question the need to label students by deficits in order to provide help they need. Can this help be provided in the general classroom with support? Problem-solving values are needed to reveal the inadequacies and inconsistencies of the present organization. These problem-solving values, in turn, will lead to enabling attitudes that question rather than defend. The REI has come under attack, however. Whose problem-solving values will infuse the system? Special educators' values? Are these values the same as general educators'? Under what conditions can a paradigm shift occur; that is, must attitudes and beliefs of all educators and administrators be in concert with each other? What is the future of the REI if this condition is not the case?

Recall the discussion of the culture of a school and the operation of regularities and loose couplings which make schools exceedingly difficult to change. Traditional approaches to change have focused on the school as a functionally rational, technological constrained organization; hence, many futile efforts resulted. Instead, the focus is shifting toward examining the process of school organization as socially constructed, subjectively meaningful embodiments of both individual and collective action. Change in a humanist or process structure occurs through change in its members and is not imposed bureaucratically through rules and regulations. Organizational change results as personnel change (Burrello & Sage, 1979). Knowing members' present attitudes and beliefs, decision-makers can determine the course of action. Policy research provides this information. Can attitudes be changed? Yes, they can (Guskey, 1986; Johnson & Johnson, 1984; Stainback & Stainback, 1982).

But first, members must feel they are part of the reform (Simpson & Edwards, 1980). Previous reforms have been outside of general education (Forness & Kavale, 1984). Effective educational reform requires input from all participants (Myles & Simpson, 1989). Will (1986) observed that "special programs and regular education programs must be allowed to collectively contribute skills and resources" (p. 413).

By making teachers' attitudes a matter of systematic inquiry, proponents of the REI will not repeat the mistakes of the past. Instead of creating a restructured system, decision-makers will only recreate administrative changes. What are educators' and administrators' attitudes toward the REI goals; that is, do they agree with them? What significance would there be if general and special educators and administrators had different levels of agreement? Since collaboration is critical to a problem-solving paradigm, it would appear difficult to cooperatively work together if there were not general agreement with the goals of a reformed system. Furthermore, teachers' attitudes and beliefs may in large measure determine their willingness to use technical assistance (Gutkin & Ajchebaum, 1984). Because technical assistance to general educators is a central feature to any reform effort to increase integration of students with learning problems into general education, the relationship between teachers' attitudes toward recommended behaviors and their technical assistance needs should receive careful scrutiny (Kauffman, Lloyd, & McGee, 1988).

In order to show the relationship between belief, attitude, value, and organizational change, this section includes: (a) definition and relationship among the concepts, belief, attitude, and value; (b)

theories of attitude and behavior change; (c) previous research on teacher attitudes toward integrative programming (i.e., mainstreaming) and; (d) use of socialization to structure attitude change.

Beliefs, Attitudes, and Values: Search for Congruence

The relationship between beliefs, attitudes, and values will be examined by first defining each of these constructs and then distinguishing among them. The question of whether there is a systematic relationship among the components of attitude will be explored.

Beliefs

Beliefs are the fundamental building blocks in the formation of attitudes. On the basis of direct observation or information received from outside sources, a person learns or forms beliefs about a phenomenon. That is, an object is associated with various attributes. Fishbein and Azjen (1975) stated:

The totality of a person's beliefs serves as the informational base that ultimately determines attitudes, intentions, and behaviors. Our approach thus views man as an essentially rational organism, who uses the information at his disposal to make judgments, form evaluations, and arrive at decisions. (p. 14)

Degree of belief is important because it determines dispositions to act on certain assumptions. A person's willingness to pursue a course of action depends to a great extent on the probability of success. Beliefs, therefore, are considered to vary quantitatively between zero and one according to degree of certainty. The higher the certainty, the higher the probability associated with the belief. Also, not all beliefs are

equally important to an individual. Two assumptions are connected with that statement. First, the more central a belief, the more it will resist change. Second, the more central the belief changed, the more widespread the repercussions in the rest of the belief system (Fishbein & Ajzen, 1975; Rokeach, 1968).

Each belief associates a given object with some attribute. According to an expectancy-value model, a person's evaluation of the attribute contributes to formation of an attitude in proportion to strength (saliency) of belief. Attitudes are determined by salient beliefs held toward an object or its attribute as a result of presented information. Information may produce an increment, decrement, or no change in attitude depending upon the saliency of prior beliefs (Fishbein & Ajzen, 1975).

Attitude

Considering that attitude is probably "the most distinctive and indispensable concept in contemporary American social psychology" (Allport, 1968, p. 59), it is curious that a high degree of ambiguity and confusion surrounds its definition (Fishbein & Azjen, 1975; McGuire, 1969; Elizur, 1970). It appears, however, that a common definition can be stated: "Attitude can be described as a learned predisposition to respond in a consistently favorable or unfavorable manner with respect to a given object" (Fishbein & Azjen, 1975, p. 6). A direct description of the nature of a predisposition has been offered by Rokeach (1968): "An attitude is a relatively enduring organization of beliefs around an object or situation predisposing one to respond in some preferential

manner" (p. 112). This concept of attitudes is reserved for more enduring, persistent organizations of predispositions. Thus, predisposition refers neither to a particular behavior nor to a class of behaviors, but rather to the overall favorability of a behavioral pattern (Asch, 1952; Rokeach, 1975).

An important distinction must be made between predisposition to behave or behavioral intention and actual behavior. Explanation of this distinction requires a description of four major variables essential to understanding the construct "attitude." These categories of variables are: (a) affect (feelings, evaluations), (b) cognition (opinions, beliefs), (c) conation (behavioral intentions), and (d) behavior (observed overt acts). In discussing the notion of response consistency, theorists have noted that the major characteristic that distinguishes attitude from other concepts is its evaluative or affective nature. Furthermore, most of the commonly accepted attitude-measurement procedures arrive at a single number designed to index this general evaluation or feeling of favorableness or unfavorableness toward the object/situation in question. For example, Thurstone (1931) argued that "opinions" are verbal expressions of attitude and that they may therefore be used to measure attitude. Most attitude-scaling procedures provide an attitude score on the basis of a person's response to a set of such opinion items. Specifically, these items are statements of belief or intention, and the person's response indicates the location along a probability continuum; that is, it is a measure of the strength of belief or intention (Sherif, 1965; Scheibe, 1970). The significance of an attitude-measurement procedure is supported by Pepitone (1966):

The degree to which an attitude is important or central to the individual is one of the most critical attributes requiring measurement. (p. 267)

Beliefs, the second variable, represent the information a person has about the object. As discussed, a belief links an object to some other attribute. For example, the belief that use of data-based practices is effective for diverse learners links the "object," data-based practices, to the attribute, effective for diverse learners. An information-processing approach, therefore, underlies the formation of attitudes. Specifically, a person's attitude toward an object is based on beliefs about that object. If those beliefs associate an object with primarily attributes, attitudes will tend to be positive. Thus, a person's attitude toward some phenomenon is determined by a set of beliefs that the "object" has certain attributes and by evaluation of those attributes (Bem, 1970; Fishbein & Ajzen, 1975).

The third class of variables refers to a person's intentions to perform various behaviors. As with a belief, the strength of an intention is indicated by the person's subjective probability that the behavior in question will be performed. To summarize the above three constructs, the concept "attitude" should be used only when there is strong evidence that the measure employed places an individual along an affective dimension. When the measure places the individual on a dimension of subjective probability relating an object to an attribute, the label "belief" should be applied. When the probability dimension links the person to a behavior, the concept "behavioral intention" should be used (Fishbein & Azjen, 1975).

The fourth category, overt behavior, departs from the description of attitudes as a complex system comprising beliefs about an object, feelings toward the object, and action tendencies with respect to the object. Given this view of attitude as encompassing all the person's experiences with an object, it would be difficult not to infer a strong connection between attitude and behavior. However, repeated findings have failed to predict the relationship between attitude and overt behavior (Bem, 1970; Sherif, 1965; Fishbein & Azjen, 1975). All questionnaire or verbal responses are instances of overt behavior. That is, they are observable acts of the respondent. Usually, however, responses are not treated as records of behavior but are instead used to infer beliefs, attitudes, or intentions. In contrast, the behavioral category of overt behavior, refers to behavior studied in its own right. That is, a researcher obtains a measure of overt behavior because of the interest in that particular behavior and desire to understand its determinants. Moreover, the study of a given behavior may be used to infer beliefs, attitudes, or intentions (Fishbein & Azjen, 1975).

Together, beliefs and attitudes which enter into a total system of beliefs, strive for consistency. Each belief within an attitude organization is conceived to have three components. These components are: (a) cognitive component (person's knowledge about what is true or false/good or bad); (b) affective component (positive or negative feelings); and (c) behavioral component (response predisposition leading to some action). Theorists point out that individuals strive to maintain consistency among the cognitive, affective, and behavioral components which enter into attitude organization (Rokeach, 1968).

Values

Values are concerned with modes of conduct and end-states of existence. Once a value is internalized, it consciously or unconsciously becomes a standard for guiding action, for developing and maintaining attitudes toward relevant objects and situations, for justifying one's own and other's actions and attitudes, and for comparing self with others. A person possesses fewer values than attitudes. While an attitude represents several beliefs focused on a specific phenomenon, a value is a single belief that transcendentally guides actions and judgments. Sometimes a person is confronted with a situation in which values conflict. A person's value system can thus be said to represent a learned organization of rules for making choices and for resolving conflicts (Scheibe, 1970; Rokeach, 1968).

Values perform an important function in maintaining attitudes. A person derives satisfaction from expressing attitudes appropriate to self-concept and personal values. For example, an event may involve three different sets of issues, ethical, social, and political. When values of a particular audience are included in the perceptual framework of a judgment, the meaning of a message can be modified to satisfy the audience. For values to change, individuals must experience dissatisfaction with their self-concept and associated values which are no longer adequate to deal with a changing world (Watts, 1984).

Attitude and Behavior Change

By conceptualizing attitudes as having three major components, researchers are provided with ideas about how to change and measure them.

Attitude change can occur by first changing the cognitive component (e.g., new information), the affective component (e.g., pleasant or unpleasant experience), or the behavioral component (e.g., norm change or legal imposition of behavioral change). When one of the components has changed, the others are likely to change (Triandis, 1971). The affective component can be measured by physiological responses or verbal statements of like and dislike, while the cognitive component might be measured by self-ratings of beliefs. The behavioral component can be measured by direct observation or verbal statements concerning behavior. In addition, attitudes are seen as enduring, highly generalized predispositions that are learned. By thinking of underlying attitudes as long lasting rather than momentary states, it should be possible to produce more pervasive change than if only specific behavior is changed (Zimbardo, Ebbesen, & Maslach, 1977). If researchers wish to change attitudes or even understand them, they must know what function attitudes perform in the "total economy of the personality" (Katz, 1960). There are four basic functions: (a) Attitudes serving a utilitarian function are aimed at maximizing external rewards and minimizing punishments; (b) ego-function refers to protecting the person from acknowledging basic self truths or about harsh realities of the external world; (c) value-expression function helps individuals maintain self-identity appropriate to personal values; and (d) knowledge function aids individuals by providing meaningful cognitive organization and consistency to their views of the world (Triandis, 1971).

Theories of Attitude and Behavior Change

Attitude and behavior change are related in complex ways. In order to understand the relationship, four theories are discussed. Theories are vital in any systematic approach to understanding complex phenomena because they can accomplish the following: (a) generate predictions about complex functional relationships between variables; (b) separate relevant from irrelevant variables and provide schema for organizing the relevant; (c) allow for derivation of nonobvious predictions; and (d) explain why variables function as they do, often by postulating hypothetical processes (Zimbardo, Ebbesen, & Maslach. 1977).

Social Role Theory

Social role theory brings together the two constructs, beliefs and values. Two concepts of role theory, role expectations and norms, are translations of beliefs and values. In role theory, the basic behavioral premise is that behavior results from the interaction between a person and a role associated with a position (status) in the social structure. Both the occupant of a status and those around have expectations about performances that are proper for the role. A major determinant of effectiveness in role enactment is the agreement of the person and audience on these expectations; that is, how well a person knows the part (Sarbin & Allen, 1968).

Since most behavior takes place in a social context, role theory provides an account of such behavior. Each person is seen as behaving in a highly differentiated social structure - a structure that consists of both knowledge of the part (beliefs) and evaluations of the adequacy of

performances (values). Role theory is interactional, always including personal and setting characteristics as determinants of a particular set of beliefs and values. For example, the special educator in a self-contained special education classroom may assume the role of co-teacher in a general education classroom. However, the change of physical setting and relevant audience require a shift in salient beliefs and values (Scheibe, 1970).

Cognitive Dissonance Theory

Underlying the interrelated connection between value, belief, and attitude is the notion that this coherent system is internally consistent. Cognitive consistency theorists have been interested in the process of belief and attitude change. They reason that individuals possess a drive toward cognitive consistency which, therefore, acts as a stimulus to motivate people to change their attitudes and beliefs and thus bring any "rebellious" premise into line. It follows from this reasoning that one should be able to change an individual's beliefs or attitudes by exposing or creating inconsistencies among them (Fishbein & Ajzen, 1975). Once dissonance is aroused, there will be a need to reduce the tension. Dissonance can be reduced by revoking a decision, lowering the importance of the cognitions or decision, or adding new cognitive elements to change the ratio of favorable to unfavorable elements.

What happens when two cognitive elements exist in a dissonant relation? For example, consider the two statements: "I know that instruction should be tailored to individual needs," and "Students are expected to perform on grade level." The magnitude of dissonance in this

situation is inversely related to the amount of perceived punishment or reward. That is, the greater the justification for the behavior, the less dissonance it arouses. Here, dissonance theory predicts that the person can reduce dissonance by changing the belief about individualization such that it becomes consonant with behavior. Thus, the greater the magnitude of dissonance, the greater the expected change in belief (Festinger, 1957).

From this discussion, it appears that behavior and the conditions under which it occurs are one of the major foundations of an individual's beliefs and attitudes. Although cognitive, affective, and social factors have their effect, it remains true that changing an individual's behavior is one of the ways of causing change in beliefs and attitudes. A person's new behavior provides a source from which a new set of inferences are drawn concerning how one feels and believes (Bem, 1970; Sherif, 1965). Festinger's theory of cognitive dissonance provides a theoretical explanation of this process of attitude change. That is, behavior changes to reduce dissonance; as a result, attitude changes in a cause-and-effect sequence.

Group Dynamics Theory

Another theory of attitude change concerns social influence on behavior. The catalogue of social influences such as social background, university training, and colleagues to which a person is exposed impacts upon one's belief system. Social influences can range from explicit attempts to modify opinions through persuasion to subconscious

manipulation. In the final analysis, the major influence upon people is people (Bem, 1970).

Social norms that partially govern behavior are in part derived from reference groups. Nearly every group has an implicit or explicit set of beliefs, attitudes, and behaviors which are considered appropriate for its members. Any member who strays from those norms risks isolation and social disapproval. Groups provide the frame of reference within which members compare and evaluate their reactions to phenomena. Individuals may be members of more than one reference groups. What happens when reference groups conflict? For example, a teacher may have had training as a special educator and general educator. Having taught small classes of students, the teacher is now confronted with a large class of heterogeneously grouped learners. Which set of beliefs and attitudes does the teacher adopt? Studies have shown that individuals select their particular reference groups because they share the same values and beliefs, and in turn, the reference group develops and sustains members' attitudes (Newcomb, 1967). For example, if the teacher in question values the importance of individual differences and acknowledges long-range consequences, this person will select the reference group which continues to reinforce this value (Bem, 1970; Newcomb, 1967).

Social Learning Theory

Social learning theory postulates that there is a continuous reciprocal interaction among a person's behavior, events going on within the person, and environmental consequences of that behavior. This theory assumes that the mechanism by which future behavior is changed is a form

of learning. If the consequences for performing a behavior are positive or rewarding, the behavior is likely to occur and if negative, not likely to occur. Thus, most behavior leads to consequences that feed back on behavior, either maintaining or changing the probability of similar behavior in the future (Zimbardo, Ebbesen, & Maslach, 1977).

Learning, a change in behavior, can occur and become altered by a number of techniques. For example, people can learn by either directly experiencing the consequences of their own behavior or by looking, listening, and reading. Change techniques include direct reinforcement, extinction, and vicarious reinforcement or instructions, rules, and communications (verbal persuasion). In essence, all the techniques relevant to increasing or decreasing learning are applicable to producing change in attitudes (Fishbein & Ajzen, 1975).

Role of Beliefs in Influencing Attitude Change

Attempts to bring about change involve exposure to new information about some issue or event. Changes in beliefs resulting from such exposure provide the foundation on which rests the ultimate effectiveness of any influence attempt. Fishbein and Ajzen (1975) argue that attempts to induce change in a given belief, attitude, intention, or behavior must take into account the beliefs that are most directly affected by the influence attempt. Studies attempting to produce change in a given variable can only lead to inconsistent findings if primary beliefs underlying that variable are not well identified and understood. The beliefs which a researcher is attempting to change are called target beliefs. One of the problems, therefore, is selecting target beliefs

which also serve as fundamental determinants (primary beliefs) of the dependent variable. Primary beliefs are not only related to an issue (e.g., attitude toward the REI) but also to its attributes (e.g., costs or consequences) (Fishbein & Ajzen, 1975; Zimbardo, Ebbesen, & Maslach, 1977).

How are beliefs changed? Beliefs can be changed if a person is: (a) placed in a situation where an event is directly observed to have a given attribute; (b) told by a creditable outside source that the event displays the characteristic in question; (c) interactively participating in a situation entailing a large number of informational items (i.e., large number of object-attribute links); and (d) presented information which has been carefully selected (persuasive communication) (Fishbein & Ajzen, 1975; Triandis, 1971).

Although understanding of teachers' and administrators' beliefs toward the REI has not been the focus of study, it is appropriate to look at previous research on a similar topic, mainstreaming, and its attributes such as teacher acceptance of handicapped students in general classrooms. What primary beliefs have been identified and targeted in previous attempts to influence attitudes? Perhaps in a similar manner, these same beliefs can be selected by implementors of REI to increase the likelihood that by influencing primary beliefs toward goals and procedures of REI, change in attitude (i.e., acceptance of REI) will result.

Mainstreaming: Attention to Attitudes of General Educator

Attitudes of teachers toward evaluating the success of integrating handicapped students into general education classrooms (i.e., mainstreaming) have been extensively explored. Reports of early experiences with mainstreaming repeatedly focused on the positive attitude of teachers as being the key to success for the special needs learner (Larrivee, 1981; Yaffe, 1979). There are many variables involved in forming and changing attitudes. Some of these variables which are reported to contribute to negative attitudes are: (a) lack of adequate preservice training and skills to work with special students (Flynn, Gack, & Sundean, 1978; Johnson & Cartwright, 1979; Middleton, Morsink, & Cohen, 1979; Salend & Johns, 1983; Stephens & Braun, 1980); (b) increased paperwork, accountability, and possible conflict with special education teachers (Ryor, 1978); (c) lowered expectations for ability of special needs learners (Fine, 1967; Good, 1981; MacMillan, Meyers, & Yoshida, 1978); (d) reduced tolerance for maladaptive behaviors (Algozzine & Curran, 1979; Doris & Brown, 1980; Hersh & Walker, 1983; Kerr & Zigmond, 1986; Safran & Safran, 1984; Shotel, Iano, & McGettigan, 1972); (e) belief that special education class placement is more appropriate for students (Barngrover, 1975); and (f) limited contact with handicapped students (MacMillan, Jones, & Aloia, 1974). As a result of these studies, many general educators have been portrayed as resistant to the integration process (Boucher, 1981).

Looking broadly across the field of mainstreaming studies, some reports have observed a trend toward more positive results. Some studies have indicated that elementary teachers' attitudes toward mainstreaming

are becoming more positive (Marston & Leslie, 1983; Reynolds, Martin-Reynolds, & Mark, 1982; Schmelkin, 1981). Administrators, who have tended to be somewhat skeptical about mainstreaming (Payne & Murray, 1974), are reported to be more positive (Carlberg & Kavale, 1980; Center, Ward, Parmenter, & Nash, 1985; Pieterse & Center, 1984). Principals who have had some formal training in special education are less resistant to mainstreaming efforts. Their more positive attitudes appear to be related to having established and maintained successful mainstreamed programs (Carlberg & Kavale, 1980; Center & Ward, 1984; Johnson & Johnson, 1981; Madden & Slavin, 1983).

However, positive attitude changes among secondary teachers toward integrative efforts appear to be developing at a slower rate. Reports indicate that secondary teachers (1) believe that special students should be taught in special classes, (2) are subject-matter rather than learner-centered oriented and less willing to use consultants and support services, and (3) perceive special students' performance in social, emotional, and academic areas as inadequate (Post & Roy, 1985; Powers, 1979; Young & Shepherd, 1983). Although many variables impact on developing positive attitudes of teachers toward integrating special needs learners into general education classes, there appears to be lack of agreement as to which variables carry the most weight (Larrivee, 1981; Stephens & Braun, 1981). One critical variable, teacher skill, has been identified consistently by researchers as necessary for successful mainstreaming, but only a small percentage of general educators feel they possess the necessary skills (Alexander & Strain, 1978; Flynn, Gack, & Sundean, 1978; Gickling & Theobald, 1975). Attempts have been made to

alter negative attitudes and increase teacher skill through inservice and preservice programs (Frith & Lindsey, 1981; Naor & Miligram, 1980), and through increased consultations between regular and special educators (Salend & Hanke). However, teachers continued to doubt the probability that they would be successful in their own efforts, and attitudinal changes gained through these methods are reportedly short-lived (Donaldson, 1980; Stainback, Stainback, Strathe, & Dedrick, 1983; Pernell, McIntyre, & Bader, 1986). Furthermore, it has been reported that interactions between special and general educators often increased resistance to the integration process (Bensky et al., 1980). Pernell, McIntyre, & Bader (1986) concluded: "Despite the large body of data amassed by researchers on the benefits of the least restrictive environment, little change has taken place in the way handicapped children are viewed by regular teachers" (p. 136). Thus, efforts to foster positive attitudes toward integrative programming between special and general education appear likely to continue.

Why, then, in spite of the many replicated studies and large amount of data on the attributes of successful mainstreaming (i.e., presence of series of factors which influence attitude change) have the results been inconclusive? Towner (1984) suggests the reason is due to deficiencies in methodology, specifically, lack of systematic application of attitude theory and principles of attitude change. In her review of 47 studies on mainstreaming, she found that they lacked the following elements: (a) definition of the term "attitude" in the context in which it is used; (b) specification of the component(s) of attitude(s) of concern; (c) identification of the function(s) of the attitude(s); (d) suggestion of

theory of attitude change, and (d) application of attitude-change principles. Towner (1984) argues that if such methodology were applied, research can facilitate understanding of how attitudes in special education context develop and the functions they serve. Strategies for attitude change can then be suggested.

Based upon the research of Towner (1984) and Fishbein and Ajzen (1975), an argument can be made for the importance of identifying beliefs toward a given "object" before research efforts toward influencing attitudes begin. Recall the informational basis for the formation of an attitude; a person is viewed as processing the information about an object in arriving at the evaluation of the object. Acknowledging this informational basis to attitudes and attending to the theory that attitudes are learned responses, professionals have typically attempted to change attitudes through the use of information. Programs generally take the form of information dissemination; examples are inservice education, workshops, and occasionally courses (Shaw & Bensky, 1980). However, attitudes are based on a network of beliefs, and the more central a belief is to a person, the more it influences the processing of new information. By directing information at educators' proximal or external beliefs, efforts to change attitudes will not be long lasting (Gans, 1986; Zimbardo, Ebbesen, & Maslach, 1977). Fullan (1982) also acknowledged the importance of understanding educators' beliefs. He stated that beliefs, teaching practices, and resources exist in a dynamic interrelationship that must be addressed if change efforts are to be successful. Beliefs guide and are informed by teaching strategies, and

effective use of materials depends on their articulations with beliefs and practices.

Problematic Use of Socialization to Structure Change in Attitudes

Attending to the criticism posed by Towner (1984), two theories are proposed to partially explain the ineffectiveness of many efforts to change attitudes of teachers toward acceptance of special learners in general education classrooms. The first is that insufficient attention has been paid to the organizational structure and socialization processes which facilitate the "learning process" of attitudes (Brim, 1966; Guskin & Guskin, 1970). The second is that there may be significant differences in the professional orientations and belief systems of special and general educators engaged in efforts for more inclusive access to the mainstream (Morsink, 1979). These two theories will be explored in the final section.

Processes Which Influence Learning

Research on teachers' attitudes suggests that negative attitudes reflect conformity to school norms (McCloskey & Quay, 1987). Copeland (1978) reported that there is a "class ecology" that shapes new teachers' attitudes regardless of their training. As teachers enter the profession, their behavior may be shaped by the norms of the existing system, and these behaviors, once shaped, may continue to conform to and reinforce the system norms in the next generation of new teachers (Copeland, 1978; Johnson, 1969; Yee, 1969). One study reported that even when student teachers were provided with coaching and training in working

with special needs learners, their attitudes changed in the direction of the classroom teachers' attitudes. That is, the attitudes of student teachers were not influenced positively by the training interventions but did appear to be influenced by supervising-teacher attitudes (McCloskey & Quay, 1987).

Recall the discussion in which Skirtic (1987) argues that people can reshuffle the organizational paradigm by injecting it with a new set of values. The difference in a restructured system will be people acting on their own values and affecting what the organization can be. The critical issue is that these people must confront the prevailing norm and cause other people to question its present currency. The collaborative paradigm is based upon the theory of socialization. In such a system, general and special educators and administrators problem-solve together and develop a norm of cooperation among professionals. The socialization process recognizes the influence of teachers' role, personal expectations, and organizational structure upon attitudes and performance (Guskin & Guskin, 1970). Traditionally, the educational system, conceived as a bureaucratic structure, approached change through the individual (Longo, 1982). However, knowledge, skills, and attitude changes are gained through socialization (Brim, 1966). Skirtic (1987) states that special educators will be the initiators of a restructured, collaborative system because of their problem-solving values. Does that statement imply that general educators generally have different values? And if so, how does that fact impede the recreation of a new educational system?

Special and General Educators' Attitudes and Beliefs:
Are They Different?

Besides creating opportunities for students with learning problems to become integrated into the general education system, PL 94-142 also created the opportunity for special educators to become more familiar with general educators. As a result, some of the basic contradictions of each system were exposed to groups of educators with different sets of values. In a sense, the REI represents a further intrusion of special education values (e.g., programs based upon needs of students) into the general system of education (e.g., programs based upon curricular benchmarks). Skirtic (1987) states that the longlasting contribution of PL 94-142 will be its contribution to infusing a new set of values into public education. He continues by stating that these values should be the organizing principle of a new paradigm, respect for each student as an unique, worthwhile individual. Yet, can this paradigm shift occur if values are divergent? Because concepts of collaboration and shared responsibility are the essence of REI, what are the chances for success when special and general educators do not share the same belief system? Can there be a common meeting ground upon which to base dialogue or must compromise occur? Several researchers have looked at this issue of value differences between special and general educators. Do they exist?

Gans (1987) and Diebold and Trentham (1987) studied the difference in attitudes and values between general and regular educators. Gans (1987) reported special educators who depend upon their own interpretations of the integration needs of general educators are apt to be in error. General educators' attitudes toward willingness to teach special learners tended to be shaped by variables linked with personal

and career characteristics whereas special educators were affected by support services and variables pertaining to the educational and affective aspects of the learning process. In Diebold and Trentham's (1987) study, special educators were asked to answer questions as they thought general educators would respond concerning willingness to teach special learners. Their predictions were approximately 30% correct. The researchers concluded that special educators may be pleasantly surprised by the optimism and willingness of their general class colleagues to facilitate the integration of special learners into the general classroom.

Complaints that special educators do not understand the needs or the priorities of general educators have persisted since the integration of handicapped students into general education settings began (Bensky et al., 1980; Blumberg, 1974; Fine, 1967; Graham, 1980; Miller, 1980; Raison, 1979; Voeltz, Bailey, Nakamura, & Azama, 1979). Some researchers argue that group differences originate from different value systems (Blumberg, 1980; Cherniss, 1980; Guskin & Guskin, 1970), and that inadequate attention to values and value system changes have been associated with ineffective inservice programs (Donaldson, 1980). Gans (1986) investigated the difference in value systems using the Rokeach Value Survey. She reported that responses to 18 values were sufficiently different so that general educator or special educator group membership could be discriminated with 71% accuracy. It may be, then, that differing value systems could make the process of collaboration or attitude reformation difficult to achieve.

Summary

Values, beliefs, intentions, and behaviors are systematically related to the construct of attitudes. Although there is disagreement on a common definition of attitudes, there is general agreement that attitudes can be measured through change in one or more of three components: (a) cognition (change in beliefs through new information); (b) affect (feelings toward an object through experiences); and (c) behavior (change of overt acts or intentional statements through norms or laws). These components serve several functions; one most important is enabling individuals to express basic values held dear. Beliefs are the basic building blocks in the conceptual network. A person's attitude toward any object or issue is determined by salient beliefs linking the object to various attributes and by evaluations of those attributes. A person's attitude is related to the totality of beliefs, not necessarily to any specific belief. Similarly, a person's attitude is related to the totality of intentions to perform an overt act, and it follows, the totality of a person's behaviors, not a given behavior, is also related to attitude. Thus, there is a sequence of systematic relations linking beliefs to attitudes, attitudes to intentions, and intentions to behaviors. The cycle is completed by realizing that in the final analysis, a person can form new beliefs only by performing some type of behavior. Learning involves a change in behavior. By exposing a person to information, changes in the above variables are initiated. To gain information, a person may read books, observe events, or interact with other people. For example, through social interaction, a person's behavior leads to the formation of beliefs about the attributes of

objects and characteristics, reactions of other people, and consequences of behavior. These beliefs, in turn, provide the basis for the formation of attitudes toward the objects, people, and behavior.

The importance of shared beliefs to facilitate the process of collaboration between special and general educators, an essential component of the implementation of the Regular Education Initiative, is indicated. However, through the process of mainstreaming, a consequence of the least restrictive environment clause of PL 94-142, contradictions between general and special educators were exposed. Studies revealed that special and general educators have different sets of values and attitudes. If a paradigm shift is to occur as a result of the Regular Education Initiative, special and general educators must share common dialogue including an understanding of each others' beliefs and attitudes. If these beliefs are too dissimilar, efforts are bound to fail. The task is to determine if belief systems are indeed different and then to propose ways to arrive at mutual understanding and accommodation.

Therefore, more specifically, the researcher's purpose in this investigation is to:

1. Explore the differences and similarities in general and special educators' and administrators' attitudes toward the goals of the Regular Education Initiative. The goals are directed toward three levels of a restructured organization, classroom, building, and system. These goals are based on beliefs which may not be held in common by all three groups. For example, is it myth or reality that special education practices can only be performed by special

educators in a separate setting? Regardless of empirical data, such an assumption has taken the form of a belief in some educators' belief systems.

2. Explore the differences and similarities in general and special educators' and administrators' attitudes regarding acceptance of practices and strategies which will facilitate integrative programming in the general classroom. Again, do some educators believe that specific practices are the territory of special or general education? Will their attitude change if support is provided? What level of support is desired? That is, do educators prefer to learn new skills through socialization with colleagues or are unintrusive inservices desired?
3. Determine the extent to which beliefs form barriers or invitations to a restructured system based on the paradigm of collaborative problem-solving.
4. Determine what differentiates general and special educators' and administrators' attitudes toward the Regular Education Initiative. Are favorable attitudes associated with information gained through previous training and experience with collaborative efforts?

CHAPTER III

METHODOLOGY

In this chapter is presented a description of the methodology used to address the research questions concerning the perceptions of general and special educators and administrators toward the goals and procedures of the Regular Education Initiative. Included in this chapter are the following sections: (A) setting, population, and sample; (B) selection of survey technique; (C) instrument development; (D) distribution and collection of questionnaire; (E) coding of data; and (F) treatment of data.

A. Setting, Population, and Sample

The population of general and special educators and administrators involved in this study will come from Michigan. A brief description of the state of Michigan will be followed by a delineated process of population selection.

Setting

The state of Michigan is located in the mid-western part of the United States and has a population of approximately 9 million people, eighth among the 50 states. Michigan can be divided generally into three regions. The industrial southeastern region may be depicted as densely

populated, containing the largest urban areas (Detroit, followed by Flint) surrounded by numerous suburban areas. The second region, including the south, central, and western portions of the state, can be characterized as moderately populated, containing several middle-sized urban areas (Lansing, Kalamazoo, Grand Rapids), surrounded by small suburban areas. These areas, in turn, are surrounded by agricultural farms and rural communities. The northern region can be generally described as sparsely populated, rural areas with a few small cities (Traverse City, Escanaba, Marquette). Tourism and agriculture are the primary sources of income.

The educational system of Michigan is organized through a central, regional, and district structure. The State Department of Education (central) oversees 57 Intermediate School Districts (region), which in turn, are divided into 528 local Public School Districts (district).

Population

The total population of interest includes general educators (K-12), special educators, and building principals in Michigan. The population of each of these three groups is: (1) general educators, 77,737; (2) special educators, 13,512; and (3) building principals, 2,797 (Michigan Board of Education, 1988).

Sample

Based upon the formula for determining the estimation of a population proportion (Scheaffer, Mendenhall, & Ott, 1986, pp. 59-60), a sample size of 400 is required from the total population of 77,737 general educators to obtain a 5% sampling error. The decision was made to have equal sample sizes for the three sample groups instead of proportional sample sizes. Because the total population of general educators is almost 6 times larger than the population of special educators and 28 times larger than building principals, the sample sizes of the latter two groups would be quite small if they were computed proportionately.

The method used to collect data, mail questionnaire, affected the decision to have equal respondents in the three sample groups. Because questionnaire return rates may vary from group to group, the smaller proportionate samples may yield an even smaller number of returned responses. Thus, this study has an orthogonal design with equal sample sizes for each group. There were 400 general educators, 400 special educators, and 400 building principals. The total number of potential respondents was 1200.

The 400 education professionals from the three populations were randomly selected. Random sampling was chosen as a method of selecting the three samples for the following reasons: (1) no advance knowledge of the characteristics of the universe (i.e., Michigan educators and school system) or of their distribution is necessary; (2) bias is eliminated as all elements of the population have an equal opportunity to be chosen; (3) researcher can easily assess the accuracy of estimates because

sampling errors follow the laws of chance; (4) units in a random sample are likely to reveal the variability of the population better than the same number of cases chosen deliberately; the random sample tends to represent the universe in all of its variable aspects; and (5) as the random sample is enlarged, it becomes increasingly representative of the universe, and the extent to which it can be relied upon to give a true cross-section can be determined in accordance with the laws of probability (Parten, 1950; Sax, 1980).

The Michigan Department of Education Data Center has the capability of randomly selecting from their computer file the required number of respondents to compose the three sample groups. The random sampling procedure was conducted in the following manner:

1. A total of 13,512 certified personnel in Special Education (including support personnel) who had any one of 15 different special education codes was gathered together. These codes included Teacher of: Mentally Impaired, Learning Disabilities, Orthopedically Impaired, Blind, Deaf, Trainable Mentally Impaired, Speech and Language Impaired, Autistic, Home-Bound, and Emotionally Impaired. Also included were Teacher Consultants of the Mentally Handicapped and Physically and Other Health Impaired. Support personnel were: Social Worker, Diagnostician, and Psychologist.

The sampling procedure was to select name #4 as the first selection and then every 35th one after that until a total of 400 names were drawn.
2. The next step was to eliminate the 13,512 special education teachers from the total collection of all teachers (N=91,249). The remaining population of general education teachers (K-12) was 77,737. From that group, name #67 was selected and then every 193rd one after that was drawn until a total of 400 general educators was obtained.
3. The third sample was 400 building principals. From the 2,797 principals (both elementary and secondary and excluding assistant principals), name #2 initialized the random selection procedure. Every 7th one after that was selected until a total of 400 building principals was drawn.

The names of the 400 people from each of the three sample groups (N=1200) were printed in triplicate on pressure-sensitive labels and once on a printout.

After the setting and population were chosen, the next step was to select the technique and method for collecting the data. The next section will discuss the rationale behind using the survey technique and more specifically, the method for collecting the research data using the mailed questionnaire.

B. Selection of Survey Technique

Survey research is the most widely used method of data collection in the social sciences (Chadwick, Bahr, & Albrecht, 1984). There are two main types of survey methods: (a) interview, and (b) questionnaire. Each includes a number of subtypes. For example, interviews may be conducted in group settings, by telephone, or in a face-to-face encounter. Similarly, questionnaires may be administered to large groups in classrooms or mailed to respondents who fill them out in private and return them by mail.

Two of the categories of surveys are descriptive and explanatory. The fundamental purpose of survey research is to describe the characteristics of or variables in populations by directly examining samples. The goal is to describe the range of beliefs of the variable of interest in the sampled population. Another category, explanatory research, tests hypotheses about the relationship among variables in the population. The greater concern is for deriving a hypothesis from theory

and carefully constructing measures of the variables. Measurements are made on samples that may not be statistically representative of a defined population. Explanatory surveys may also combine their analytic purpose with carefully constructed probability sampling designs. Studies such as these are known as descriptive-explanatory surveys (Smith & Glass, 1987; Borg & Gall, 1983).

There are several important reasons why survey research methods serve as a basis for a large proportion of research that is carried out by social scientists and educators. These reasons include: (a) Information on such topics as attitudes and beliefs of large numbers of respondents is difficult to obtain by any other means, and (b) they permit the collection of data from large numbers of respondents in relatively short periods of time at relatively low costs (Sax, 1980).

In addition, surveys perform a number of uses relative to data collection. Seven of these functions are: (a) Surveys provide an assessment of the population base rate of attitudes on specific issues; (b) sources of social influence are uncovered; (c) critical issues are exposed; (d) intuitions about public opinion are replaced with data; (e) simple act of responding to questions can sensitize people to arguments that they would not have generated on their own; (f) inconsistencies in beliefs are revealed which may cause reorientations in a person's belief system; and (g) more dangerously, surveys may be exploited to create a "bandwagon" effect (Zimbardo, Ebbesen, & Maslach, 1977).

There are, however, three limitations to surveys. These limitations are: (a) As a tool for causal analysis or for careful testing of theory, the survey is weak when compared with experimental research; (b)

the researcher is not likely to learn as much about important contextual factors that affect the behavior of the respondent or obtain the depth of information as is the case with participant observation; and (c) respondents' actions may not correspond to self-reported responses (Chadwick, Bahr, & Albrecht, 1984).

Recognizing both the advantages and disadvantages of the survey method, the survey was chosen as the method for collecting data in this study. The reasons for the decision were: (a) There are large numbers of respondents, and (b) the nature of the research questions, perceptions or attitudes toward the REI, can best be measured by considering respondents' replies to a set of belief statements. Thus, the survey method is considered to be appropriate for the research problem in this study.

Mail Questionnaire

In considering the two main types of survey methods, interview and questionnaire, a questionnaire was selected. There were several factors that entered into this decision: (a) large number of respondents (i.e., 1200); (b) one researcher; (c) randomly selected respondents living in various parts of the state; and (d) fiscal constraints.

The advantages of the mail questionnaire are the relative ease and efficiency of mailing structured questions to a large number of respondents across the state. The otherwise time-consuming legwork of locating respondents is done by the U.S. Postal Service. Respondents may answer the questions at their own convenience and then return the questionnaire to the researcher.

There are several caveats when considering the use of a self-administered questionnaire, however. The format requires relatively simple questions and instructions to avoid misunderstanding. Even so, many items may not have the same general agreement in meaning or may not be interpreted the same way across respondents. Questions of how honest participants are in their responses or how influenced they are by situations also enter into consideration of the use of surveys.

Two important distinctions of the survey must be noted when addressing the above detractors. First, surveys are not interpreted by individual participant responses; they represent collective action. Attention is drawn to how groups are most likely to respond and not individuals. The second related distinction is sample size. Given a large enough sample size (adequate for small sampling error), responses can be viewed as representative of the sampled groups (Rubin, 1983; Sax, 1980). That is, little faith would be placed in a survey given to 20 educators to elicit response to an issue versus one given to 1200. Thus, the focus shifts from the single individual to population characteristics. Group effects and population shifts in attitude, averaged over an entire sampled group, are detected (Zimbardo, Ebbesen, & Maslach, 1977).

An important disadvantage of the mail questionnaire is the difficulty of getting a high return rate. Several researchers (e.g., Chadwick, Bahr, & Albrecht, 1984; Parten, 1950) state that the initial mailing can be predicted to yield an approximate 20% response rate. Using follow-up procedures, such as a follow-up postcard and a second mailing, final response rates may vary from 50% to 95%. For purposes of this study, a

response rate of 60% was targeted as an adequate return (D. J. Freeman, personal communication, January 17, 1989; N.S. Hubble, personal communication, December 15, 1988).

The next critical step was the development of the measuring instrument, the questionnaire.

C. Instrument Development

Before developing the questionnaire, questions were raised as to what types of information were desired. Subsequent formulation of the data gathering procedure and instrumentation was based on how to gather the desired information. Questions were also raised concerning attitude-behavior relationship. In response to the illusive concept of attitude, a search for methodology to employ logic and rigor in collecting and analyzing data was undertaken. These considerations are presented in the introduction to this section. In developing the questionnaire, five components were considered. They are: (a) construction of the items; (b) choice of attitude-scaling procedure; (c) attention to content and external predictive ability; (d) pretesting the instrument; and (e) appearance and format of questionnaire.

Introduction

The intent to scientifically conduct a survey is juxtaposed against the acceptance that the study of attitude, an ill-defined concept, makes scientific inquiry problematic. This section will address how this study attended to these issues.

Measurement of Attitudes: Applying Criteria to an Ill-Defined Concept

Recall from the discussion of attitudes that the definition includes three components. They are: (a) affective or feeling core of liking or disliking; (b) cognitive or belief; and (c) behavioral or conative, a predisposition to act. The inconclusive evidence of correlation among these components have provided continued discourse and disagreement in the field of social psychology (Kahle & Berman, 1979; Wicker, 1971). Dawes and Smith (1985) argued, however, that correlations are inappropriate measures of how highly related the three components are or of how attitudinal affect is related to belief and behavior. In going beyond simple characteristics of attitude-behavior relationships, Dawes and Smith (1985) reported studies that demonstrated how individual differences in attitude predict later individual differences in behavior and cited cognitive dissonance studies that indicated behavioral change will lead to attitudinal change as well as vice versa. Yet the structural complexity of the attitude-behavior problem is ill-defined because a single attitude may be associated with a multitude of behaviors and many different attitudes may be associated with a particular behavior. Although a tripartite definition remains challenged as a measure of the unity of the concept, Dawes and Smith (1985) suggest that the concept of attitude is needed for its heuristic value. It appears that the comment Allport made in 1935 remains true today: "Attitudes are measured more successfully than they are defined" (p. 9).

Dawes and Smith (1985) pointed out that measurement of attitudes is no less a viable measure than representational measurement of behaviors.

They state:

Nor is there any special reason to believe that behaviors are more "real" than are attitudes. Indeed, we believe the exact opposite in such contexts as course evaluations, in which we accept the anonymous questionnaire as an instrument to assess true student opinions about teaching and reject what they say to the teachers face to face. (p. 91)

Acknowledging the illusiveness of the concept of attitudes, Smith and Glass (1987) and Towner (1984) recommended criteria for judging the methodological adequacy of survey studies. The following questions should be asked:

1. Does the study have logical validity? Do the conclusions follow logically from the findings, the findings from the methods, and the methods from the problem and hypotheses?
2. Is the term "attitude" defined in the context in which it is used?
3. Are the component(s) of the attitude(s) of concern specified?
4. If the survey was descriptive in purpose, was the population adequately defined?
5. How representative was the sample? If the survey was descriptive in purpose, were proper probability sampling methods used?
6. Was the instrumentation adequate? Was there an attempt to validate findings with alternative sources of data?
7. Was an adequate rate of response achieved to eliminate nonresponse bias?
8. Did the method of analysis provide adequate support for the conclusions reached?

Information Gained through a Questionnaire

What kind of information is required to achieve the survey's objectives of finding out general and special educators' and administrators' perceptions toward the REI? The information can be sorted into four general categories: (a) attitudes (how people feel about an attitude object such as an idea or goal); (b) beliefs (what

people believe to be true); (c) attributes (characteristics such as experience, training); and (d) behavior (what people actually do or have done) (Smith & Glass, 1987). The questionnaire and follow-up technique allowed for these four types of information to be gained. Items 10-61 requested information on respondents' attitudes toward goals and procedures of the REI and technical assistance needs. Items 62 and 63 were open-ended items assessing respondents' beliefs concerning those factors inhibiting and promoting REI efforts. Demographic information about respondents' attributes was obtained from items 1-9. Follow-up telephone interview provided the opportunity to learn about specific behaviors associated with respondents' level of agreement with the REI. Thus, the questionnaire and follow-up procedure contained cognitive, affective, and behavioral components.

Construction of Response Items

Response items were divided into five major parts: (a) demographic variables; (b) goals of the Regular Education Initiative; (c) procedures for implementing the goals; (d) technical assistance needs; and (e) factors (positive and negative) important to consider in the realization of the REI.

Demographics

Background information important to the study was requested through nine response items. Information concerned: (a) present assignment (school level); (b) present position (special educator, general educator, administrator, support personnel); (c) role as special educator; (d)

years of general education experience; (e) years of special education experience; (f) number of workshops/in-services on teaching of special needs children; (g) educational level completed; (h) extent of collaborative efforts (continuum of no planning toward collaboration to have been implementing collaborative efforts (e.g., co-teaching, teacher assistance teams); and (i) level of satisfaction with participation in collaborative efforts. It was hypothesized that a respondent who had participated in in-services and collaborative efforts and felt satisfied with this participation may perceive the REI proposals more favorably.

Goals

Difficulty was encountered when trying to word goal statements to reflect common agreement among the different researchers and professionals who have written about the REI. When trying to find a common denominator, one runs the risk of making statements either so vague that no one understands their meaning or so general that no one would find disagreement. The nine assumptions which Kauffman, Gerber, and Semmel (1988) summarized as those agreed upon among supporters and critics of the REI were used as a basis from which to build goal statements. A list of 22 goals were initially synthesized from the literature (see Chapter 2) and then in recognition of the fact that questionnaires should not take too long to complete, winnowed down to 14. An expert in the field of special education and the pretesting groups were instrumental in finalizing the list. Although not presented to respondents in an apparent manner, the goals comprised three levels: (a) classroom-level (e.g., increase instructional time for special

learners by keeping them in general education settings); (b) building-level (e.g., increase collaborative teaching arrangements); and (c) system-level (e.g., pool instructional resources from separate programs into one unified delivery system). These levels of goals would, in turn, be used to match the types of recommended procedures to implement them. Again, there was concern that a goal would be too generally phrased that no one respondent from each of the three sample groups would find disagreement (and thus no variance), yet upon examination of the statements, it appeared that this concern was unfounded. For example, when examining one of the goal statements of the REI, "To integrate 'special learners' in general education classrooms, for most, if not all, of the time," participants in the pretesting focus groups stated varying levels of agreement to this statement. The other goal statements also appeared to present definite departures from traditional ways of viewing the segregated nature of special and general education.

When developing this list, it became apparent that the terms, "goals," "assumptions," and "premises" were used interchangeably in the literature, but in reality, the terms are different. The dictionary provides a distinction: (1) premise refers to the use of logic in helping to support a conclusion; (2) assumption refers to an act of supposition or forming a hypothesis; and (3) goal refers to achievement toward which effort is directed. Thus, to reflect a goal's behavioral component, the phrase "To what extent do you agree with the GOAL to ... " was used as the heading to the first section and statements beginning with a verb (e.g., develop, coordinate, pool, increase) followed. Instead of writing

an affirmative statement such as "Instructional strategies are available that allow teachers to instruct heterogeneous groups of students," the statement was changed to: "To what extent do you agree with the GOAL to ... use instructional methods effective for general education with special learners."

Another decision had to be made concerning the choice of the word "agree" or "accept" preceding the respondent's evaluation of goal statements. For example, consider the statement: "Special needs learners should be educated in general education classrooms." The struggle whether to use "should" or "can" in goal statements involved the judgment of whether such a statement pertained to acceptability (i.e., "should") or agreement (i.e., "can"). This issue was resolved in favor of "level of agreement."

Procedures

The next section of the questionnaire pertained to procedures recommended by REI advocates to implement the goals of the REI. In order to ascertain if educators would actually implement the procedures, the task was to assess acceptability. It was decided to use the lead-in, "acceptable is it to ..." before each procedure as acceptability implies consumer satisfaction. Procedures were synthesized from the literature on effective practices recommended by REI proponents (see Chapter 2). Procedures were broken down into three levels to correspond with goals of the REI. For example, a classroom-level procedure item is peer tutoring; a building-level procedure is co-teaching; and a system-level procedure is providing "waivers for performance" for experimental trials.

Technical Assistance Needs

A consultant suggested the use of Hill M. Walker's (1983) Student Behavior Standards (SBS) Inventory of Teacher Social Behavior Standards and Expectations. The SBS assesses teachers' willingness to teach or tolerance for behaviors of special needs learners. Once the level of willingness or tolerance is established, the instrument helps to assess the level of technical assistance needed to deal with perceived problems (i.e., whether teachers would assume responsibility for teaching expected behaviors or whether technical assistance must be provided before the student was accepted into the classroom). Coincidentally, in a separate conversation with a researcher from another university, the same suggestion was made to use the SBS in the questionnaire. Both experts felt that since one of the tenants of the REI is to provide support to the teacher and/or student within the general classroom, it was important to explore the level of support needed or desired. Would teachers' attitudes change towards acceptability of procedures if technical assistance were provided? Perhaps some teachers already have the skills and do not require help, or perhaps some teachers who reject a procedure may also reject assistance. These are important questions to answer since the implementation of the REI may involve costly inservices or extra support personnel or general resistance to any assistance.

A telephone call was placed to Dr. Hill M. Walker, Professor, University of Oregon, requesting permission to adapt the SBS to the study. Dr. Walker granted permission. A copy of the questionnaire was subsequently sent to his office. The SBS was adapted in the following manner: Following a response item relating to a procedure, another

response in a separate column is required. This time, the respondent was asked to indicate the level of assistance needed. The general lead-in heading of the section on procedures and technical assistance thus read, "How acceptable is it to ... and what level of assistance is needed to ...". A decision was reached to incorporate five levels of technical assistance: (a) no assistance necessary; (b) short-term assistance such as workshops, inservices; (c) individual who mainly consults on as-needed basis; (d) team that provides indirect service by consultation; (e) formalized support team that provides direct, in-class help; and (f) doesn't apply - dislike procedure and do not want help of any kind.

At the end of response items concerning goals, procedures, and levels of assistance, a closing summative question was posed. This summative question asked the respondent if, in general, he/she personally wanted to see REI efforts implemented. The respondent was asked to rank the response along a continuum from not at all (1) to definitely (5).

Inhibitors and Promoters

Besides the goals and procedures, there are many factors which opponents to the REI list as impediments to the realization of this restructuring of the dual system delivery of services. Initial efforts were directed toward construction of a list of such factors as time, class size, scheduling, union agreement, training, administrative support, and so on. The list became longer and longer. The respondent's task was to prioritize five of the items. A consultant questioned the use of such a list since it is well-documented that there are and always will be inhibitors to program changes. A suggestion was made that the

respondent write one factor felt to be an important barrier. With 1200 possible responses, a list of significant barriers prioritized by frequency rates could be developed. Instead of focusing only on negative factors, it is also important to inquire about the positive factors which would promote integrative efforts. Again, this information was requested through the use of an open-ended option. Respondents were asked to name one factor which would promote integrative efforts between special-general education in their schools. Weinberg (1983) commented on the use of an open-ended question:

The main advantage of open questions is that they allow respondents to answer in their own frames of reference, entirely uninfluenced by any specific alternatives. They also reveal what is most salient to respondents, what things are foremost in their minds. Closed questions do not permit this. (p. 206)

Standard Attitude Scaling

In discussing attitudes, it is important to remember that from the point of view of attitude measurement, an attitude has two important properties: (a) direction and (b) magnitude (Scheff, 1970). Direction refers to whether the feelings and behavioral tendencies are positive or negative. Magnitude refers to the "degree" of favorableness or unfavorableness of an attitude. Clearly, variations in the strength, as well as the magnitude of an attitude, will account for variation in human behavior. A person who feels very strongly toward an idea might be more willing to engage in proactive behavior than a person who is only mildly concerned. In the past, many researchers focused only on direction of an attitude. Questions such as "Do you mind teaching handicapped children? Why/Why not?" were common. Information about the strength of an attitude

can be gained through a single question, such as "Would you say that handicapped children can be educated in general classrooms (1) effectively, (2) adequately, (3) inadequately?" While questions of this type are an improvement over the simpler "Yes-No" type of questions, this procedure is still less than optimal.

A preferable procedure would be to administer a number of items about the attitude of interest, have the respondent react to each of these items, and assign an attitude score based on responses to this series of statements. Scales are composite measures of attitudes, meaning that they are the result of combining responses to several items that measure the same dimension or variable. Scales have some advantages over separate questionnaire items, the most important being increased reliability (Smith & Glass, 1987). The errors of measurement associated with single items are averaged out over the set of items on a scale. Moreover, it is simpler to perform more sophisticated analysis with scales than with separate items. For example, to test the relationship between agreement with the goals of REI with group (i.e., general educator, special educator, and administrator), it is necessary to only compare the mean of the scale for each group. This method would be more efficient than examining the mean differences among the groups for each of the separate items. Statistics computed from rating scales are valid descriptors of the data. They may also be used for making statistical inferences, provided the numerical assumptions about the population sampled are met - even though these numbers are not representational ones (Dawes & Smith, 1985). There are several attitude scales such as Guttman,

Thurstone, and semantic differential. The scales chosen for this study were Likert scales.

Likert Scales

Likert scales, generally referred to as the method of summated ratings, are among the most commonly used scaling methods in social research (Rossi, Wright, & Anderson, 1985). Likert scales yield ordinal rather than interval measurements because differences in numerical values are not equal. The procedure is relatively easy to use. First, a pool of items are selected, each of which reflects favorably or unfavorably on the attitude object. These items may be statements of either beliefs or intentions. After each statement there is an agreement scale.

Respondents are asked to indicate the degree to which they agree or disagree with each statement. Typically, a five-point scale is used with the following response categories: (1) strongly agree, (2) agree, (3) neutral, (4) disagree, and (5) strongly disagree. The particular response indicates a person's location along a probability dimension; that is, it is a measure of the strength of belief or intention. One major purpose of any scaling procedure is to select items that permit accurate inferences about the respondent's attitude (Fishbein & Ajzen, 1975).

Items should also indicate variation across respondents. If almost everyone answers the same way then the item simply adds a constant to all respondents' scores. After the respondent has indicated a response to each item, the scores are summed, and the respondent's attitude is assumed to be represented by the sum.

There are three basic assumptions of Likert scales. First, a continuous underlying attitude dimension is assumed and each item is monotonically or uniformly related to that continuum. That is, an unfavorable attitude should produce a higher expected score on any particular item. Second, it is assumed that the sum of the item scores is uniformly related to the attitude; for example, a higher score indicates a less favorable attitude. Third, a single common factor or one underlying common attitude is assumed to be measured. More formally stated, each item is assumed to be the weighted combination of two independent factors, one of which is the attitude being measure, and the other factor is some specific component belonging to the individual item (Rossi, Wright, & Anderson, 1983).

Nonrepresentational Measurement: Concern for Validity

Representational measurement is rare in the field of attitude; instead, this field is suffused with questionnaires and rating scales. While these devices attempt to assess important aspects or attributes of people's attitude, they do not constitute representational measurement, because there are no specific behaviors they represent. That is, there are no internal consistency checks on respondents' rating scales or responses that can be examined to see if they correspond to the numbers derived from such responses. However, since well over 90% of the research conducted in "attitude measurement" depends upon nonrepresentational measurement (Dawes & Smith, 1985), ways of addressing its limitations are discussed.

Literal Interpretation Fallacy

Because individuals' responses on a rating scale may be determined by many factors other than attitude, their responses cannot be interpreted literally. Because rating scales are generally used as index measures, they must be evaluated in terms of their predictive validity. Simply presenting someone with a scale and noting responses to it does not demonstrate the scale's validity. The literal interpretation fallacy lies in believing that the individual's response to the scale provides a certain source of information. If it does provide any information, this fact must be demonstrated and not assumed on the basis of the scale's structure (Dawes, 1984).

Basically, two types of statistical predictability are studied to determine whether an index measurement is useful. According to Dawes (1984), index measurement is useful in providing information if it predicts. Internal predictive validity refers to the power of responses to predict other similar responses (e.g., from one rating scale to a highly similar one). External predictive validity refers to the power to predict to dissimilar behavior (e.g., from rating scales to responses to teaching behavior). An index measure must be shown to have internal or external predictive validity (preferably both). For purposes of the index measurement developed in this survey, internal predictability was demonstrated.

Internal Predictive Validity

Has a connection been established between the performance on the chosen indicator and some other indicator that purports to measure the

same construct? If the answer is "yes" then the indicator is said to have internal predictive validity. Through the technique of a follow-up telephone interview, a second method of reported behaviors was obtained. Campbell (1963) suggested that episodic recall was one way of assessing attitudes. Episodic recall requires individuals to recount to the interviewer situations they have been in during a preceding length of time and to report their behavior and feelings about those incidents.

Using the technique of episodic recall, the telephone interviewer asked sampled educators and administrators' responses to the following inquiries: (1) Describe your present participation or facilitation of collaborative efforts between general and special education. (2) Give reasons why or why not these collaborative efforts were successful. (3) On a scale of 1 (negative) to 5 (positive), please indicate how you feel toward the REI. The purpose of these three questions was to establish a link between level of agreement with the REI and present behaviors concerning one goal of the REI, "increase collaborative arrangements among general and special educators."

Although it is acknowledged that the two methods, self-administered questionnaire and self-report telephone interview, are both similar, Smith and Glass (1987) present support for this procedure: "Establishing a correlation between two indicators of the same construct when measured with alternative methods is particularly strong evidence for validity" (p. 109).

Internal Consistency

Is there logical consistency between the content of response items and definition of the construct? If the answer is "yes" then the questionnaire is said to have internal consistency (Smith & Glass, 1987). Reliability coefficients were first computed on the 14 items comprising the questionnaire section on goals of the REI and then an analysis was made of three clusters. Chronbach's alpha of .86 was reported on the 14 goals and is considered to represent a strong index of correlation among the items. The same procedure was continued for sub-sets of the items. Three clusters were assessed. The first cluster were seven classroom-level goals: (1) Integrate special learners in general education classrooms for most, if not all, of the time; (2) provide additional assistance without labeling; (3) increase instructional time by keeping special learners in general education settings; (4) reduce social stigma by providing for increased opportunity for social interactions in general education classrooms; (5) use instructional methods effective for special education with special learners in general classrooms; (6) use instructional methods effective for general education with special learners; and (7) spend more time altering instructional practices than assessing special learners. A Chronbach's alpha of .79 was computed.

The next cluster was four items that related to building-level goals. These goals are: (1) Increase collaborative teaching arrangements; (2) coordinate curricular activities; (3) empower building principal to coordinate all programs; and (4) negotiate new roles among staff. A Chronbach's alpha of .70 was recorded.

The third cluster was three items that pertained to system-level goals. They were: (1) Pool instructional resources; (2) increase teachers' ability; and (3) develop administrative policies that provide incentives. A Chronbach's alpha was low on this cluster, .61, possibly because of the small cluster. Consequently, this cluster should be interpreted cautiously.

The second section of the questionnaire concerned the procedures for implementing the REI. Again, reliability coefficients were computed to examine correlations among the items. The 22 items comprising this section were analyzed and a Chronbach's alpha of .87 was reported. Again, three sub-sets of clusters were analyzed.

The first cluster, classroom-level procedures, consisted of 15 items: (1) Teach social skills; (2) use computers; (3) reallocate instructional time; (4) use behavior management strategies; (5) use same curriculum, but modify practices; (6) use student-paced activities; (7) use cooperative learning; (8) provide for peer tutoring; (9) teach cognitive strategies; (10) increase rates of behaviors; (11) include braille and sign language; (12) use curriculum-based assessment; (13) use mastery learning approach; (14) provide instruction through heterogeneous grouping; and (15) make at least three instructional modifications prior to testing. A Chronbach's alpha of .82 was computed.

The next cluster, building-level procedures, included five items: (1) Work with consulting teacher; (2) co-teach; (3) participate in building-level support teams; (4) engage in peer coaching; and (5) attend inservices. Reliability was tested, and Chronbach's alpha level of .83 was reported.

The third cluster, system-level procedures, contained two items: (1) Fund services by block entitlement; and (2) provide "waivers for performance." Chronbach's alpha of .67 was recorded.

In conclusion, a determination was made that there were strong correlations among the items representing the goals and procedures of the REI. The subclusters of classroom-level and building-level also represented moderately strong relationships among the items. The sub-cluster, system-level, had only a moderate correlation, possibly because of the fewer items. This sub-cluster should be interpreted cautiously.

Face Validity

An expert who has conducted research and written articles regarding the Regular Education Initiative (REI) examined the items to see if there was a plausible connection between the measure's content and the construct as defined in the literature. This "surface" examination is sometimes referred to as establishing face validity. The researcher determined that the items represented the construct, REI, as delineated by the itemized goals and procedures. In addition, each goal and procedure was selected directly from the relevant literature (see Chapter 2).

Pretesting

The questionnaire was pretested with three groups of representative respondents. Different viewpoints are extremely helpful at this stage for revealing ambiguous or confusing items and for suggesting better

formatting of response items. Small groups of three to five general and special educators met to review and to discuss the sample questionnaire whereas selected administrators were sent a questionnaire with a form to guide their review. The focus groups yielded more productive information because the investigator was able to interact and to sense an affective response to the instrument. One valuable lesson was reinforced during the meetings with the general educators. They have little spare time beyond the demands of their job. The length of the cover letter was first targeted. The teachers were encouraged to use their pencil and amend it. Soon, the letter was reduced from a page to two paragraphs. The teachers said that if they cannot skim something in 20-30 seconds, they throw it away. Other changes that were made as a result of those meetings included: (1) elimination of some terms such as "curriculum-based assessment" and replaced with a description of the method; (2) elimination of description of the Likert scale items as part of the instructions (teachers said descriptors were already provided above each column and they were familiar with this ranking); (3) demographic items were originally placed two on a line to save space, but a recommendation was made to place each item one below the other for clarity; (4) one item which had much description and took long to read was replaced with a visual picture of a continuum with several words to anchor each rating; and (5) a sixth choice was added to "Levels of Technical Assistance," which was "Doesn't apply - dislike procedure and do not want help of any kind."

The second focus group was special educators. They were helpful in reducing the number of REI goals that were finally chosen for the

questionnaire. Although the goal section on the survey form was going to be limited to 10 to 15 goals, it was still uncertain which goals were the most critical in conveying the message of a unified delivery system. The teachers were instrumental in deciding which goals were a priority. The teachers also reinforced the feeling that listing potential barriers at the end of the survey and having respondents select the ones most important was not adding any new information than what was known. Through their suggestion, open-ended responses were put in their place. In this way, only the factor important to respondents would be written without having lists of "prompts."

Information from the administrators' feedback forms did not show general agreement as to recommended changes. One comment was made, however, which must be seriously considered. The administrator said that he could not decide which level of assistance is needed for his staff because they are at varying stages of professional growth. He said that this comment may be peculiar to him since he just finished a course which focused on teachers' maturity levels. Even though the other six forms did not have that comment, his point is well-taken. It is hoped that administrators will answer the section, "Levels of Assistance," as a general observation since there was not a way to individualize the responses for each staff member.

Thus, the use of focus groups as a method of pretesting the questionnaire proved to be an enlightening and valuable activity which enhanced the quality of the final product.

The final version was submitted to the University Committee on Research Involving Human Subjects (UCRIHS) and was approved on March 10,

1989. One last minute change involved enclosing a postcard in the survey packet to request permission to call the respondent regarding follow-up information. This permission was originally requested on the questionnaire, but since confidentiality would be violated (i.e., name associated with data), the postcard allowed the respondent's name and telephone number to remain separate from the returned response sheet.

Appearance

The Total Design Method (TDM) (Dillman, 1983) guided the design and distribution of the questionnaire. This method consists of two parts: (a) identifying and designing each aspect of the survey process that may affect response in a way that maximizes response rates; and (b) organizing the survey effort in a way that assures the design intentions are carried out in complete detail. Dillman (1983) suggested that previous research on response-inducing efforts have been limited to a few stimuli (e.g., follow-ups, personalization) while ignoring other factors that might influence respondent behavior (e.g., questionnaire format, social rewards). Thus, factors found to influence response rates were pooled from across the literature (see Chadwick, Bahr, & Albrecht, 1984; Dillman, 1983; Berdie & Anderson, 1974; Sax, 1980).

A technical assistant and graphic designer provided advice in designing the cover letter and questionnaire. The technical assistant prepared the typed copy which went to the printers. Through the use of Ventura, a printing option which allows different print sizes and styles, the following "special effects" were added: (a) item response numbers were bold-faced and larger than the printed items so that readers would

keep their place; (b) instructions were printed in italics to distinguish them from the printed items; (c) each section began on a different page and marked by bold-faced, larger typed printing; and (d) double column responses to feasibility of procedures and levels of assistance were set apart through wider spacing and the use of numbers and letters to distinguish the two different required responses.

A student majoring in graphic design helped to "lighten" the look of the cover letter by injecting spaces, indenting keypoints, and highlighting key words. The letter looked more inviting to read and could be skimmed quickly to gather the relevant information.

Several questionnaire developers stressed humor when designing follow-up mailings (Berdie & Anderson, 1974; Dillman, 1983). A cartoon found in the KAPPAN was reduced in size and added to the postcard which requested the respondent's permission to conduct a follow-up telephone interview. The follow-up reminder postcard had a picture of a stylized elephant. The cover letter for the second mailing of the questionnaire had a large, boldly drawn figure of a cat hanging onto the background. It was hoped that such whimsical touches would cause the respondents to regard the "chore" of completing a questionnaire more favorably.

The printing was done by off-set printing rather than photocopying for a more professional look. The questionnaire was printed on 20 lb. weight ivory paper with dark blue ink. The matching envelope was also ivory with the same weight of paper. The cover letter was printed on bright gold paper, 20 lb. weight, to attract the respondents' attention. The color of the cover letter and envelope for the second mailing was cherry blossom pink to remind respondents of spring.

In trying to personalize the procedure, several factors had to be ruled out because of the sample size of the study ($N=1200$). Questionnaire developers recommend sending the packet first class to distinguish it from "junk" mail. Unfortunately, the postage would have been \$.45 a letter. Thus, bulk rate postage was used to obtain a rate of \$.167 per packet. It was also recommended to personally sign each letter and address each envelope, but again, the time factor was weighed against the perceived benefit. Mailing labels were used as an expedient option. Other recommendations included printing the actual mailing date on the questionnaire and telephoning respondents as a follow-up. Since respondents in the study were identified by their school district, not school, follow-up calls were more difficult. Again, costs and time were considered, and the use of follow-up postcards were chosen as an alternative.

After the development and printing of the mailout packets, the next steps were their distribution and collection.

D. Distribution and Collection of Questionnaires

Using the TDM implementation procedure, attention to details of mailout packets and scheduled dates of questionnaire distribution were adhered to. This section includes a discussion of: (a) description of first mailout packet; (b) distribution of questionnaire packets and follow-up mailings; (c) return rate of first mailing; and (d) return rate of second mailing.

Description of First Mailout

The first mailout packet consisted of a cover letter, questionnaire, NCR scanning sheet, return postcard requesting permission to contact, and self-addressed stamped envelope. The one-page cover letter was prepared using Dillman's (1983) advice:

[My] basic assumption is that a person is most likely to respond to a questionnaire when the perceived costs of doing so are minimized, the perceived rewards are maximized, and the respondent trusts that the expected awards will be delivered. (p. 361)

Social reward was provided by: (a) explaining that a socially useful study was being conducted; (b) stressing that their input was important and could affect decision-makers' future policy planning; (c) offering a copy of the completed results; and (d) extending appreciation for their valuable responses. Trust was established through the promise of confidentiality. Respondents were told that data was to be coded blindly and reported as aggregate scores. Endorsement by Michigan Department of Education, Special Education Services, was written at the bottom of the cover letter to establish official sponsorship.

Respondents were directed to use the NCR scanning sheet to record their responses. By entering the data directly on the scanning sheet, it is possible to directly process the data into a computer file without having to manually code and input the data. There was concern that perhaps respondents would be reluctant to use the scanning sheet. Yet a consultant stated that he had conducted a study to determine if there was a reduction in response rates when a scanning sheet was used. Half of his sample was given a scanning sheet and the other half were directed to record their answers directly on the questionnaire. He found out that

there was no significant difference in response rates using the two data recording methods. Considering the results of his study and the large sample size, a decision was made to include scanning sheets with the questionnaire. It was felt that if respondents desired to respond directly on the questionnaire, then they could exercise that option.

Distribution of First Mailing

On March 20, 1989, the first mailing of 1200 questionnaires occurred. In spite of careful planning, it was soon discovered that three factors might have affected the initial return rate: (a) The one week Easter holiday for Michigan schools was scheduled either for March 20 or March 27 depending upon the schools' location; (b) bulk rate mailing delays letters at least a week; and (c) mailing labels indicated only the respondents' school districts and not individual school locations, further delaying the questionnaires' arrival. The cover letter indicated a return date of April 7, 1989.

It soon became obvious by several telephone calls from respondents that when they returned from their holiday and found the questionnaire at their school location, there was only a week left to return it. Callers wondered if it were all right to return the questionnaire after the requested return date. Perhaps the perceived short time to complete the questionnaire deterred some respondents.

Follow-up Procedure

Not realizing the impact of the above three factors, a follow-up postcard was sent exactly a week later according to the schedule recommended by the Total Design Method. Unfortunately, the postcard,

which was sent first class, arrived the same time as the questionnaire. The postcard's effect was negated, and it is suspected that the postcard reminder might have annoyed respondents who had not yet received the questionnaire.

Return Rate of First Mailing

The length of time to allow the return of the first mailing was extended beyond April 7 to April 14. Since the majority of returns did not occur until mid-week of April 3-7 and continued until the following week, the recommended three week period before the second mailing was disregarded. A summary of returned responses is presented in Table 1. As noted in the above description of the special education sampling group, respondents include both special educators (certified according to handicapping category; e.g., teacher of the emotionally impaired) and support personnel (e.g., social worker). Although these two groups will be reported as "Special Educators," the breakdown in their returned surveys are noted. Return rates were calculated by first adding complete plus incomplete surveys (incomplete surveys were kept if more than half was completed; directions were given to the computer program to eliminate incomplete items from statistical calculations). This number was divided by the total number sent (400) minus those educators who indicated they were not involved with grades K-12 instruction (e.g., nurse, adult educator) and those respondents who had moved. Some respondents indicated that they did not complete the survey because of their present assignment (e.g., art, music, or PE). These incomplete questionnaires were treated as nonresponses.

TABLE 1

RETURN RATE OF QUESTIONNAIRES FOLLOWING FIRST MAILING

	Regular Educators	Special Educators	/ Support Personnel	Administrators
Complete	120	149	39	160
Incomplete	2	1	--	3
Not Applicable	5	--	--	--
Moved	2	2	--	--
Total returned	122		189	160
Total possible	393		398	397
Return rate (%)	31		47	40

There were 242 postcards returned indicating that these respondents would be receptive to receiving a telephone call to further explore the survey questions.

Noted was the fact that not all respondents completed the last two open-ended responses on the questionnaire. Thus, some scanning sheets were without this information.

Second Mailing Distribution

On April 17, 1989, a second mailing of 715 questionnaire packets was distributed. It was discovered that out of 91 questionnaires sent to Detroit Public School teachers and administrators, not one was returned.

Thus, 91 questionnaires were again distributed. Information was obtained that the mail was not forwarded due to the fact that individual school addresses were not on the envelope. Instead, a three-tier approval process had to be enacted which involved obtaining permission from the Research Department, Assistant Superintendent, and individual school principals. On May 30, it was learned that the Research Department had approved the research effort, but the second approval form had not left the Assistant Superintendent's office. Because it was doubtful whether the surveys would be sent to the respondents this school year, a decision was made to close the second mailing date. Return rate of the second mailing as well as the total return rate can be seen in Table 2.

TABLE 2
RETURN RATE OF QUESTIONNAIRES FOLLOWING SECOND MAILING

	Regular Educators	Special Educators	/ Support / Personnel	Administrators
Received	41	53	1	39
Moved	6	4	--	1
Total returned (Two Mailings)	163	243		199
Total possible	387	394		396
Return by GRP (%)	42	62		49
Return rate (%)	51			

Demographic Characteristics of Sample Groups

The following demographic information describes respondents in the three sample groups: (a) school level assignment; (b) general education experience; (c) special education experience; (d) educational level; and (e) role of special education teacher.

TABLE 3
SCHOOL LEVEL ASSIGNMENT OF GENERAL EDUCATORS,
ADMINISTRATORS, AND SPECIAL EDUCATORS

Group	N	Elem	Mid	Sec	Other*
Gen Ed	163	79	35	44	5
Admin	199	108	27	43	21
Spec Ed	243	86	45	63	49
Total	605	273	107	150	75

* Center program; intermediate district office

School level assignment. Respondents appear to be well-distributed among the three school levels according to school population (Table 3). Center program (i.e., separate buildings organized to serve the severely handicapped population) and district intermediate office education professionals appear to be proportionately represented.

TABLE 4
**GENERAL EDUCATION EXPERIENCE OF GENERAL EDUCATORS,
 ADMINISTRATORS, AND SPECIAL EDUCATORS**

	Years Experience					Row Total
	0	1-5	6-10	11-15	16 +	
Gen Ed.	1	14	17	33	98	163
	.6	8.6	10.4	20.2	60.1	26.9
	.7	15.4	41.5	40.7	38.3	
Admin.	10	16	12	32	129	199
	5.0	8.0	6.0	16.1	64.8	32.9
	7.4	17.6	29.3	39.5	50.4	
Spec. Ed.	125	61	12	16	29	243
	51.4	25.1	4.9	6.6	11.9	40.2
	91.9	67.0	29.3	19.8	11.3	
Column	136	91	41	81	256	605
Total	22.5	15.0	6.8	13.4	42.3	100.0

General education experience. It appears that approximately 60% of general educators and administrators have more than 16 years of general education experience (Table 4) . Special educators have less general education experience; in fact, 52% have no general education experience.

TABLE 5
SPECIAL EDUCATION EXPERIENCE OF GENERAL EDUCATORS,
ADMINISTRATORS, AND SPECIAL EDUCATORS

	Years Experience					Row Total
	0	1-5	6-10	11-15	16 +	
Gen Ed.	126	22	5	4	6	163
	77.3	13.5	3.1	2.5	3.7	26.9
	44.5	23.9	6.7	4.7	8.7	
Admin.	149	18	11	7	14	199
	74.9	9.0	5.5	3.5	7.0	32.9
	52.7	19.6	14.7	8.1	20.3	
Spec. Ed.	8	52	59	75	49	243
	3.3	22.4	24.3	30.9	20.2	40.2
	2.8	56.5	78.7	87.2	71.0	
Column Total	283	92	75	86	69	605
	46.8	15.2	12.4	14.2	11.4	100.0

Special education experience. Approximately 75% of the general educators and administrators have no special education experience (Table 5). Special educators with 1-16+ years of special education experience appear to be evenly distributed.

TABLE 6

**Education Level of General Educators, Administrators,
and Special Educators**

Group	N	BA	MA	EdS	PhD
Gen. Ed.	163	52	96	13	2
Admin.	199	--	129	52	18
Spec. Ed.	243	64	142	34	3
Total	605	116	367	99	23

Education level. Approximately 70% of general and special educators and 100% of administrators have a M.A. degree and beyond (Table 6).

TABLE 7

ROLE OF SPECIAL EDUCATORS AT ASSIGNED POSITIONS

Role of Spec. Educator	N	Percent
Resource rm teacher	59	24.3
Resource rm + consult	33	13.6
Consultant	30	12.3
Self-contained rm	86	35.4
Center program	35	14.4
Total	243	100.0

Role of special educators at assigned positions. It appears that approximately 50% of the responding special educators teach in self-contained, separate settings (Table 7). A less traditional role, consulting, is performed in some degree by approximately 25% of the special educator respondents.

Experiential Characteristics of Sample Groups

Experiences of respondents with training or participating in activities involving instructing special needs learners are described by the following: (a) training (e.g., inservices, courses, and/or workshops); (b) extent of schools' readiness (e.g., activities involving collaboration between special and general education); (c) personal participation with collaborative efforts; and (d) level of satisfaction with participation.

TABLE 8

**Inservices with Special Needs Learners by General Educators,
Administrators, and Special Educators**

	Number of Inservices					Row Total
	0	1-5	6-10	11-15	16 +	
Gen Ed.	34	96	16	6	11	163
	20.9	58.9	9.8	3.7	6.7	27.0
	45.3	41.7	21.9	16.2	5.8	
Admin.	38	107	27	8	19	199
	19.1	53.8	13.6	4.0	9.5	32.9
	50.7	46.5	37.0	21.6	10.1	
Spec. Ed.	3	27	30	23	159	242
	1.2	11.2	12.4	9.5	65.7	40.1
	4.0	11.7	41.1	62.2	84.1	
Column Total	75	230	73	37	189	604
	12.4	38.1	12.1	6.1	31.3	100.0

Inservices. Approximately 75% of general educators and administrators have participated in 0-5 training experiences involving the instruction of special needs learners (Table 8). On the other hand, 66% of special educators have had 16 or more training experiences.

TABLE 9

**EXTENT OF SCHOOLS' READINESS WITH GENERAL-SPECIAL EDUCATION COLLABORATION
BY GENERAL EDUCATORS, ADMINISTRATORS, AND SPECIAL EDUCATORS**

Extent of Readiness						
	No Plan	Aware	Discuss	Plan	Implement	Row Total
Gen Ed.	18	35	30	12	68	163
	11.0	21.5	18.4	7.4	41.7	26.9
	29.5	26.1	25.0	18.8	30.1	
Admin.	8	38	43	22	88	199
	4.0	19.1	21.6	11.1	44.2	32.9
	13.1	28.4	35.8	34.4	38.9	
Spec. Ed.	35	61	47	30	70	243
	14.4	25.1	19.3	12.3	28.8	40.2
	57.4	45.5	39.2	46.9	31.0	
Column	61	134	120	64	226	605
Total	10.1	22.1	19.8	10.6	37.4	100.0

Extent of school readiness. All respondents' schools appear to be in different stages of readiness with general-special education collaborative activities (Table 9). Almost 40% are implementing some type of activity (e.g., teacher assistance teams, co-teaching).

TABLE 10

**PERSONAL PARTICIPATION WITH GENERAL-SPECIAL EDUCATION COLLABORATION
BY GENERAL EDUCATORS, ADMINISTRATORS, AND SPECIAL EDUCATORS**

Group	N	Participation	
		Yes (% of N)	No (% of N)
Gen Ed	163	87 (53.4)	76 (46.6)
Admin	199	130 (65.3)	69 (34.7)
Spec Ed	243	114 (46.9)	129 (53.1)
Total	605	331 (54.7)	274 (45.3)

Personal collaboration with general-special education. Approximately half of the general and special education respondents had personally participated in collaborative planning with each other (Table 10). Administrators had more experience with collaborative activities; 65% indicated their participation.

TABLE 11

**PERSONAL SATISFACTION WITH GENERAL-SPECIAL EDUCATION COLLABORATION BY
GENERAL EDUCATORS, ADMINISTRATORS, AND SPECIAL EDUCATORS**

	Satisfied	Neutral	Dissatisfied	Row Total
Gen Ed.	43 49.5	26 30.0	17 19.5	87 26.3
Admin.	97 74.6	23 17.7	10 7.7	130 39.3
Spec. Ed.	51 44.7	29 25.5	34 29.8	114 34.4
Column Total	191 57.8	78 23.7	61 18.5	331 100.0

Personal satisfaction with general-special education collaboration.

Of the 331 (54.7% of n=605) education professionals who had participated in activities involving planning between general and special education, 58% of all respondents reported their satisfaction (Table 11).

Profiles of Education Professional Respondents

After examination of the demographic and experiential characteristics of respondents in the three sample groups, a profile of a typical general educator, special educator, and administrator is presented.

Profile of general educator. The typical general educator has taught in general education for more than 16 years (60%); has no special education experience (77%); has a M.A. degree (58%); has taken part in

1-5 inservices on special learners (59%); is in schools which are either discussing or implementing innovative efforts (49%), has personally participated in collaborative activities with special educators (53.4%); and is satisfied with this participation (50.6%).

Profile of administrator. The typical administrator has more than 16 years of general education experience (65%); has no special education experience (75%); has a M.A. degree (65%); has taken part in 1-5 inservices on special learners (54%); is working in a school which is implementing innovative efforts (44%); has personally participated in general-special education collaborative activities (65.3%); and is satisfied with this participation (74.6%).

Profile of special educator. The typical special educator has no experience in general education (51%); has taught 11-16+ years in special education (51.1%); teaches in a self-contained setting (49.8%); has a M.A. degree (58%); has engaged in 16 or more types of training experiences in working with special learners (66%); is teaching in a school that is in the early stages of discussion of collaborative efforts (56.7%) and; has not personally participated (53.1%).

Nonresponse Check

Because of the difficulty of getting a 100% response rate, researchers must be concerned about the problem of nonresponse. What started out to be a representative sample of a defined population has produced data that may be unrepresentative of the populations as

originally defined. The data are only representative of the subpopulation of responders; that is, a nonresponse bias may exist. In every case, nonrespondent checks should be performed.

The overall response rate to this study was 51% which was less than the hoped-for rate of 60%. The total number of respondents in Michigan was randomly selected, and it was possible to determine how many education professionals were selected from each county through the availability of a computer listing. In order to check on the congruence of non-respondents to respondents, a record was made of the respondents and non-respondents in each county. These data were transcribed onto a map of Michigan's counties (Figure 3). Examining the distribution of respondents and non-respondents in Table 12, the researcher determined that there was more demographic similarity than non-similarity by geographic region.

FIGURE 1

TABLE 12

NUMBER AND PERCENTAGE OF NON-RESPONDENTS AND RESPONDENTS
BY GEOGRAPHIC REGION

Region	<u>Non-Respondents</u>		<u>Respondents</u>	
	N	%	N	%
1: Upper Peninsula	23	4	22	4
1: Upper Michigan	28	5	41	6
2: Central	118	21	172	27
3: Southwest	133	23	149	24
4: Southeast	266	47	248	39
Total	568	100	632*	100

*Includes respondents who indicated their incomplete questionnaire was due to present assignment or questions about topic; only 605 were complete for analysis

In addition, the researcher randomly telephoned 30 non-respondents to inquire about reasons for their non-response. It was felt that this information would help to pinpoint problems with the study's survey methodology. Reasons given for nonreturn of surveys were lack of time, questions about items, length of form, nonreceipt of survey, and loss of return envelope. Thirty-four percent of the randomly sampled non-respondents were no longer employed in their respective districts (e.g., retired, moved). There is concern that the original list (N=1200) which was provided by the Michigan Department of Education was not current. Possibly the return rate might have been higher if it were up-to-date.

D. Coding of Data

Recipients of the survey recorded their responses directly onto NCR scanning sheets. In addition, two items which corresponded to open ended responses were coded later by the researcher and added onto the scanning sheets. These machine readable answer sheets were run through an optical scoring machine; a raw data file was created directly from these answer sheets.

E. Treatment of Data

The data analysis management system, Statistical Package for Social Sciences (SPSS-X), is a comprehensive, integrated system for managing, analyzing, and displaying data. This system was used to treat the collected data. The study's research questions will be answered using the following described procedures.

Research Question 1:

Do education professionals agree with the basic goals of the REI?

Procedure:

Crosstabulation of groups (i.e., special and general educators and administrators) and each of the 14 goals was conducted using the statistic, chi square. The resulting contingency tables yielded marginal distributions, both a frequency count and row and column percentages. The marginal distributions define the nature of the groups. A chi square test was used to analyze the data and to determine if differences in patterns among cells were significant. Five levels of agreement were collapsed into three - agree, neutral, and disagree, which resulted in a three by three table.

After individual item agreement within and across groups was established, agreement with the three subclusters (i.e., classroom level, building level, and system level) were computed. The procedure, ANOVA, performs analysis of variance for factorial designs. The ANOVA was performed with each subcluster; significant differences were noted. The Scheffe post hoc analysis allowed the researcher to note which groups were significantly different from each other. Finally, all goals were averaged to yield one score, "mean goal agreement." An ANOVA was again performed; differences among groups as to their mean agreement with REI goals was noted. The Scheffe post hoc analysis allowed the researcher to locate which groups were significantly different from one another. In order to determine the relationship of demographics and experiential characteristics with group mean agreement with REI goals, a two factor ANOVA procedure was performed. This procedure allowed the researcher to note not only main effects but possible interaction of demographic factors which affected agreement with goals.

A journal was kept to record responses to questions posed in the telephone interview. From the population of 242 postcards returned by respondents who gave permission to be contacted, 29 postcards were randomly drawn. A telephone interview was conducted with these 29 education professionals. Descriptions of their collaborative behaviors with special or general education (depending upon their position) were recorded.

Research Question 2:

Do education professionals accept the procedures to implement REI proposals?

Procedure:

The same procedure which was used for the first research question was applied to this question.

Research Question 3:

What levels of assistance are needed for REI procedures to be implemented?

Procedure:

Crosstabulation of levels of technical assistance (i.e., none necessary, inservice, individual consultation, building team consultation, in-class help, and doesn't apply) by groups was computed using contingency tables and the test statistic, chi square. These six levels were then collapsed into five: (a) no help necessary; (b) inservice; (c) consultation; (d) in-class help; and (e) doesn't apply. A five by three contingency table was produced. A frequency count was computed for the 15 classroom level procedures to determine which types of assistance were most often needed by groups. The procedure, chi square, was conducted to determine significant patterns of differences among cells.

Research Question 4:

Is there an relationship between agreement with the goals of REI and acceptance of procedures?

Procedure:

The procedure, Pearson product-moment correlation, produces correlation coefficients. A coefficient of correlation is a statistical summary of the degree and direction of relationship between two variables. The variable, "mean goal agreement" was correlated with the variable, "mean procedure acceptance" for each of the three groups. The resulting correlation coefficient permitted the researcher to determine if there was a significant relationship between respondents' acceptance of the goals and agreement with the procedures of the REI.

Research Question 5:

What factors will inhibit and promote REI efforts at the building level?

Procedure:

Open ended responses to the two open-ended items were analyzed and coded. Responses indicating barriers to the REI were coded on five levels: (a) pragmatic, (b) conceptual, (c) affective, (d) miscellaneous; and (e) none. Crosstabulation of levels by groups produced a five by three contingency table and chi square test statistic was used to analyze significant patterns of differences among cells. Due to fewer number of total cases (5%) in levels 4 (miscellaneous) and 5 (none present), these two levels were dropped and a three by three table was computed. Crosstabulation of groups by factors which would promote REI was also performed using the procedure, chi square.

Coding of Open-Ended Responses

Items 62 and 63 referred to those factors which inhibited and promoted REI proposals. Respondents were to name one factor which inhibited integrative programming between special and general education in their building/district and one factor which presently existed to promote such an effort.

Factors which inhibit REI proposals. The original plan was to categorize all written responses into two categories: (a) pragmatic or procedural factors and (b) conceptual factors. This idea was taken from Johnson, Pugach, and Hammittee (1988) who identified barriers to effective special education consultation using these two classifications. Pragmatic barriers refer to system regularities or "microeconomics" such as time, classroom size, money, scheduling and procedures. Conceptual factors refer to the assumed different knowledge bases of the dual systems. Related conceptual issues concern different methodology, types of students, grouping arrangements, and communication between special and general education. It soon became obvious, however, that a third category should be added, "affective factors." Responses included words like resentment, prejudice, bias, jealousy, power brokers, empire builders, close-minded, dogmatic, and elitism. These responses were targeted against the other system and reflected more of an emotional response rather than pinpointing specific pragmatic or conceptual factors which could be addressed by specific system behavioral actions. This affective category can be linked with Fishbein and Ajzen's (1975) definition of attitude which has three components, cognitive, behavioral,

and affective. Thus, three variables were coded for factors which inhibit REI proposals in respective respondents' schools. These variables can be found in Table 13. Following each variable are lists of values which lend specification to each general category.

TABLE 13

**VARIABLES CODED FOR FACTORS WHICH INHIBIT REI EFFORTS
IN RESPONDENTS' SCHOOLS**

Variable	Values (1-10)
A. Pragmatic Factors	1. Money, funding, cutbacks 2. Class size 3. Time (for planning) 4. Facility, structure 5. Organization of support 6. Scheduling 7. Administration 8. Training 9. Laws, regulations, contract 10. Set curriculum; benchmarks
B. Conceptual Factors	1. Knowledge base 2. Ownership of students, program 3. Status quo; better separated 4. Methodology 5. Lack of communication 6. Knowledge of roles, expectations 7. Types of students; stereotyping 8. Philosophy 9. Emotionally Impaired; behavioral problems 10. Class composition; mission of general education
C. Affective Factors	1. Overloaded; overwhelmed 2. "Dumping"; doing each other's job 3. Willingness; resistance 4. Attitudes (negative) toward special education; bias 5. Elitism; compromise standards; look down upon others 6. Special status; hierarchial relationship 7. Distrust 8. Resentment; jealousy 9. Protectionism; overindulge, cater to special learners 10. Miscellaneous (parents' and nonhandicapped students' bias)

Factors which promote REI proposals. The second open-ended response item concerned positive factors present at respondents' locations which favored REI implementation. Responses to this item did not fall into categories; instead, eight general variables were generated from reported responses. In addition, two other categories were added: (a) miscellaneous and (b) none (present). These variables can be found in Table 14.

TABLE 14

**VARIABLES CODED FOR FACTORS WHICH PROMOTE REI EFFORTS
IN RESPONDENTS' SCHOOLS**

Variable	Values
A. Membership of Organization	1. Special educators' expertise (e.g., zeal, leadership, willingness) 2. Administrators (e.g., leadership, knowledge of special learners, commitment) 3. Staff characteristics (e.g., flexible, congenial, cooperative, cohesive, committed, shared concerns)
B. Structure of Organization	1. Innovative efforts (e.g., in process of co-teaching; teacher assistance team; collaborative curriculum planning) 2. Procedures in place (e.g., Mainstreaming, teacher consultants, resource teacher, team meetings, weighting of students, small/large school advantages - all are "in place" to build upon)
C. System Level Support	1. Expert available/support of Special Education Director, district consultant, Superintendent
D. Impact of Environmental Issues	1. Perceived benefits (e.g., awareness of limitations of segregated placement; presence of "at risk" students needing help) 2. Economic, political problems due to cutbacks and redistricting

Interjudge Agreement

For those methods of measurement that require ratings or judgments of an event by one person, there are techniques for estimating the error associated with the rater. The procedure requires the same event/item to be rated by more than one judge. The ratings given by the judges are then calculated by the percentage of agreement to provide a measure of interjudge reliability. The resultant statistics reflect the ability to generalize across potential judges. A high value of the statistic indicates that the quantities assigned to the individual are not limited by the personality and abilities of one judge (Smith & Glass, 1987). In order to ensure interjudge agreement to items 62 and 63, another rater categorized respondents' written answers according to the above variables and assigned designated codes. Calculation of disagreement (difference in assigned codes) to total number of potential agreements revealed interjudge reliability between 70% and 90%. These percentages represent sufficient interjudge agreement.

Summary

Random sampling technique was employed to select three sample groups of general educators, special educators, and administrators from the total population of these educational professionals in the state of Michigan. From a population of 77,737 general educators, a computer-generated random sample of 400 was selected to obtain a 5% sampling error. The decision was made to have equal sample sizes; thus, a sample of 400 special educators was chosen from the population of 13,512 certified personnel, and the third sample of 400 administrators

was selected from the population of 2,797 principals. Thus a total sample of 1200 was obtained.

Survey research method of data collection was chosen for this study. Specifically, the mail questionnaire was selected as the type of survey technique. Reasons for this decision were: (a) There were large numbers of respondents distributed throughout Michigan; and (b) the nature of the research questions can best be measured by considering respondents' replies or attitudes to a set of structured items.

The questionnaire was developed to gather data on education professionals' attitudes toward the goals and procedures of the Regular Education Initiative (REI). The questionnaire was divided into five sections: (a) demographic and experiential characteristics of respondents; (b) respondents' agreement with goals of the REI; (c) their acceptance of procedures of the REI; (d) levels of technical assistance needed to implement the procedures; and (e) respondents' perceptions of factors in their school building which would both promote and inhibit REI proposals. The Likert scaling method was used to measure respondents' attitudes along a five-point scale.

Questionnaires were distributed through one initial mailing and two follow-up procedures. The total return rate was 51%. The number of respondents from each sample group were: (a) 163 general educators; (b) 199 administrators; and (c) 243 special educators. The total number of respondents were 605. Because the return rate was below the 60% accepted rate, a nonrespondent check was made by telephoning a random sample of 30 nonrespondents.

The data analysis management system, Statistical Package for Social Sciences (SPSS-X) was used to treat the data. Machine readable answer sheets were processed through an optical scanner, and a data file was created. Crosstabulation of groups (i.e., general educators, administrators, and special educators) by each of the 9 demographic and experiential characteristics, 14 goals, 22 procedures, and 15 levels of assistance was performed using the chi square test statistic. An analysis of variance procedure was performed to determine if there were significant differences among groups in their attitudes toward the goals and procedures of the Regular Education Initiative.

Chapter IV will present the results of the data analysis. These results will answer each of the five research questions which guided this study.

MICHIGAN STATE UNIV. LIBRARIES



31293007537057

26443230

v.2-

MICHIGAN STATE UNIVERSITY LIBRARIES



3 1293 00753 7065



**PLACE IN RETURN BOX to remove this checkout from your record.
TO AVOID FINES return on or before date due.**

DATE DUE DATE DUE DATE DUE		
<u> </u>	<u> </u>	<u> </u>
<u> </u>	<u> </u>	<u> </u>
<u> </u>	<u> </u>	<u> </u>
<u> </u>	<u> </u>	<u> </u>
<u> </u>	<u> </u>	<u> </u>
<u> </u>	<u> </u>	<u> </u>
<u> </u>	<u> </u>	<u> </u>

**PERCEPTIONS OF GENERAL AND SPECIAL EDUCATORS AND ADMINISTRATORS
TOWARD AGREEMENT WITH THE GOALS AND ACCEPTABILITY OF PROCEDURES
OF THE REGULAR EDUCATION INITIATIVE**

Volume II

By

Jane C. Davis

A DISSERTATION

**Submitted to
Michigan State University
in partial fulfillment of the requirement
for the degree of**

DOCTOR OF PHILOSOPHY

**Department of Counseling, Educational Psychology
and Special Education**

1989

9181009
6001816

CHAPTER IV

RESULTS

The present investigation was undertaken to systematically evaluate the perceptions of general and special educators and administrators toward the goals and procedures of the Regular Education Initiative (REI). Specifically, the researcher examined responses toward 14 goals of the REI identified at the classroom, building, and systems level. In the same manner, 22 procedures were also identified at three levels. These procedures were associated with levels of technical assistance which might be required if the procedures were to be both feasible and acceptable. Specific variables identified in the demographic characteristics of the sample groups were studied to determine their impact on education professionals' responses to the above items. In addition, respondents identified one factor which might be a barrier to implementation of the REI and one factor which might promote the REI in their school building.

Data collected from education professionals' responses were analyzed. The results of descriptive statistics, factor analyses, correlational analyses, and contingency tables are presented as each research question is answered.

Research Question 1: Do education professionals agree with the goals of the Regular Education Initiative?

H₀: There are no significant difference among the groups in their levels of agreement with the goals of the REI. Rejected

H₁: There are significant differences among the groups in their levels of agreement with the goals of the REI. Accepted

The research findings to this question will be presented in three sections: (a) overall agreement with the goals; (b) agreement with subclusters at the classroom, building, and system levels; and (c) agreement with individual items. Concluding the reporting of these results, the impact of demographic characteristics on the groups' level of agreement are presented.

Overall Agreement with Goals

Table 15 presents descriptive statistics of the three groups' mean agreement with the goals of the REI. These statistics reveal that administrators ranked first in their agreement with the goals, followed in order by special educators and general educators. (Scale used was strongly agree (1) to strongly disagree (5).)

TABLE 15

MEAN AGREEMENT WITH GOALS OF THE REI BY GROUPS

Groups	N	Mean	S.D.
Administrators	199	1.99	.59
Special Educators	243	2.24	.57
General Educators	163	2.50	.64
Entire Sample	605	2.23	.62

In order to determine if there were significant differences among the groups, an analysis of variance was performed. The results of this

procedure are seen in Table 16. As shown by this table, there were significant differences among the groups ($F = 31.44; p < .0001$). Further examination of the differences among groups using the Scheffe Multicomparison Test indicated that significant differences among all three comparisons, general educators, administrators, and special educators, were found at the .05 level.

TABLE 16
ANALYSIS OF VARIANCE ON MEAN AGREEMENT WITH GOALS FOR
GENERAL EDUCATORS, ADMINISTRATORS, AND SPECIAL EDUCATORS

Source of Variation	df	MS	F
Between Groups	2	11.10	31.44*
Within Groups	602	.36	

* $p < .0001$

Agreement by Clusters

The 14 goals were organized by clusters at the classroom, building, and system levels. There was a question as to whether groups would vary in their agreement with the goals of the REI on different levels. Mean responses indicate that the same observed order of agreement found in Table 17 is consistent with the results in Table 15. Administrators responded more positively to classroom, building, and system level clusters of goals followed in order by special and general educators. It appears that classroom level goals were the least preferred items among the three levels.

TABLE 17

MEAN AGREEMENT WITH CLUSTERS OF GOALS BY GROUPS

Groups	N	Mean	S.D.
<u>Cluster: Classroom Level</u>			
Administrators	199	2.10	.75
Special Educators	243	2.28	.66
General Educators	163	2.67	.75
Entire Sample	605	2.33	.73
<u>Cluster: Building Level</u>			
Administrators	199	1.90	.60
Special Educators	243	2.26	.62
General Educators	163	2.41	.71
Entire Sample	605	2.18	.67
<u>Cluster: System Level</u>			
Administrators	199	1.91	.75
Special Educators	243	2.10	.73
General Educators	163	2.22	.78
Entire Sample	605	2.07	.76

To investigate whether there were significant differences among the groups concerning their level of agreement with the three goal clusters, an analysis of variance was conducted. As shown in Table 18, significant effects were demonstrated for groups at the classroom level

($F = 30.97; p < .0001$), building level ($F = 31.79; p < .0001$), and system level ($F = 8.33; p < .001$).

TABLE 18

**ANALYSIS OF VARIANCE ON MEAN AGREEMENT OF GOAL CLUSTERS WITH
GENERAL EDUCATORS, ADMINISTRATORS, AND SPECIAL EDUCATORS**

Source of Variation	df	MS	F
<u>Cluster: Classroom Level</u>			
Between Groups	2	14.82	30.97**
Within Groups	602	.48	
<u>Cluster: Building Level</u>			
Between Groups	2	12.82	31.79**
Within Groups	602	.40	
<u>Cluster: System Level</u>			
Between Groups	2	4.72	8.33*
Within Groups	602	.57	

** $p < .0001$ * $p < .001$

Further examination of the differences among groups was performed using the Scheffe Multicomparison Test. Significant differences were found for three comparisons at the .05 level in the classroom cluster. Significant differences between general and special educators were observed in the building and system clusters at the .05 level.

Goal Items

Results of chi square statistic performed on contingency tables for responses to each of the 14 goals of the REI are reported. All 14 contingency tables are in Appendices 1A-14A. A decision was made not to present the tables in this section if all groups responded with "general agreement." General agreement is defined as all groups are in 70% agreement or more with a goal item. For those goal items which represent diversity among groups, tables are presented to demonstrate the relative distribution of responses. Patterns of responses are noted to help analyze whether the distribution of responses is dependent, or is contingent, upon the nature of the goal.

Classroom level goals. Seven goal items follow. For those contingency tables presented, frequency counts and row and column percentages are given in each cell. Marginal distributions include row and column counts and percentages. All seven classroom level goals tested for significant differences at the .001 level. (Tables for classroom level goals are also found in Appendices 1A-7A.)

Goal 1: To integrate special needs learners in general classrooms for most, if not all, of the time. (Appendix 1A)

TABLE 19

TO INTEGRATE SPECIAL LEARNERS MOST OF TIME IN GENERAL CLASSROOMS
BY GROUP AGREEMENT

	Agree	Neutral	Disagree	Row Total
Gen Ed	51	21	90	162
	31.5	13.0	55.6	26.8
	16.7	37.5	37.2	
Admin	127	14	58	199
	63.8	7.0	29.1	32.9
	41.5	25.0	24.0	
Spec Ed	128	21	94	243
	52.7	8.6	38.7	40.2
	41.8	37.5	38.8	
Column Total	306	56	242	604
	50.7	9.3	40.1	100.0

Chi-Square: 38.06 $p < .001$

The goal to educate special learners in the general classroom is the cornerstone of the REI reform movement. It is interesting to note that when looking across respondents in Table 19 that there is almost a balance of education professionals who agree and those who disagree with the goal. When looking within groups, however, it appears that there is almost the same percentage of general educators who disagree (50.1%) with

the goal as there are special educators who agree (43.7%) with it. Administrators represent the group with the greatest percentage of agreement (56.3%).

Goal 2: Increase instructional time for special learners by keeping them in general education settings. (Appendix 2A)

TABLE 20

TO INCREASE INSTRUCTIONAL TIME IN GENERAL EDUCATION BY GROUP AGREEMENT

	Agree	Neutral	Disagree	Row Total
Gen Ed	50 30.9 18.7	31 19.1 25.4	81 50.1 37.9	162 26.8
Admin	112 56.3 41.8	36 18.1 29.5	51 25.6 23.8	199 32.9
Spec Ed	106 43.6 39.6	55 22.6 45.1	82 33.7 38.3	243 40.2
Column Total	268 44.4	122 20.2	214 35.4	604 100.0

Chi-Square: 29.59 $p < .001$

The results of Table 20 demonstrated that general educators disagreed (50.0%) with the goal to increase instructional time for special learners by keeping them in general classrooms. This result

paralleled the findings of the goal to instruct special learners in general classrooms Table 19. Both goals are directed toward instructing children with learning problems in the general education setting rather than the "pull-out" model. Again, fewer administrators (25.6%) and special educators (33.7%) disagreed with this goal.

Goal 3. Use instructional methods effective for special education in with special learners in general classrooms. (Appendix 3A)

TABLE 21

**USE INSTRUCTIONAL METHODS EFFECTIVE FOR SPECIAL EDUCATION
IN GENERAL CLASSROOMS BY GROUP AGREEMENT**

	Agree	Neutral	Disagree	Row Total
Gen Ed	94 57.7 20.1	31 19.0 44.3	38 23.3 56.7	163 26.9
Admin	164 82.4 35.0	20 10.1 28.6	15 7.5 22.4	199 32.9
Spec Ed	210 86.4 44.9	19 7.8 27.1	14 5.8 20.9	243 40.2
Column Total	468 77.4	70 11.6	67 11.1	605 100.0

Chi-Square: 53.06

$p < .0001$

Although 82.4% of administrators and 86.4% of special educators agreed with the goal to use special education methods in general classrooms, only 57.7% of general educators agreed (Table 21). It is interesting to note that general educators did not respond the same way toward using special education methods as special educators did.

Goal 4: Use instructional methods effective for general education with special learners in general classrooms. (Appendix 4A)

TABLE 22

USE INSTRUCTIONAL METHODS EFFECTIVE FOR GENERAL EDUCATION
WITH SPECIAL LEARNERS BY GROUP AGREEMENT

	Agree	Neutral	Disagree	Row Total
Gen Ed	80	50	33	163
	49.1	30.7	20.2	27.0
	23.6	37.9	24.8	
Admin	142	28	29	199
	71.4	14.1	14.6	32.9
	41.9	21.2	21.8	
Spec Ed	117	54	71	242
	48.3	22.3	29.3	40.1
	34.5	40.9	53.4	
Column Total	339	132	133	604
	56.1	21.9	22.0	100.0

Chi-Square: 34.75

$p < .0001$

It appears that general educators (49.1%) and special educators (48.3%) responded with similar caution toward the goal to use general education methods for special learners (Table 22). Administrators, on the other hand, were more favorable (71.4%).

Goal 5: Provide additional assistance without labeling special learners impaired. (Appendix 5A)

TABLE 23

**PROVIDE ADDITIONAL ASSISTANCE WITHOUT LABELING SPECIAL LEARNERS IMPAIRED
BY GROUP AGREEMENT**

	Agree	Neutral	Disagree	Row Total
Gen Ed	112 68.7 24.1	23 14.1 30.7	28 17.2 42.4	163 26.9
Admin	172 86.4 37.1	19 9.5 25.3	8 4.0 12.1	199 32.9
Spec Ed	180 74.1 38.8	33 13.6 44.0	30 12.3 45.5	243 40.2
Column Total	464 76.7	75 12.4	66 10.9	605 100.0

Chi-Square: 20.98 $p < .0001$

It appears all groups agreed generally with the goal to provide additional assistance to special learners without labeling them (Table 23). Percentage of groups' agreement was: general educators (68.7%); special educators (74.1%); and administrators (86.4%).

Goal 6: Spend more time altering instructional practices to teach special learners than assessing and conducting meetings to label them. (Appendix 6A)

TABLE 24

SPEND MORE TIME ALTERING INSTRUCTIONAL PRACTICES TO TEACH SPECIAL LEARNERS THAN ASSESSING THEM BY GROUP AGREEMENT

	Agree	Neutral	Disagree	Row Total
Gen Ed	110 67.5 23.7	27 16.6 32.9	26 16.0 44.8	163 26.9
Admin	166 83.4 35.7	18 9.0 22.0	15 7.5 25.9	199 32.9
Spec Ed	189 77.8 40.6	37 15.2 45.1	17 7.0 29.3	243 40.2
Column Total	465 76.9	82 13.6	66 9.6	605 100.0

Chi-Square: 17.03 $p < .0001$

Special educators (77.8%) and administrators (83.4%) agreed with the goal to spend more time altering practices to teach special learners than assessing them (Table 24). General educators agreed somewhat less (67.5%).

Goal 7: Reduce social stigma by providing increased opportunity for social interactions in general classrooms. (Appendix 7A)

TABLE 25

REDUCE SOCIAL STIGMA BY PROVIDING INCREASED OPPORTUNITY FOR
SOCIAL INTERACTIONS IN GENERAL CLASSROOMS BY GROUP AGREEMENT

	Agree	Neutral	Disagree	Row Total
Gen Ed	112 68.7 23.0	30 18.4 40.0	21 12.9 50.0	163 26.9
Admin	166 83.4 34.0	22 11.1 29.3	11 5.5 26.2	199 32.9
Spec Ed	210 86.4 43.0	23 9.5 30.7	10 4.1 23.8	243 40.2
Column Total	488 80.7	75 12.4	42 6.9	605 100.0

Chi-Square: 22.45 $p < .0001$

Groups generally agreed with the goal to reduce social stigma of special learners by providing increased opportunity for social interactions (Table 25): general educators (68.7%); administrators (83.4%) and; special educators (86.4%).

Building level goals. Four items measured group agreement to building level goals. The first three goals revealed significant differences at the .001 level. The fourth goal, "Negotiate new roles

among staff," did not test for significant differences. A contingency table is presented to represent the wide range in differences for the first goal, empower principals to control all programs. Results from the analysis of the other three goals reflected general agreement; (i.e., 70% agreement and more by all groups); however, general educators consistently responded with less agreement than administrators and special educators. Tables for all building level goals are found in Appendices 8A-11A.

Goal 8: Empower principals to control all programs and resources at the building level. (Appendix 8A)

TABLE 26

EMPOWER PRINCIPALS TO CONTROL ALL PROGRAMS BY GROUP AGREEMENT

	Agree	Neutral	Disagree	Row Total
Gen Ed	50	43	70	163
	30.7	26.4	42.9	26.9
	20.4	30.3	32.1	
Admin	137	33	29	199
	68.8	16.6	14.6	32.9
	55.9	23.2	13.3	
Spec Ed	58	66	119	243
	23.9	27.2	45.0	40.2
	23.7	46.5	54.6	
Column Total	245 40.5	142 23.5	218 36.0	605 100.0

Chi-Square: 104.87

$p < .001$

As seen from Table 26, 49.0% of special educators and 42.9% of general educators disagreed with the goal to empower principals to control all programs. Special educators appeared to be the group expressing the greatest percentage of disagreement; only 23.9% agreed with the goal to give greater "power" or supervision of all programs to the principal. By contrast, 68.8% of administrators agreed with the goal.

Goal 9: Coordinate curricular activities between general and special education classes. (Appendix 9A)

TABLE 27

**COORDINATE CURRICULAR ACTIVITIES BETWEEN GENERAL AND SPECIAL EDUCATION
BY GROUP AGREEMENT**

	Agree	Neutral	Disagree	Row Total
Gen Ed	127 77.9 23.7	19 11.7 45.2	17 10.4 60.7	163 26.9
Admin	189 95.0 35.3	7 3.5 16.7	3 1.5 10.7	199 32.9
Spec Ed	219 90.1 40.9	16 6.6 38.1	8 3.3 28.6	243 40.2
Column Total	535 88.4	42 6.9	28 4.6	605 100.0

Chi-Square: 28.68 $p < .001$

Education professionals were in general agreement to coordinate curricular activities between general and special education (Table 27): general educators (77.9%); special educators (90.1%); and administrators (95.0%). General educators' responses, however, did not indicate approximate total group agreement as administrators' and special educators' responses did.

Goal 10: Increase collaborative teaching arrangements among general and special educators. (Appendix 10A)

TABLE 28

**INCREASE COLLABORATIVE TEACHING ARRANGEMENTS AMONG
GENERAL AND SPECIAL EDUCATORS BY GROUP AGREEMENT**

	Agree	Neutral	Disagree	Row Total
Gen Ed	117 71.8 23.1	28 17.2 42.4	18 11.0 54.5	163 26.9
Admin	180 90.5 35.6	13 6.5 19.7	6 3.0 18.2	199 32.9
Spec Ed	209 86.0 41.3	25 10.3 37.9	9 3.7 27.3	243 40.2
Column Total	506 83.6	66 10.9	33 5.5	605 100.0

Chi-Square: 26.32 $p < .001$

Education professionals were in general agreement to increase collaborative activities between general and special education (Table 28): general educators (71.8%); special educators (86.0%); and administrators (90.5%).

Goal 11: Negotiate "new" roles among staff (Appendix 11A)

TABLE 29

**NEGOTIATE NEW ROLES AMONG STAFF FOR SHARING RESPONSIBILITY
FOR SPECIAL LEARNERS BY GROUP AGREEMENT**

	Agree	Neutral	Disagree	Row Total
Gen Ed	107 65.6 25.7	33 20.2 26.4	23 14.1 35.9	163 26.9
Admin	140 70.4 33.7	43 21.6 34.4	16 8.0 25.2	199 32.9
Spec Ed	169 69.5 40.6	49 20.2 39.2	25 10.3 39.1	243 40.2
Column Total	416 68.8	125 20.7	64 10.6	605 100.0
Chi-Square:	3.60	$p > .05$		

Results of the goal to negotiate "new roles" among staff were not significant (Table 29). However, percentages of agreement will be

descriptively provided: general educators (65.6%); special educators (69.5%); and administrators (70.4%).

System level goals. Three goal items were included at the system level. The first two system level goals tested for significant differences ($p < .001$). (Tables for systems level goals are also found in Appendices 12A-14A).

Goal 12: Pool instructional resources into one unified delivery system. (Appendix 12A)

TABLE 30

**POOL INSTRUCTIONAL RESOURCES INTO ONE UNIFIED DELIVERY SYSTEM
BY GROUP AGREEMENT**

	Agree	Neutral	Disagree	Row Total
Gen Ed	84	46	33	163
	51.5	28.2	20.2	26.9
	25.7	35.1	22.4	
Admin	133	28	38	199
	66.8	14.1	19.1	32.9
	40.7	21.4	25.9	
Spec Ed	110	57	76	243
	45.3	23.5	31.3	40.2
	33.6	43.5	51.7	
Column Total	327	131	147	605
	54.0	21.7	24.3	100.0

Chi-Square: 26.76 $p < .001$

Levels of agreement of general educators (51.5%) and special educators (45.3%) indicate they are concerned about disbanding separation of resources for categorical programs (Table 30). Administrators appear less cautious in their agreement (66.8%).

Goal 13: Increase teachers' ability to instruct diverse learners.
(Appendix 13A)

TABLE 31

INCREASE TEACHER'S ABILITY TO INSTRUCT DIVERSE LEARNERS
BY GROUP AGREEMENT

	Agree	Neutral	Disagree	Row Total
Gen Ed	132 81.0 24.3	16 9.8 44.4	15 9.2 60.0	163 26.9
Admin	189 95.0 34.7	7 3.5 19.4	3 1.5 12.0	199 32.9
Spec Ed	223 91.8 41.0	13 5.3 36.1	7 2.9 28.0	243 40.2
Column Total	544 89.9	36 6.0	25 4.1	605 100.0

Chi-Square: 22.70 $p < .001$

Education professionals were in general agreement with the goal to provide training to teachers to increase their skills to instruct diverse

learners (Table 31): general educators (81.0%); special educators (91.8%); and administrators (95.0%).

Goal 14: Develop administrative policies that provide incentives for general educators to teach special learners (Appendix 14A).

TABLE 32

DEVELOP ADMINISTRATIVE POLICIES THAT PROVIDE INCENTIVES FOR GENERAL EDUCATORS TO TEACH SPECIAL LEARNERS BY GROUP AGREEMENT

	Agree	Neutral	Disagree	Row Total
Gen Ed	115	30	17	162
	71.0	18.5	10.5	26.8
	26.1	27.8	30.4	
Admin	144	37	18	199
	72.4	18.6	9.0	32.9
	32.7	34.3	32.1	
Spec Ed	181	41	21	243
	74.5	16.9	8.6	40.2
	41.1	38.0	37.5	
Column Total	440	108	56	604
	72.8	17.9	9.3	100.0

Chi-Square: 0.78 $p > .05$

The goal to develop administrative policies that provide incentives did not test for significance (Table 32). However, it will be descriptively reported by percentages of agreement: general educators (81.0%); special educators (91.8%); and administrators (95.0%).

In reviewing the above 14 goal items, there appears to be a consistent pattern of general educators expressing more caution and

disagreement toward the goals of the REI than special educators. Three goals are exceptions in which special educators expressed less agreement than general educators: (a) "Pool" instructional resources; (b) empower the principal; and (c) use general education methods for special learners. Administrators also exhibited a consistent pattern of positive agreement with the goals of REI.

Impact of Demographic Characteristics

The next question concerns the impact of demographic characteristics on the respondents' level of agreement with the goals of REI. A two factor analysis of variance was performed to test the main effects of group membership and interaction with the following seven variables: (1) grade level; (2) general education experience; (3) special education experience; (4) training experiences; (5) school readiness; (6) participation (in collaborative efforts); and (7) satisfaction (with collaborative efforts). Role of special educators (e.g., consultant, self-contained teacher, resource teacher) was analyzed specifically for special educators to determine relationship of role with REI goal agreement.

Educational level was not analyzed because there were not sufficient cases in each cell (see Table 6). That is, only two regular educators and three special educators had Ph. D. degrees. All administrators had M.A. degrees and beyond; thus, there was an empty cell. Sixty percent of all respondents had M.A. degrees. It appears that educational level does not uniquely distinguish the groups.

1. Grade Level

A two factor analysis of variance was conducted to determine significant main effects and interaction between group agreement to the goals of REI and grade level (Table 3). The results are reported in Table 33.

TABLE 33

TWO FACTOR ANALYSIS OF VARIANCE ON EDUCATION PROFESSIONALS' MEAN AGREEMENT WITH GOALS OF REI AND GRADE LEVEL

Source of Variation	df	MS	F
Group agreement	2	4.07	11.48*
Grade Level	3	.51	1.45
Group x Level	6	.27	.76
Residual	593	.35	

*p < .0001

It appears that grade level (i.e., elementary, middle, and high school and "other" including center programs) did not create significant differences among groups' agreement with the goals of REI at the .05 level (Table 33). In addition, categories were recoded to determine if elementary and secondary levels responded differently. Again, the results were not significant at the .05 level.

2. General Education Experience

A two factor analysis of variance was conducted to determine if years of general education experience (Table 4) were related to groups' agreement with the REI goals. The results of this analysis are found in Table 34.

TABLE 34

TWO FACTOR ANALYSIS OF VARIANCE ON EDUCATION PROFESSIONALS' MEAN AGREEMENT WITH GOALS OF REI AND GENERAL EDUCATION EXPERIENCE

Source of Variation	df	MS	F
Group agreement	2	2.63	7.57**
Gen. Ed. Exper.	3	.90	2.60
Group x Gen. Ed. Exp.	6	.87	2.51*
Residual	593	.35	

**p < .001 *p < .05

A significant interaction was noted between the two independent variables, general education experience by group mean agreement with REI goals (Table 34). Function of this interaction is depicted in Figure 1.

Figure 2

**MEAN AGREEMENT WITH GOALS OF THE REI BY YEARS OF GENERAL EDUCATION
EXPERIENCE FOR GENERAL EDUCATORS, ADMINISTRATORS, AND SPECIAL EDUCATORS**

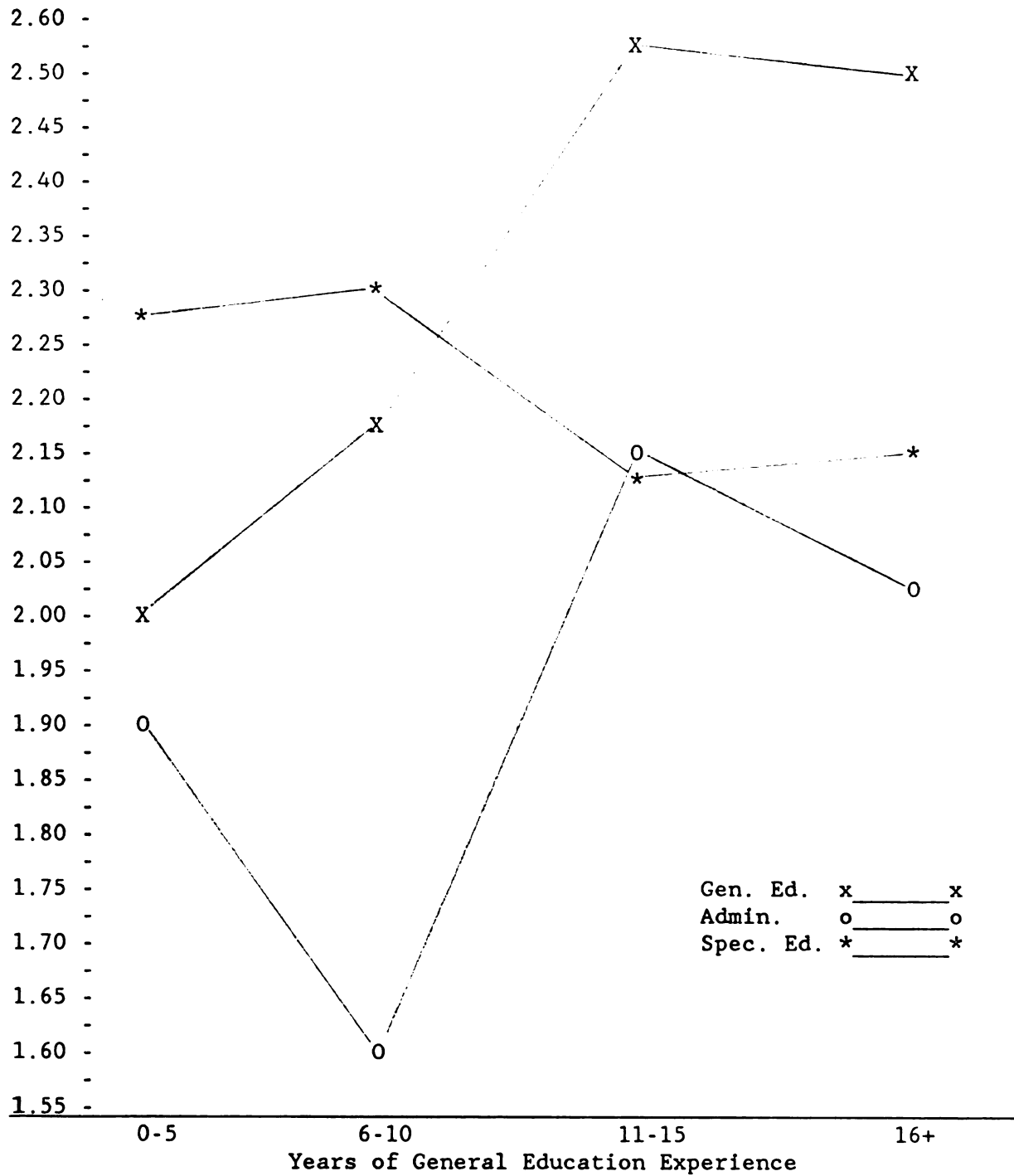


Figure 1 represents the interaction of group mean agreement with the goals of REI and number of years of general education experience.

The interaction effect between two independent variables, years of general education experience and agreement with goals, is best illustrated by examining mean acceptance for years 6-10 (Figure 1). For other categorical years of experience, no significant differences were found between groups and their acceptance. However, for years 6-10, general educators and special educators expressed significant greater disagreement toward the goals than administrators.

3. Special Education Experience

A two factor analysis of variance was performed to determine if differences across and within groups' agreement with the goals could be related to special education experience (Table 5). Table 35 contains the results of this analysis.

TABLE 35

TWO FACTOR ANALYSIS OF VARIANCE ON EDUCATION PROFESSIONALS' MEAN AGREEMENT WITH GOALS OF REI AND SPECIAL EDUCATION EXPERIENCE

Source of Variation	df	MS	F
Group agreement	2	4.27	12.24*
Spec. Ed. Exper.	3	.22	.62
Group x Spec. Exper.	6	.55	1.56
Residual	593	.35	

*p < .001

The main effect of special education experience was tested with group agreement with the goals of the REI (Table 35). Four levels were tested (i.e., 0-5 years, 6-10 years, 11-15 years, and 16+ years). No significant main effect or interaction was noted with regard to special education experience at the .05 level.

4. Inservices

A two factor analysis of variance was completed to determine if inservices and other training experiences were related to group agreement with goals of the REI (Table 8). Two significant main effects were noted. Further examination of the differences between groups was conducted using the Scheffe Multicomparison Test. Significant differences were found between those respondents who had taken 0-5 inservices on instructing special needs learners and those who had taken over 16 types of training experiences ($p < .05$). The more training experiences a respondent has had, the more positive the level of agreement. The results of this analysis are presented in Table 36.

TABLE 36

TWO FACTOR ANALYSIS OF VARIANCE ON EDUCATION PROFESSIONAL'S MEAN AGREEMENT WITH GOALS OF REI AND NUMBER OF INSERVICES

Source of Variation	df	MS	F
Group agreement	2	4.72	13.50**
Inservices	2	1.62	4.64*
Group x Inservices	4	.76	2.17
Residual	595	.35	

** $p < .001$ * $p < .01$

5. School Readiness

Some schools are in various stages of readiness in integrating the services of special and general education programs (Table 9). The question was asked if a school's "readiness" would relate to how groups responded to the goals of the REI. The five categories on the questionnaire were recoded to three: (1) no planning-awareness; (2) planning-discussion; and (3) implementation of innovative efforts (e.g., co-teaching, teacher assistance teams). Record of these results are shown in Table 37.

TABLE 37

TWO FACTOR ANALYSIS OF VARIANCE ON EDUCATION PROFESSIONALS' MEAN AGREEMENT WITH GOALS OF REI AND SCHOOL READINESS

Source of Variation	df	MS	F
Group agreement	2	9.98	28.20*
Readiness	2	.32	.92
Group x Readiness	4	.20	.56
Residual	596	.35	

* $p < .001$

Upon examination of Table 37, it appears that neither the main effect of school readiness nor Group x Readiness interaction was significant at the .05 level.

6. Participation

Respondents were asked if they were personally participating in collaborative efforts between special and general educators. To determine if the two independent groups, those who had participated and those who had not, were different in their mean agreement to the goals of the REI, a Mann-Whitney U test was performed. The results are reported in Table 38.

TABLE 38

**EFFECT OF EDUCATION PROFESSIONALS' PARTICIPATION IN COLLABORATIVE EFFORTS
AND MEAN AGREEMENT WITH GOALS OF REI**

	General Educators		Administrators		Special Educators	
Particip.:	Yes	No	Yes	No	Yes	No
N:	87	76	130	69	114	129
Z score:	-.04		-.74		-.71	

No significant difference was reported between participants and non-participants at the .05 level. It appears that participation in collaborative efforts does not make a difference in groups' mean agreement with the goals.

7. Satisfaction

For those respondents who did participate in collaborative efforts (Table 11), their level of satisfaction was measured with group agreement to determine if there was a relationship between agreement with REI goals and satisfaction. Five categories were recoded to three: (a) satisfied, (b) neutral, and (c) dissatisfied. Results are found in Table 39.

TABLE 39

TWO FACTOR ANALYSIS OF VARIANCE ON EDUCATION PROFESSIONALS' MEAN AGREEMENT WITH GOALS OF REI AND SATISFACTION WITH PARTICIPATION

Source of Variation	df	MS	F
Group Agreement	2	4.23	12.45**
Satisfaction	2	1.35	3.96*
Group x Satis.	4	.40	.81
Residual	322	.34	

**p < .0001

*p < .05

Examination of the differences between groups was performed using the Scheffe Multicomparison Test. Results indicate that respondents who were satisfied with their participation in collaborative efforts had higher mean agreement scores than those participants who were neutral or dissatisfied ($p < .05$).

8. Role of Special Educator

A one-way analysis of variance was conducted to determine if the role of a special educator (Table 7) was a significant variable as it related to special educators' agreement with goals of the REI. The analysis revealed differences among five roles (groups) ($F = 4.31; p < .01$). A Scheffe Multicomparison Test was conducted. Significant differences exist between those special educators who work in centers and those who are resource room and self-contained teachers. Teachers who work in centers (separate special education facilities) find the goals more acceptable at a .05 level of significance. Results of this analysis are found in Table 40.

TABLE 40
ANALYSIS OF VARIANCE ON SPECIAL EDUCATORS' ROLE
AND MEAN AGREEMENT WITH GOALS OF THE REI

Source of Variation	df	MS	F
Between Groups	4	.09	4.31*
Within Groups	187	.02	

*p .01

In summary, it appears that the interaction of group membership and general education experience, number of inservices taken, satisfaction with collaborative efforts, and role of special educator were significant demographic and experiential characteristics.

The second research question concerning the procedures to implement the goals of the REI is explored.

Research Question 2: Do education professionals accept the procedures of the Regular Education Initiative?

H₀: There are no significant difference among the groups in their levels of acceptance of the procedures of the REI. Rejected

H₁: There are significant differences among the groups in their levels of acceptance of the procedures of the REI. Accepted

The research findings to this question will be presented in three sections: (a) overall agreement with the procedures; (b) agreement with subclusters at the classroom, building, and system levels; and (c) agreement with individual items. Concluding the reporting of these results, the impact of demographic characteristics on the groups' level of agreement are presented.

Overall Agreement with Procedures

Table 41 presents descriptive statistics of the three groups' mean acceptance of the procedures of the REI. Examination of Table 41 reveals that administrators ranked first in their acceptance of the procedures, followed in order by special educators and general educators. (Scale ranges from strongly agree (1) to strongly disagree (5).)

TABLE 41

MEAN ACCEPTANCE OF REI PROCEDURES BY GROUPS

Groups	N	Mean	S.D.
Administrators	194	1.89	.45
Special Educators	240	1.99	.44
General Educators	160	2.18	.53
Entire Sample	594	2.01	.48

In order to determine if there were significant differences among the groups, an analysis of variance was performed. The results of this procedure are seen in Table 42. As shown by this table, there were significant differences among the groups ($F = 18.00; p < .0001$). Further examination of the differences among groups using the Scheffe Multicomparison Test indicated that significant differences existed between general educators and special educators and general educators and administrators at the .05 level.

TABLE 42

**ANALYSIS OF VARIANCE ON MEAN ACCEPTABILITY OF PROCEDURES WITH
GENERAL EDUCATORS, ADMINISTRATORS, AND SPECIAL EDUCATORS**

Source of Variation	df	MS	F
Between Groups	2	3.96	18.00*
Within Groups	592	.36	.22

*p < .0001

Agreement by Clusters

The 22 procedures were organized by clusters at the classroom, building, and system levels. There was a question as to whether groups would vary in their acceptance of procedures of the REI on different levels. Results of this analysis are in Table 43. Mean order of acceptance revealed the following order: Administrators responded more positively than special and general educators to classroom, building, and system level clusters of procedures. Special educators expressed greater acceptance than general educators to classroom and building level procedures. General educators responded more positively than special educators to system level clusters. It appears that building level procedures were preferred more than classroom level procedures. The results of system level clusters should be interpreted cautiously as there were only two items.

TABLE 43

MEAN AGREEMENT WITH CLUSTERS OF PROCEDURES BY GROUPS

Groups	N	Mean	S.D.
<u>Cluster: Classroom Level</u>			
Administrators	199	1.93	.48
Special Educators	242	1.95	.43
General Educators	163	2.19	.54
Entire Sample	604	2.01	.49
<u>Cluster: Building Level</u>			
Administrators	196	1.69	.57
Special Educators	242	1.75	.65
General Educators	163	2.02	.72
Entire Sample	601	1.80	.66
<u>Cluster: System Level</u>			
Administrators	196	2.13	.91
General Educators	163	2.60	.87
Special Educators	242	2.85	1.06
Entire Sample	601	2.55	1.01

To investigate whether there were significant differences among the groups concerning their level of agreement with the three goal clusters, an analysis of variance was conducted. As shown in Table 44, significant effects were demonstrated at the classroom level ($F =$

15.43; $p < .0001$), building level ($F = 12.81$; $p < .0001$), and system level ($F = 31.43$; $p < .0001$).

TABLE 44

ANALYSIS OF VARIANCE ON MEAN ACCEPTANCE OF PROCEDURE CLUSTERS
WITH GENERAL EDUCATORS, ADMINISTRATORS, AND SPECIAL EDUCATORS

Source of Variation	df	MS	F
<u>Cluster: Classroom Level</u>			
Between Groups	2	3.55	15.43*
Within Groups	601	.23	
<u>Cluster: Building Level</u>			
Between Groups	2	5.39	12.81*
Within Groups	598	.42	
<u>Cluster: System Level</u>			
Between Groups	2	29.02	31.43*
Within Groups	602	.92	

* $p < .0001$

Further examination of the differences among groups was performed using the Scheffe Multicomparison Test. Significant differences were found between general educators and administrators and general educators and special educators at the .05 level in the classroom and building clusters. Significant differences among all three groups were observed in the system cluster at the .05 level.

Procedure Items

Results of chi square statistic performed on contingency tables for responses to each of the 22 procedures of the REI are reported. All 22 contingency tables are in Appendices 15A-36A. A decision was made not to present the tables in this section if all groups responded with "general acceptance." General acceptance is defined as all groups are in 70% agreement or more with a procedure item. For those procedure items which represent diversity among groups, tables are presented to demonstrate the relative distribution of responses. Patterns of responses are noted to help analyze whether the distribution of responses is dependent, or is contingent, upon the nature of the procedure.

Classroom level procedures. Fifteen procedure items follow. For those contingency tables presented, frequency counts and row and column percentages are given in each cell. Marginal distributions include row and column counts and percentages. Five of the 15 procedures did not test for significant differences at the .05 level. (Tables for classroom level procedures are found in Appendices 15A-29A.)

Classroom level procedures 1-10 were generally accepted by all groups of education professionals. That is, 70% or more of respondents within each group accepted the procedure. The first five procedures tested significantly with a level of .05 as measured by the chi square test statistic. These procedures are:

Procedure 1: Use curriculum based assessment (Appendix 15A)

Procedure 2: Teach social skills (Appendix 16A)

Procedure 3: Reallocate instructional time on basis of student needs (Appendix 17A)

Procedure 4: Use behavior management strategies (Appendix 18A)

Procedure 5: Teach cognitive skill strategies (Appendix 19A)

The next five classroom level procedures did not test for significant differences using the chi square test statistic:

Procedure 6: Use computer-assisted instruction (Appendix 20A)

Procedure 7: Use cooperative learning (Appendix 21A)

Procedure 8: Use peer tutoring (Appendix 22A)

Procedure 9: Increase rates of teaching behaviors (Appendix 23A)

Procedure 10: Group students heterogeneously (Appendix 24A)

Education professionals were more cautious in their responses to five of the remaining classroom procedures. These items are presented individually.

Procedure 11: Include specialized instruction such as braille and sign language within the general classroom (Appendix 25A)

TABLE 45

**INCLUDE SPECIALIZED INSTRUCTION (BRAILLE, SIGN LANGUAGE)
BY GROUP ACCEPTANCE**

	Agree	Neutral	Disagree	Row Total
Gen Ed	60 37.3 20.8	39 24.2 24.8	62 38.5 40.5	161 26.9
Admin	91 46.4 31.5	53 27.0 33.8	52 26.5 34.0	196 32.7
Spec Ed	138 57.0 47.8	65 26.9 41.4	39 16.1 25.5	242 40.4
Column Total	289 48.2	157 26.2	153 25.5	599 100.0
Chi-Square:	27.44	p < .001		

The procedure to include specialized instruction such as braille and sign language in the general classroom was not generally accepted by all groups (Table 45). Percentage of acceptance was: general educators (37.3%); administrators (46.4%); and special educators (57.0%). It appears that special educators are more accepting of the procedure to provide instruction in sign language and braille in general classrooms as opposed to instructing visually and hearing impaired students in separate classrooms.

Procedure 12: Make at least three instructional modifications prior to referring (Appendix 26A).

TABLE 46

**MAKE AT LEAST THREE INSTRUCTIONAL MODIFICATIONS PRIOR TO REFERRING
BY GROUP ACCEPTANCE**

	Agree	Neutral	Disagree	Row Total
Gen Ed	75 46.6 21.0	64 39.8 33.9	22 13.7 43.1	161 27.0
Admin	124 63.6 34.7	56 28.7 29.6	15 7.7 29.4	195 32.7
Spec Ed	158 65.6 44.3	69 28.6 36.5	14 5.8 27.5	241 40.4
Column Total	357 59.8	189 31.7	51 8.5	597 100.0
Chi-Square:	18.29	p < .001		

The procedure to make three instructional modifications before referring a student with learning problems received the following percentage of acceptance by groups (Table 46): general educators (46.6%); administrators (63.6%); and special educators (65.6%). General educators appear to stand alone in their cautious acceptance of this practice.

Classroom level procedures 13-15 did not receive general acceptance. That is, 70% or more of respondents within each group did not accept the procedure. As they did not test for significance using the chi square test statistic ($p < .05$), description of percentages of acceptance across groups will be presented.

Procedure 13: Modify instructional practices for special learners using the same curriculum (Appendix 27A)

The practice to modify instructional practices using the same curriculum received the following percentage of acceptance: general educators (63.8%); administrators (67.7%) and; special educators (67.7%). Responses were somewhat less than 70% general agreement and did not seem to vary much among groups.

Procedure 14: Use student-paced activities (Appendix 28A)

The following levels of acceptance across groups were: general educators (57.7%); special educators (62.4%); and administrators (68.7%).

Procedure 15: Use mastery learning approach (Appendix 29A)

The procedure to use mastery learning received less than general acceptance among groups: general educators (54.9%); special educators (59.3%); and administrators (65.1%).

Building level. Five items were included in building level procedures. Four items were tested with the chi square test statistic and significance was recorded at the .05 level. Tables for building level procedures are in Appendices 30A-34A.

The four building level procedures that were generally accepted by 70% or more of respondents within all groups are presented:

Procedure 16: Co-teach (general-special educator) (Appendix 30A)

Procedure 17: Attend inservices (Appendix 31A)

Procedure 18: Participate in building-based support teams (Appendix 32A)

Procedure 19: Engage in peer coaching (Appendix 33A)

Although two of the building level procedures were generally acceptable, there was quite a range in acceptance among general educators and administrators and special educators. The procedure to participate in building-based support teams received the following percentage of acceptance by groups: general educators (71.2%); administrators (87.8%); and special educators (89.3%). The building level procedure to engage in peer coaching was also perceived differently by groups: general educators (65.6%); special educators (78.9%); and administrators (87.2%). The pattern of general educators' acceptance of building level procedures appeared less positive than special educators' and administrators' response patterns.

Procedure 20: Work with consulting teacher (Appendix 34A)

The building level procedure to work with a consulting teacher did not test significantly at the .05 level using the measure, chi square test statistic. Descriptively, it can be reported that 90% of all groups agreed with this procedure.

System level procedures. There were two items for this system level. Both items tested significantly using the chi square test and employing a .01 significance level. (Tables for systems level procedures are also found in Appendices 35A-36A.)

These two system level procedures are reported as follows:

Procedure 21: Fund services by block entitlement (Appendix 35A)

TABLE 47

FUND SERVICES BY BLOCK ENTITLEMENT BY GROUP ACCEPTANCE

	Agree	Neutral	Disagree	Row Total
Gen Ed	71 43.6 26.2	55 33.7 31.8	37 22.7 23.6	163 27.1
Admin	126 64.3 46.5	37 18.9 21.4	33 16.8 21.0	196 32.6
Spec Ed	74 30.6 27.3	81 33.5 46.8	87 36.0 55.4	242 40.3
Column Total	271 45.1	173 28.8	157 26.1	601 100.0
Chi-Square:	53.47	p < .001		

The procedure to fund services by block entitlement (Table 47) was received cautiously by special and general educators. This procedure would involve the loss of funds singled out especially for special education. Percentages of acceptance were: special educators (30.6%) and general educators (43.6%). Almost an equal number of special educators, however, are undecided (33.5%). Administrators, on the other hand, found the procedure more acceptable (64.3%).

Procedure 22: Provide waivers for performance (Appendix 36A)

TABLE 48

PROVIDE WAIVERS FOR PERFORMANCE BY GROUP ACCEPTANCE

	Agree	Neutral	Disagree	Row Total
Gen Ed	83 50.9 24.0	57 35.0 33.3	23 14.1 27.4	163 27.1
Admin	141 71.9 40.8	42 21.4 24.6	13 6.6 15.5	196 32.6
Spec Ed	122 50.4 35.3	72 29.8 42.1	48 19.8 57.1	242 40.3
Column Total	346 57.6	171 28.5	84 14.0	601 100.0
Chi-Square:	29.91	p < .001		

The procedure to waive special education regulations while trial efforts are underway was perceived with wariness by general educators who expressed 50.9% agreement and special educators who were in 50.4% agreement. Administrators responded more positively (71.9%). Results are presented in Table 48.

Thus, in general, the procedures of the REI at the classroom and building level appear acceptable (i.e., 70% acceptance of respondents within each group). The procedure to make at least three instructional modifications prior to referring received only 50% acceptance by general educators and appeared to reflect important differences in the perceptions of general educators concerning their role in modifying instruction for special needs learners. At the system level, it appears that changing policies toward regulations and funding were met with caution by general and special educators; responses ranged from 30% to 50% acceptance.

Demographic Characteristics

Demographic characteristics of grade level, general education experience, special education experience, number of training experiences, school readiness, participation in collaborative efforts, satisfaction with cooperative efforts between special and general education, and role of special educator were examined to see if these variables created differences in groups' acceptance of the procedures. Results of the procedure, two factor analysis of variance, that was used to investigate the effect of these demographic and experiential variables are presented.

1. Grade Level

A two factor analysis of variance was conducted to determine significant main effects and interaction between group mean acceptance of procedures of REI and grade level (Table 3). The results are reported in Table 49.

TABLE 49

TWO FACTOR ANALYSIS OF VARIANCE ON EDUCATION PROFESSIONALS' MEAN
ACCEPTANCE OF PROCEDURES OF REI AND GRADE LEVEL

Source of Variation	df	MS	F
Group acceptance	2	2.10	9.49*
Grade Level	3	.35	1.58
Group x Level	6	.13	.59
Residual	592	.22	

*p < .001

It appears that grade level (i.e., elementary, middle, and high school and "other" including center programs) was not a significant main effect and there was no interaction between group acceptance of procedures of REI and grade level ($p < .05$).

2. General Education Experience

A two factor analysis of variance was conducted to determine if years of general education experience (Table 4) were related to groups'

acceptance of REI procedures. The results of this analysis are found in Table 50.

TABLE 50

TWO FACTOR ANALYSIS OF VARIANCE ON EDUCATION PROFESSIONALS' MEAN ACCEPTANCE OF PROCEDURES OF REI AND GENERAL EDUCATION EXPERIENCE

Source of Variation	df	MS	F
Group acceptance	2	.60	2.75*
Gen. Ed. Exper.	3	.52	2.39
Group x Gen. Ed. Exp.	6	.47	2.18*
Residual	592	.22	

*p < .05

A significant interaction was noted between the two independent variables, group mean acceptance of procedures by general education experience at the .05 level (Table 50). The function of this interaction is depicted in Figure 2.

Figure 3

**MEAN ACCEPTABILITY OF PROCEDURES OF REI BY GENERAL EDUCATION EXPERIENCE
FOR GENERAL EDUCATORS, SPECIAL EDUCATORS, AND ADMINISTRATORS**

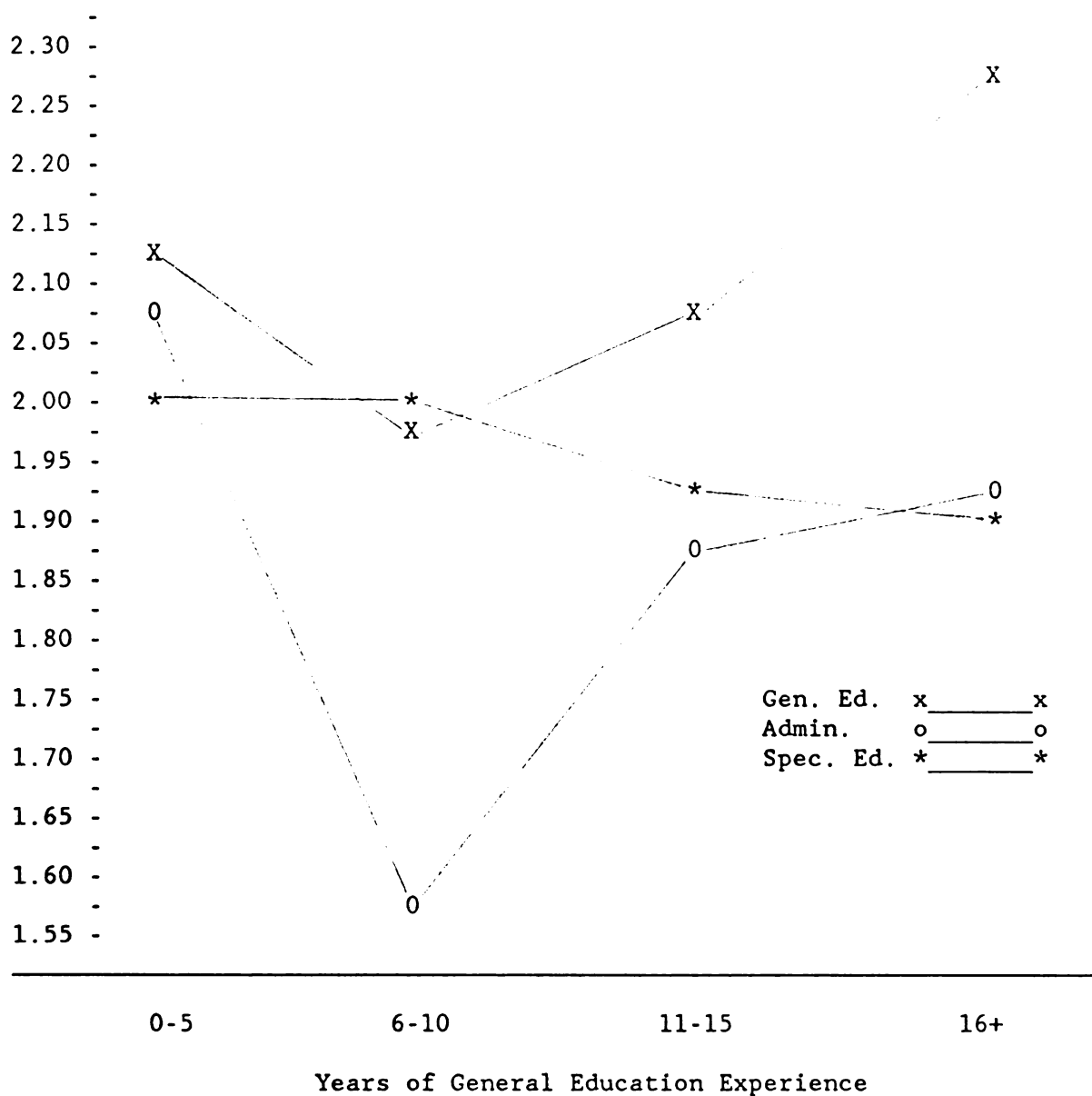


Figure 2 represents the interaction between acceptance of procedures and number of years of general education experience.

The interaction effect between the two independent variables, mean acceptance and general education experience, is best illustrated by examining mean acceptance of procedures for years 6-10. For other categorical groups of years experience, no significant differences were found between groups and their acceptance. However, for years 6-10, general educators and special educators expressed significant greater disagreement than administrators.

3. Special Education Experience

A two factor analysis of variance was performed to determine if differences within and across groups' acceptance of the procedures of REI were related to special education experience (Table 5). Table 51 contains the results.

TABLE 51

TWO FACTOR ANALYSIS OF VARIANCE ON EDUCATION PROFESSIONALS' MEAN ACCEPTANCE OF PROCEDURES OF REI AND SPECIAL EDUCATION EXPERIENCE

Source of Variation	df	MS	F
Group acceptance	2	1.08	4.91*
Spec. Ed. Exper.	3	.25	1.14
Group x Spec. Exper.	6	.30	1.36
Residual	593	.22	

*p < .001

The main effect of special education experience was tested with group acceptance of procedures of the REI. Four levels were tested (i.e., 0-5 years, 6-10 years, 11-15 years, and 16+ years). It appears that the main effect, special education, and its interaction with group acceptance of REI procedures were not significant at the .05 level (Table 51).

4. Inservices

A two factor analysis of variance was completed to determine if differences in group acceptance of procedures of REI could be related to the number of training experiences (Table 6) in the instruction of special needs learners. Results revealed that the main effect, inservice, and interaction of inservice by group mean acceptance of procedures were not significant at the .05 level. The results of this analysis are presented in Table 52.

TABLE 52

TWO FACTOR ANALYSIS OF VARIANCE ON EDUCATION PROFESSIONALS' MEAN ACCEPTANCE OF PROCEDURES OF REI AND NUMBER OF INSERVICES

Source of Variation	df	MS	F
Group acceptance	2	1.40	6.33*
Inservices	2	.56	2.52
Group x Inservices	4	.21	.93
Residual	594	.22	

*p < .001

5. School Readiness

Some schools are in various stages of readiness in integrating the services of special and general education programs (Table 9). The question was asked if a school's "readiness" would affect how groups responded to the procedures of REI. The five categories on the questionnaire were recoded to three: (1) no planning-awareness; (2) planning-discussion; and (3) implementation of innovative efforts (e.g., co-teaching, teacher assistance teams). Record of these results are shown in Table 53.

TABLE 53

TWO FACTOR ANALYSIS OF VARIANCE ON EDUCATION PROFESSIONALS' MEAN ACCEPTANCE OF PROCEDURES OF REI AND SCHOOL READINESS

Source of Variation	df	MS	F
Group acceptance	2	3.44	15.71**
Readiness	2	.92	4.19*
Group x Readiness	4	.21	.94
Residual	596	.22	

**p < .001 *p < .05

Upon examination of Table 53, it appears that the main effect, school readiness for change, is significant at the .05 level. Moreover, as tested by the Scheffe Multicomparison Test, there was a significant difference in mean acceptance of procedures across groups at the .05 level. Education professionals who were in schools doing no planning

were significantly different from respondents in schools that were in the planning-discussion stage and implementation stage of general-special education collaborative efforts. That is, the no planning group reported significantly lower mean acceptance of procedures than each of the other two groups.

6. Participation

Respondents were asked if they were personally participating in collaborative efforts between special and general educators. To determine if the two independent groups, those who had participated and those who had not, were different in their mean acceptance of procedures of REI, a Mann-Whitney U test was performed. The results are reported in Table 54.

TABLE 54

**EFFECT OF EDUCATION PROFESSIONALS' PARTICIPATION IN COLLABORATIVE EFFORTS
AND MEAN ACCEPTANCE OF PROCEDURES OF REI**

	General Educators		Administrators		Special Educators	
Particip.:	Yes	No	Yes	No	Yes	No
N:	87	76	130	69	114	129
Z score:	-0.67		-0.63		-0.63	

No significant difference was reported between participants and non-participants at the .05 level. It appears that participation in collaborative efforts does not make a difference in groups' mean acceptance of procedures of the REI.

7. Satisfaction

For those respondents who did participate in collaborative efforts (Table 11), the variable, satisfaction, was measured with group acceptance of procedures to determine significant main effects and a possible interaction. Five categories were recoded to three: (a) satisfied, (b) neutral, and (c) dissatisfied. Results are found in Table 55.

TABLE 55

TWO FACTOR ANALYSIS OF VARIANCE ON EDUCATION PROFESSIONALS' MEAN ACCEPTANCE OF PROCEDURES OF REI AND SATISFACTION WITH PARTICIPATION

Source of Variation	df	MS	F
Group Acceptance	2	1.47	7.02**
Satisfaction	2	.65	3.08*
Group x Satis.	4	.15	.71
Residual	322	.34	

**p < .001

*p < .05

The main effect, satisfaction, was significant at the .05 level (Table 55). Examination of the differences between groups was performed using the Scheffe Multicomparison Test. Results indicated that respondents who were satisfied with their participation in collaborative efforts had higher mean agreement scores than those participants who were neutral or dissatisfied.

8. Role of Special Educator

A one-way analysis of variance was conducted to determine if the role of a special educator (Table 7) was related to acceptance of REI procedures. Five roles (groups) were tested (i.e., resource room, resource room + consultant, consultant, self-contained, and center program). The results indicated that role was not a significant main effect. Results of this analysis are found in Table 56.

TABLE 56

**ANALYSIS OF VARIANCE ON SPECIAL EDUCATORS' ROLE
AND MEAN ACCEPTANCE OF PROCEDURES OF REI**

Source of Variation	df	MS	F
Between Groups	4	.06	1.07
Within Groups	187	.06	

p > .05

Thus, it was determined that the interaction of general education and group acceptance of procedures, school readiness, and personal satisfaction with collaborative efforts were significant demographic and experiential characteristics.

In order to make clearer the significant demographic and experiential characteristics that related to groups' mean agreement with the goals of REI and groups' mean acceptance of procedures, Table 57 is presented.

TABLE 57

**SUMMARY OF SIGNIFICANT DEMOGRAPHIC CHARACTERISTICS
AND MEAN AGREEMENT TO REI GOALS AND PROCEDURES**

	GOALS	PROCEDURES
Variables	$p < .05$	$p < .05$
MAIN EFFECTS		
Group Agreement	*	*
Demographics:		
Grade Level		
Gen. Ed. Exper.		
Spec. Ed. Exper.		
Inservices	*	
School Readiness		*
Participation		
Satisfaction	*	*
Sp Ed Role	*	
INTERACTIONS		
Group x Level		
Group x Gen. Exp.	*	*
Group x Spec. Exp.		
Group x Inservices		
Group x Readiness		
Group x Particip.		
Group x Satisf.		

Research Question 3:

What levels of assistance are needed for REI procedures to be implemented?

H₀: There are no significant differences among groups in the levels of assistance needed to implement the procedures of the REI.

Rejected

H₁: There are significant differences among groups in the levels of assistance needed to implement the procedures of the REI.

Accepted

In order to find out what levels of assistance were needed to implement the 15 classroom procedures of the REI, education professionals chose among six levels of assistance: (1) no assistance necessary; (2) inservice; (3) individual consultation; (4) building team that consults; (5) in-class assistance; and (6) does not apply (dislike procedure - no help of any kind). Contingency tables illustrated the pattern of assistance needed by each group; these 15 tables are found in Appendices 37A-51A. A significant chi square test statistic was reported for 13 of 15 procedures ($p < .05$). That is, there were significant patterns in the level of assistance needed by each group. Although administrators are not directly involved in the instructional setting, it is interesting to note what they perceived the needs of their staff to be. Table 58 summarizes the cumulative number of times respondents within each group chose the level to assist with the 15 procedures. For purposes of analysis, consultation by individual and team was recoded to "consultation."

TABLE 58

**LEVELS OF ASSISTANCE NEEDED TO IMPLEMENT REI CLASSROOM PROCEDURES
(CUMULATIVE RESPONSES) BY GROUPS**

	None	Inserv	Consult	In-Class	Does Not Apply	Row Total
Gen Ed	391 16.1	666 27.4	645 26.5	474 19.5	255 10.5	2431
Admin	343 11.7	1197 40.7	754 25.7	435 14.8	210 7.1	2939
Spec Ed	386 10.6	979 27.0	1248 34.4	728 20.1	286 7.9	3627
Column Total	1120 12.4	2842 31.6	2647 29.4	1637 18.3	751 8.3	8997 100.0
Chi Square	34.965	p < .01				

It appears that technical assistance in the form of inservice, consultation, or in-class assistance was needed for 79.3% of the classroom procedures. There were 12.4% of education professionals who indicated no help was needed and only 8.3% stated that the procedures did not apply. Groups varied in their needs. Inservice was preferred by most administrators (40.7% of responses) while general and special educators appear divided over inservice and consultation. General educators indicated inservice was needed in 27.4% of their responses and consultation in 26.5%. Special educators chose consultation for 34.4% of assistance needs and inservice for 27.0%. In-class assistance was the

third preferred form of aid for all groups. General educators' preference for no help (16.1%) exceeded administrators' preference (11.7%) and special educators' choice of no help needed (10.6%).

Individual classroom procedures were examined to find out which ones educators indicated did not apply. Six classroom procedures received more than 10% of "does not apply" responses. These six were: (1) Modify instructional practices (12% of all groups); (2) use student-paced activities (18% of general educators); (3) use mastery learning approach (20% of general educators); (4) include specialized instruction such as braille and sign language (26% of general educators); (5) provide instruction by heterogeneous grouping (11% of general educators and 10% of special educators); and (6) Make at least three instructional modifications prior to referring (19% of general educators, 17% of special educators, and 14% of administrators). These classroom procedures were also ones that did not receive general acceptance by all groups. However, when technical assistance was offered, educators indicated that assistance was necessary rather than "does not apply."

The fourth research question examines the relationship between agreement with goals and acceptability of procedures.

Research Question 4:

Is there a relationship between agreement with the goals of REI and acceptance of REI procedures?

H_0 : There is no significant relationship between agreement with the goals of REI and acceptability of procedures of REI among groups.

Rejected

H_1 : There is a relationship between agreement with the goals of REI and acceptability of procedures of the REI among groups.

Accepted

In order to answer this research question, the Pearson correlation coefficient was used to measure the relationship between two variables. The results of this procedure are reported in Table 59.

TABLE 59

CORRELATION (PEARSON R) MATRIX BETWEEN MEAN AGREEMENT WITH GOALS
OF REI AND MEAN ACCEPTABILITY OF PROCEDURES FOR ALL GROUPS

	Procedure	Goal
General Educators ($\underline{n}$ = 163)		
Procedure	---	.60*
Goal	.60*	---
Administrators ($\underline{n}$ = 199)		
Procedure	---	.63*
Goal	.63*	---
Special Educators ($\underline{n}$ = 243)		
Procedure	---	.58*
Goal	.58*	---
* $p < .001$		

A significant positive relationship exists between agreement with the goals and acceptability of procedures of the REI among all groups (Table 59).

Summary Statement: Personal Feeling toward REI

At the end of the questionnaire, educators indicated along a continuum of not at all (1) to definitely (5) how they personally felt about the REI. That is, did they personally want to see REI efforts implemented. Responses to this statement provided an indication of a relationship between their personal statement and their agreement to the goals and acceptability of procedures. Five categories were recoded to three: (a) negative, (b) neutral, and (c) positive. Results of education professionals' reactions toward the REI are observed in Table 60.

TABLE 60

PERSONAL AGREEMENT TO REI BY GROUPS

	Negative	Maybe	Positive	Row Total
Gen Ed	49 30.1	66 40.5	48 29.4	163 27.0
Admin	42 21.1	56 28.1	101 50.8	199 32.9
Spec Ed	59 24.4	78 32.2	105 43.4	242 40.1
Column Total	150 24.8	200 33.1	254 42.1	604 100.0

Chi Square: 16.993 $p < .01$

It appeared that there was one relationship between this summary statement and the results of groups' agreement with the goals and acceptability of procedures. The order of agreement remained the same: Administrators were more positive followed in order by special educators and general educators. However, mean agreement with the goals of REI and mean acceptance of procedures would have indicated a more positive response from all groups. Only 42.1% of all educators indicated that they personally wanted to see REI efforts implemented. Perhaps some educators adopted a "wait and see" attitude as 33.1% of all respondents indicated "maybe."

The final question to be examined was respondents' perceptions of those barriers within their school which would inhibit REI efforts and those that would promote the initiative.

Research Question 5:

What factors will inhibit and promote agreement with the goals of REI and acceptance of REI procedures?

H_0 : There is no significant difference in factors which inhibit and promote REI goals and procedures among groups.

Rejected

H_1 : There is a significant difference in factors which inhibit and promote REI goals and procedures among groups.

Accepted

Respondents completed an open-ended sentence in which they had to name one factor which would inhibit REI efforts in their school and one factor which would promote the initiative. Not all respondents chose to complete these open-ended sentences; 8% left them blank.

Barriers to REI

Responses to barriers of the REI were coded in three discrete categories: (1) pragmatic, (2) conceptual, and (3) affective. Miscellaneous responses comprised 1.1% of total responses. Because the miscellaneous category was small, it was eliminated, and a chi square test statistic was conducted on three categories. The results of this analysis are seen in Table 61.

TABLE 61
BARRIERS TO IMPLEMENTATION OF THE REI BY GROUPS

	Pragmatic	Conceptual	Affective	Row Total
Gen Ed	89 58.6	31 20.0	32 21.4	152 27.5
Admin	87 48.1	56 30.9	38 21.0	181 32.7
Spec Ed	77 35.0	59 26.8	84 38.2	220 39.8
Column Total	253 45.8	146 26.4	154 27.8	553 100.0
Chi Square 30.204 $p < .001$				

It appeared that pragmatic barriers represented the majority of responses from general educators (59%) and administrators (48%). Special Educators appeared divided over pragmatic and affective barriers (35% and 38% respectively).

Descriptions of specific types of factors underlying each of these categories are provided in contingency tables which are found in Appendices 52A-54A. Description of percentages of responses for pragmatic, conceptual, and affective factors are presented. Because of the tables' uneven and empty cells, the results cannot be interpreted as significant.

Pragmatic factors (Appendix 52A). Ten pragmatic factors were coded from educators' responses. Pragmatic factors concern the microeconomics of managing an organization. These 10 factors are presented in order of percentages received. Two factors, (1) regulations and (2) time for planning, were indicated by 16-18% educators as the factors which would impede collaborative practices. Four additional factors received 10-12% of responses: (3) money; (4) constraints of the facility (e.g., separate programs, location of rooms, small, rural); (5) class size; and (6) organization of support (e.g., inadequate, uncoordinated). Smaller percentages, 3-5%, were received for: (7) administrative support; (8) inservice; (9) curriculum benchmarks; and (10) scheduling constraints.

Conceptual factors (Appendix 53A). Nine conceptual factors were coded from educators' responses. Conceptual factors pertain to two different knowledge bases between special and general education which educators felt would restrict REI practices in their school. These nine factors are presented in order of percentages received. The two most prominent

were: (1) Knowledge of special education, received 22.2% of total responses; and (2) knowledge of different types of students (e.g., mentally impaired, learning disabled) was cited by 18% of respondents. Other factors in order of percentages received were: (3) special education methods; (4) communication (e.g., misunderstanding between special and general educators; (5) status quo (e.g., special education should remain separate); (6) roles (e.g., roles of special educators were unknown; and (7) emotionally impaired students (e.g., lack of knowledge to teach). Two factors were stated by only 1-2% of educators: (8) ownership (i.e., special education students belong to special educators) and; (9) lack of vision (i.e., schools lack vision or a mission concerning the servicing of special learners).

Affective factors (Appendix 54A). Attitudes include three components, affect, cognition, and behavior. Affective factors, therefore, pertain to the affective nature of attitudes. Nine categories were coded from responses. The two most prominent were: (1) Negative attitudes (of general or special educators) were stated as barriers to collaborative efforts by 36.7% of respondents; and (2) willingness (of general or special educators) to teach special learners was expressed by 22.7% of respondents. Other responses, in order of percentages reported, were: (3) overload (i.e., too overwhelmed to handle anything new); (4) resentment (i.e., special/general educator's job was easier); (5) status (i.e., special/general educator wanted to preserve their status); (6) trust (i.e., lack of trust between special-general educator; (7) dumping (i.e., special/general educators were perceived to be dumping special needs students on each other); (8) elitism (i.e., special/general

educators thought themselves to "better" than the other; and (9) protectionism (i.e., educators protected special learners by isolating them).

Promoters of REI

Educators' responses concerning factors present in their school which would promote collaborative efforts between general and special education were analyzed. Eight discrete factors were cited. Appendix 55A displays these factors by percentages of responses by groups. Because of uneven and blank cells in the contingency table, the chi square test statistic cannot be interpreted as significant. However, results are presented as descriptive data.

Three factors were well-defined: (1) characteristics of staff (33%) such as caring, committed, and cooperative; (2) procedures in place (14.7%) such as mainstreaming, meetings between special and general educators regarding IEPs and special needs students' participation in lunchroom; and (3) expertise of special educators who were perceived as leaders and skilled educators (14.1%). Other factors named less often were: (4) administrative support (6.7%); (5) expert available (6.5%) such as Special Education Director and district personnel); (6) innovative efforts already underway (5.1%); (7) perceived benefits (2.3%) such as at-risk population not eligible for special services and (8) economic problems which will "force" restructuring (1.2%); that is, loss of funding base and consequent inability to employ support personnel.

It appeared that two of the three most prominent factors concerned the membership of the school organization (i.e., staff characteristics and special educators' expertise). In fact, the factor, staff characteristics, received one third of the responses. The factors, special educators' expertise (school membership) and procedures in place (school structure) were among the top three variables mentioned by education professionals as promoters of the REI in their schools. The next three factors in order of response concerned organization membership (i.e., administrators' support), system level support (i.e., expert available or commitment of someone in authority), and organization structure (i.e., innovative efforts or restructuring taking place). A small percentage of responses concerned environmental issues (i.e., perceived benefits and political and economic problems).

Results of Telephone Interview

Telephone interviews were conducted with 28 education professionals concerning the collaborative experiences that they have had with general and/or special educators Table 62. These educators included 17 special education teachers, 8 general educators, and 3 administrators. (Because respondents did not include their full name or position on the returned postcard, there was no way to control for the characteristics of the sample interview group.) Collaborative experiences were defined as on-going planning and discussion concerning special needs students.

Results of the interviews with general educators indicated that eight out of eight general educators reported no planned coordination with special educators. Five of the general educators appeared frustrated

with the lack of follow-through. They described specific students in their room who needed more help than the instruction that they could provide and stated that help either was infrequent or absent. Although all eight educators indicated that there was informal communication with special educators, the problem was the lack of follow-through. One educator did not view the lack of contact negatively. She said it was up to her to meet the challenge. At the close of the interview, the topic of the Regular Education Initiative was discussed and interviewees were asked to rate along a continuum of not at all (1) to definitely (5) how they felt toward the initiative. It appeared surprising that in light of their reported experiences, the mean acceptance of the REI was 2.48.

Thirteen of the seventeen special educators did not report collaborative relationships with general educators. Examples of reasons for lack of contact with general educators were: (1) teaching in departmentalized or separate settings; (2) no planning time; (3) previous recommendations were not followed; and (4) no knowledge of other types of collaboration such as co-teaching. Four of the special educators reported collaborative activities, however. These activities were co-teaching, organizing a directed study hall for all children with learning problems, and coordinating curricular activities between special and general education. Special educators' mean agreement with the REI was 2.82.

The three administrators' reported varied experiences. One administrator stated he was initiating collaborative activities with special and general education. All third grade students, including students with learning problems, were organized into one reading program

which was taught by general and special educators. The second administrator said that general and special educators communicated informally at IEPC meetings, but there was no organized time for planning. The third administrator worked in a district office. She said that she wanted to see REI efforts succeed, but practically, there was little money in the district. The administrator stated that she wanted special education support to go to special learners who really needed the help rather than share with general education. Administrators' mean agreement was 3.34.

TABLE 62

**TELEPHONE INTERVIEWS WITH GENERAL EDUCATORS, SPECIAL EDUCATORS, AND
ADMINISTRATORS CONCERNING GENERAL-SPECIAL EDUCATION COLLABORATION**

Group	N	<u>Collaboration Present</u>		REI <u>M</u>
		Yes	No	
General Educators	8	--	8	2.48
Special Educators	17	4	13	2.82
Administrators	3	1	--	3.34
Total	28	5	21	

Summary

Results of data in response to the five research questions are presented by individual questions.

Research Question 1: Do education professionals agree with the goals of the REI?

Findings are presented in three stages: (1) mean agreement of 14 goals by groups; (2) mean agreement with items "clustered" together at the classroom, building, and system levels by groups; and (3) groups' responses to individual goal items. Agreement was measured by using a 5-point Likert scale ranging from strongly agree (1) to strongly disagree (5).

Mean agreement with REI goals. Mean agreement with the 14 goals of the REI in ascending levels of agreement were: (1) general educators, 2.50; (2) special educators, 2.24; and (3) administrators, 1.99. These groups were significantly different among all three comparisons at .05 level.

Mean agreement with clusters of goal items. Mean agreement with clusters of goals (items grouped by their common connection) by groups was measured at three levels: (a) classroom, (b) building, and (c) system levels.

First, mean agreement with classroom level cluster of items, in ascending levels of agreement, was: (1) general educators, 2.67; (2) special educators, 2.28; and (3) administrators, 2.10. Significant differences among all three comparisons was found at the .05 level.

Second, mean agreement with building level cluster of items also mirrored the same order of agreement as above: (1) general educators, 2.41; (2) special educators, 2.26; and (3) administrators, 1.90. Significant differences occurred between general and special educators at the .05 level.

Third, mean agreement with system level cluster of items by groups indicated that administrators continue to be the group which is most in agreement. The groups' mean agreement was: (1) general educators, 2.22; (2) special educators, 2.101; and (3) administrators, 1.91. Significant differences were reported between general and special educators at the .05 level.

Agreement with individual goal items. There were seven goal items at the classroom level, four items at the building level, and three items at the system level. For those items that findings indicated more than 70% agreement by all three groups, the groups were reported as being in "general agreement." For those items which there was not general agreement, specific findings for each group were reported.

All seven classroom goals items tested for significant differences at the .001 level. Seventy percent or more agreement among all three groups was reported for the following classroom goal items: (1) Provide additional assistance without labeling special learners as impaired; (2) spend more time altering instructional practices to teach special learners than assessing them; and (3) reduce social stigma by providing increased opportunity for social interactions in general classrooms.

Four classroom goal items showed greater disparity among the groups. The first two goals concerned providing instructional services to special students in the general classroom. The first item, to integrate special learners for most, if not all, of the time in general education, received 31.5% agreement by general educators, 52.7% agreement by special educators, and 63.8% by administrators; collectively, 50.7% of respondents agreed and 40.1% disagreed. The second item concerned the goal to increase instructional time of special learners in general classes; that is, prevent the loss of time as special learners transition from separate programs to the general classroom. This classroom level goal received 30.9 % agreement by general educators, 43.6% by special educators, and 56.3% agreement by administrators. Overall, 44.4% of respondents agreed with the goal while 20.2% were neutral and 35.4% disagreed.

The next two goals which created wide ranges of agreement among groups pertained to instructional methods. The goal to use instructional methods effective for general education with special learners received the following levels of agreement: Half of general educators (49.1%) and special educators (48.3%) agreed with this goal. In contrast, 71.4% of administrators expressed agreement. The second related goal was to use instructional methods effective for special education with special learners; only 57.7% of general educators agreed with this goal compared to 86.4% of special educators and 82.4% of administrators.

Four items measured group agreement to building level goals. Two items received more than 70% agreement from all three groups: (1) coordinate curricular activities between general and special education

classes; and (2) increase collaborative teaching arrangements among general and special educators. The third item, empower principals to control all programs and resources at the building level, did not reflect general agreement among all three groups. General educators responded with 30.7% agreement, special educators, 23.9%, and administrators, 68.8% agreement. These three building level items were significant at the .001 level. The fourth item, negotiate new roles among staff, did not test for significant differences. Descriptively, 65% of general educators agreed with this goal as compared to 70% of special educators and administrators.

Three items were included at the system level. The first two items tested for significant differences at the .001 level: (1) "pool instructional resources into one unified delivery system" received 51.5% agreement from general educators and 66.8% from administrators; special educators responded with less agreement, 45.3%; and (2) 80% or more respondents in each group agreed in their response to increase teachers' ability to instruct diverse learners. The third system level goal which did not test for significance was "develop administrative policies that provide incentives." Descriptively, the contingency table revealed that 70% or more of respondents agreed with this goal.

Demographic and experiential characteristics. Seven demographic and experiential characteristics were tested to determine their significance and interaction with the main effect of group agreement. These seven variables were: (1) grade level; (2) general education experience; (3) special education experience; (4) inservice training; (5) school readiness; (6) participation (in collaborative efforts); and (7)

satisfaction (with collaborative efforts). Role of special educator (e.g., consultant, self-contained teacher) was also examined to determine its impact on agreement with goals. The results of these findings indicated that the following main effects showed significant differences: inservices, satisfaction, and role of special educator. There was also a significant interaction between general education experience and group agreement.

Results of Telephone Interviews. Telephone interviews were conducted with 28 respondents concerning the collaborative experiences that they have had with general and/or special educators. These experiences were defined as on-going planning and discussion concerning special needs students. Eight out of the eight general education teachers reported no planned coordination with special educators. Interviews centered on examples of special needs students (e.g., blind, emotionally impaired) who received little or no follow-through in their classrooms. Their mean agreement with the REI was 2.82 .

Special educators also reported little formal contact with general educators. Only four of the seventeen special educators reported that they did engage in collaborative efforts. These activities included co-teaching, a directed study hall with special needs children included, and study skills training to help special students with general education curriculum. The other 13 special educators stated that general educators either resisted their help or did not follow through with their suggestions. These 13 educators also indicated that there was no time to collaborate as they had no planning period. Their mean agreement with the REI was 2.48.

Three administrators were also contacted. One administrator stated that general and special educators collaborated informally, but there was no formal structure. This communication occurred at IEPC meetings. The other administrator said that he had begun "cooperative reading" among all third grade students; special and general educators were involved. The third administrator stated that cutbacks in funding had affected the number of support personnel; special educators were servicing only those students who were placed in programs. Personnel were unavailable to consult or support general educators. Their mean agreement with the REI was 3.34.

Research Question 2: Do education professionals accept the procedures to implement the goals of the REI?

Findings are presented in three stages: (1) mean acceptance of 22 procedures by groups; (2) mean acceptance of items "clustered" together at the classroom, building, and system levels by groups; and (3) groups' responses to individual goal items. Acceptance was measured by using a 5-point Likert scale ranging from very acceptable (1) to totally unacceptable (5).

Mean acceptance of REI procedures. Mean acceptance of the 22 procedures in ascending levels of acceptance was: (1) general educators, 2.18; (2) special educators, 1.99; and (3) administrators, 1.89. These groups were significantly different among all three comparisons at the .05 level.

Mean acceptance of clusters of procedure items. Mean acceptance with clusters of procedures (items grouped by their common connection) by

groups was measured at three levels: (a) classroom, (b) building, and (c) system levels.

First, mean acceptance of classroom level cluster of items, in ascending levels of acceptance, was: (1) general educators, 2.19; (2) special educators, 1.95; and (3) administrators, 1.93. Significant differences were found between general educators and administrators and general educators and special educators at the .05 level.

Second, mean acceptance of building level cluster of items also mirrored the same order of ascending acceptance as above: (1) general educators, 2.02; (2) special educators, 1.75; and (3) administrators, 1.69. Significant differences occurred between general and special educators and general educators and administrators at .05 level.

Third, mean acceptance of system level cluster of items by groups indicated that administrators continue to be the group that expresses the greatest acceptance of procedures. The groups' mean acceptance in ascending order was: (1) special educators, 2.85; (2) general educators, 2.60; and (3) administrators, 2.13. Significant differences among all three groups were observed in the system cluster at the .05 level.

Acceptance of individual procedure items. There were 15 procedure items at the classroom level, 5 items at the building level, and 2 items at the system level. For those items that findings indicated more than 70% acceptance by all three groups, the groups were reported as expressing "general acceptance." For those items which there was not general acceptance among groups, specific findings for each group were reported.

Ten classroom level procedure items were generally accepted (70% acceptance and greater) by all three groups. Five items which tested significantly at the .05 level were: (1) use curriculum-based assessment; (2) teach social skills; (3) reallocate instructional time on the basis of student needs; (4) use behavior management strategies; and (5) teach cognitive skill strategies. The next five procedures did not achieve statistical significance: (6) use computer-assisted instruction; (7) use cooperative learning; (8) use peer tutoring; (9) increase rates of teaching behaviors; and (10) group students heterogeneously.

Five classroom procedure items received more cautious responses from groups. The first of these procedures was to include braille and sign language within the general classroom. Percentage of general educators reporting neutral acceptance was 24.2%; 38.5% of the same group reported that the procedure was unacceptable. Percentage of neutral responses from administrators was 27.0%; 26.5% responded that the procedure was unacceptable. In contrast, special educators indicated a 26.9% neutral response and 16.1% found it unacceptable.

The second classroom procedure which was cautiously viewed is the practice to make three instructional modifications prior to referring. Forty-seven percent of general educators found the procedure acceptable whereas 64% of administrators and 66% of special educators found it acceptable.

The third classroom procedure that did not receive general agreement from all three groups was the procedure to modify instructional practices for special learners using the same general education curriculum. Percentage of respondents in each group who reported their acceptance

were: general educators, 63.6%; administrators, 67.7% and special educators, 69.0%.

The fourth classroom procedure to which groups responded with less than general agreement was the procedure to use student-paced activities in general classrooms. Percentage of education professionals in each group who found the procedure acceptable was: general educators, 57.7%; special educators, 62.4% and; administrators, 68.7%.

The fifth classroom procedure which received less than general acceptance was the technique of mastery learning. The lowest level of acceptance was reported by general educators (54.9%) followed in order by special educators (59.3%) and administrators (65.1%).

Five of the four building level procedure items were found significant. Of those four practices found to be significant, three were generally accepted by all groups. These three practices were: (1) attend inservices; (2) co-teach; and (3) participate in building-based support teams. The fourth item, peer coaching, was found acceptable by special educators (78.9%) and administrators (87.2%), but a smaller percentage of general educators indicated their acceptance (65.6%). The fifth building level procedure that was not reported statistically significant was consulting. Descriptively, 90% of all groups agreed with this procedure.

There were two system level procedure items that were reported significant. The system level procedure, fund services by block entitlement, did not receive general acceptance from special educators and general educators. Only 30.6% of general educators and 43.6% of general educators found the procedure acceptable. On the other hand, 64.3% of administrators found the procedure acceptable. The second

procedure, provide waivers for performance, received 50% acceptance by general and special educators. Administrators found the practice more acceptable (71.9%).

Demographic and experiential characteristics. Two experiential characteristics significantly influenced groups' mean acceptance of REI procedures. These characteristics were school readiness and personal satisfaction with collaborative experiences. The interaction of general education experience by group mean acceptance was also found to be a significant factor in groups' acceptance of REI procedures.

Research Question 3: What levels of assistance are needed for REI procedures to be implemented?

Two levels of technical assistance, inservice and consultation, were requested by all groups as their first two choices. These levels accounted for 61% of all groups' requests for assistance. The third choice by all groups was in-class help; this level was requested by 18.3% of all respondents. Those classroom procedures which respondents felt did not apply (i.e., did not like and did not want help of any kind) accounted for 8.3% of total responses. Percentage of total responses that indicated no help was required was 12.4%.

Research Question 4: Is there a relationship between agreement with the goals of REI and acceptance of procedures?

Findings to this question indicate that there is a positive significant ($p < .001$) relationship between the goals and procedures of the REI for all three groups. Reported correlation coefficients were:

(1) general educators, .60; (2) special educators, .58; and (3) administrators, .63.

Research Question 5: What factors will inhibit and promote agreement with the goals of the REI and acceptance of procedures?

Barriers were categorized into three areas: (1) pragmatic, (2) conceptual, and (3) affective. Pragmatic issues (e.g., time for planning, regulations, and money) were seen as barriers to the implementation of REI proposals by 58.6% of general educators, 48.1% of administrators, and 35.0% of special educators. Special educators indicated that affective issues (e.g., attitudes and willingness of teachers to instruct special learners) were a major factor against implementation of REI practices in 38.2% of their responses. Fewer general educators (21.4%) and administrators (21.0%) named affective factors. Conceptual factors (e.g., different knowledge base for general and special education) were reported by 20.0% of general educators, 26.8% of administrators, and 30.9% of administrators.

When considering those factors which promote REI goals in their schools, education professionals cited three prominent features. These factors were: (1) staff characteristics such as caring and committed (32.9%); (2) expertise of special educators (14.1%); and (3) procedures already in place such as mainstreaming and IEPC meetings (14.6%). Two of these positive factors pertain to membership of the organization and one pertains to structuring of activities.

Chapter 5 will present a discussion of results, conclusions, and recommendations to relevant audiences.

CHAPTER V

DISCUSSION, CONCLUSIONS, AND RECOMMENDATIONS

This chapter will present the final culmination of the research study in three main sections: (A) discussion, (B) conclusions, and (C) recommendations.

A. Discussion

Introduction

Discussion of the study's results will be conducted by examining each of the five research questions. However, it is important to note certain limitations. Four limitations to the study will be discussed: (a) response rate from sample group of general educators; (b) nonresponse from large urban area, Detroit; (c) statistical interpretation of a large sample; and (d) survey as a nonrepresentational measure.

The first limitation relates to the low response rate from general educators. The total response rate from general educators was 42%. This low response rate creates concern that this sample group is not representative of the total population. If the investigator were to enter the school system and sample attitudes of all general educators, there is the possibility that the general educators' responses reported in this study may not be representative. One possible explanation is that some general educators may not have contact with special education (e.g., involved with mainstreaming) and may know little about the issues involved with teaching children with learning problems. Because they did not have the experience upon which to base an answer, these general

educators chose not to answer. Some of the partially completed surveys contained questions which give an indication of this fact. (These questionnaires were not analyzed.)

The second limitation pertains to the nonresponse from a large urban city. The difficulty of distributing surveys in the Detroit Public Schools posed a problem. As a result, this particular group of education professionals from a large urban city was under-represented. Other large urban areas (e.g., Flint, Grand Rapids, Saginaw) were represented, however.

The third limitation concerns the large sample size in this study. A large sample size requires one to recognize that as the sample size becomes larger, there is a greater potential for detecting statistically significant differences. However, statistically significant differences may or may not be practically significant. Thus, when interpreting the results, one must consider the impact of a large sample size.

The fourth limiting factor is the use of a survey as a nonrepresentational measure. How people cognitively interpret their behavior (i.e., theory-of-action) may not be the same as their actual behavior (i.e., theory-in-action). That is, what education professionals say may be different from what they do. The design of this study did not allow for validation of responses with an objective measure such as observing educators' behaviors in their respective schools. Telephone interviews were conducted with a small random sample of respondents, but this procedure is also a self-report measure. Because of this limitation, the general positive responses to the goals and practices of the REI might be questioned. The degree of social desirability of a

certain response may have influenced how education professionals answered a question.

The above limitations indicate that the results of this study are statistically limited to the population parameter of the 605 education professionals who chose to respond. However, the results may be used as indicators of belief systems of a large sample of educators in Michigan. Through "taking the pulse" of 605 respondents, a beginning understanding of those variables which may affect the implementation of REI proposals is achieved.

The researcher chose to apply a criterion to those 14 goals and 22 procedures which were generally agreed upon and accepted by general educators, administrators, and special educators. If all groups expressed 70% or more agreement with a goal or acceptance of a procedure, then all groups were in "general agreement."

Research Question 1: Do education professionals agree with the goals of the REI?

The level of mean agreement of all three groups (i.e., general educators, special educators, and administrators) indicated that education professionals do agree with the goals of the REI (scale ranged from strongly agree (1) to strongly disagree (5)). This result points out that the concerns of several opponents may be too cautious (Davis, 1989; McKinney & Hocutt, 1988; Keogh, 1988). Education professionals in this study were not adverse to the overall goals that advocates propose. There were differences, however, among groups which researchers and professionals have signaled (Kauffman, Gerber, & Semmel, 1988; Lieberman,

1985; Mesinger, 1985; Will, 1986). Mean agreement among all three groups was significantly different. Administrators expressed the greatest agreement followed by special educators and then general educators. The finding that general educators ranked third in agreement corresponds with the position of several opponents to the REI (Lieberman, 1985; Mesinger, 1985). These researchers have pointed out that the Regular Education Initiative has originated from professionals in the field of special education and consequently, general educators' beliefs about the issues may not be the same. This study has demonstrated that the beliefs of general educators are significantly different from special educators and administrators toward the overall goals of the REI.

Mean agreement with goals "clustered" in three levels, classroom, building, and system, indicated agreement among all three groups. The order of agreement continued to be the same for the three clusters: Administrators ranked first in their agreement followed by special educators and general educators.

Classroom Level Goals

All three groups differed significantly from each other in their agreement with classroom level goals. Two classroom level goals concern the setting where most instruction for special learners is to take place - the general classroom. The goal to instruct special learners in the general classroom is the overarching goal of the REI, yet general educators indicated their disagreement (55.6%). The second goal, to increase instructional time by keeping special needs learners in general classrooms was rejected by 50.1% of general educators. These results

v
v
v
I
a
e
n
s
c
s
h
ap
to
ex
ed
ne
re
(2
cat
off
bel
pos
they

would seem to support studies which have indicated that general educators believe that special education class placement is more appropriate for students with learning problems (Barngrover, 1975; Fiedman & Altman, 1985).

It would seem that the two goals are similar, yet a discrepancy was noted as special educators and administrators shifted in their level of agreement. Administrators responded with 63.8% agreement, and special educators expressed 52.7% agreement with the goal to integrate special needs students in the classroom for most of the time. Yet, agreement shifted concerning the goal to increase instructional time in general classrooms by reducing transitional time and disruptions caused when special learners leave the classroom to attend separate programs. Agreement of administrators was 56.3% and special educators, 43.6%. It appears that both groups were somewhat ambivalent in their attitude toward the setting where instruction should take place. A possible explanation might be that both groups, administrators and special educators, view the time students transition to special classes as a necessary regularity that must occur if "special" instruction is to be received. In considering the neutral responses of special educators (22.6%) and administrators (18.1%), it appears that both groups are cautious about "giving up" separate programs for special learners. Opponents to the REI have also indicated that many special educators believe in the efficacy of separate programs and may not accept the possible "second order status" (Keogh, 1988; McKinney & Hocutt, 1988; Reynolds & Wang, 1983).

Inconsistent responses of administrators and special educators to goals relating to the instruction of special learners in the general classroom can be interpreted by the theory of cognitive dissonance (Festinger, 1957). When two cognitive elements exist in a dissonant relation, there is a need to reduce the tension. That is, it may be all right to integrate special needs learners in general classrooms for most of the day, but time in special classes should not be eliminated. In order to reduce the tension, theorists argue, individuals will strive for cognitive consistency, which, therefore, acts as a stimulus to motivate people to change their beliefs and bring any "rebellious" premise into line. Dissonance can be reduced by revoking a decision, lowering the importance of the decision, or adding new cognitive elements to change the ratio of favorable to unfavorable elements. It would seem imperative, therefore, for REI advocates to proceed in such a manner as to reduce the cognitive dissonance of many education professionals who are undecided or ambivalent toward the goals of the REI. Once trial efforts are begun, general educators, special educators, and administrators should be supported in their behaviors through encouragement and positive reinforcement.

All groups differed as to which methods were effective for special learners. Percentages of agreement to the goal to use special education methods for special learners were: general educators (57.7%); administrators (82.4%), and special educators (86.4%). This result supports researchers who state that general educators are opposed to practices which are viewed to be the realm of special education (Gans, 1985; Rosenfield, 1985) and for which they feel untrained (Flynnn, Gack,

& Sundean, 1978; Johnson & Cartwright, 1979; Stephens & Braun, 1980). Administrators and special educators, however, indicated their belief in the efficacy of special education practices in the general classroom. Researchers have pointed out that consultation by special educators is hampered because special educators fail to understand that general educators may not know or accept strategies for which they have been trained (Friend, 1984; Idol, 1986)

The goal to use effective general education methods for special learners also received different levels of agreement: general educators (49.1%); administrators (71.4%); and special educators (48.3%). It appeared that all groups were uncertain as to whether effective "general education" practices would be appropriate for special learners. Other researchers have indicated their doubts about "effective practices" being appropriate to the needs of special learners (Kauffman, Gerber, & Semmel; McKinney & Hocutt, 1988). The result that special educators were uncertain about effective general education practices supports research that indicates special and general educators have concerns about each other's skills (Aloia & Aloia, 1982; Ringlaben & Price, 1981; Furey & Strauch, 1983). Such dissonance is a stumbling block to effective communication.

Although professionals have written that there are not two types of methods, one effective for special education and one for general education (Stainback & Stainback, 1984) or that few qualitative differences in practices can be found between general and special education classrooms (Lipsky & Gartner, 1989), all groups believed that there were differences in methods. It appeared that the education

professionals in this study have not accepted as part of their belief system the literature which informs educators that effective practices can benefit all students (Bickel & Bickel, 1986; Bogdan, 1987; Reynolds & Lakin, 1987).

General educators responded with approximately 68% agreement to three other classroom goals: (a) provide assistance without labeling; (b) spend more time altering instructional practices than assessing ; and (c) reduce social stigma by providing increased opportunity for social interaction. This reticence might be explained by general educators' concern that support will not be provided to help them accommodate special learners' needs in the general classroom. Moreover, special educators were not unanimous in their agreement with the goals to provide assistance to special learners in the general classroom without labeling them (74.1% agreement) and to spend more time altering practices than assessing students (77.8% agreement). Some special educators might be concerned that needed services for children with learning problems will be denied under these conditions. In contrast, administrators responded with over 80% agreement to the above three goals. A possible interpretation might be that administrators feel that regulations hamper instructional programs; that is, time spent in meetings and assessment might be more profitably spent by working with programs in the classroom.

Building Level Goals

Special and general educators differed significantly in their attitudes toward items pertaining to building level goals. The goal to empower principals to control all programs was received by general

educators with 30.7% agreement and 26.4% undecided whereas special educators reported 23.9% agreement and 27.2% undecided. Both groups may be concerned about the principal's ability to facilitate a unified instructional delivery system. This result again supports researchers who have explored different perceptions of general and special educators and administrators toward one another's competence (Aiello, 1979; Gear & Gable, 1979; Graham et al., 1980; Ringlaben & Waller, 1981). Often these doubts are confirmed (Burrello & Sage, 1979; Carpenter, 1980; Iriarte, 1980). Although the building principal's role of leader and coordinator of programs has been cited as essential to an effective school (Edmonds, 1979; Will, 1986), it appears that special and general educators had a different belief. Thus, the result that special and general educators appear wary of principal empowerment over all programs may lend support to the organization of a building-based instructional team. In that way, instructional decisions could be made collaboratively by staff and administration.

Administrators, on the other hand, appeared more confident and positive toward the goal to control all programs with 68.8% in agreement. This result confirms professionals who state that administrators would welcome the flexibility inherent in REI proposals (McKinney & Hocutt, 1988) and disconfirms the concerns of others who state that principals may not want the responsibility of coordinating all programs (Davis, 1989). It appears that different beliefs between special and general educators and administrators toward instructional leadership may lead to dissonance unless new patterns of instructional governance are explored.

Responses to two other building level goals received general agreement among all groups: to increase collaborative teaching arrangements and to coordinate curricular activities between general and special education. Special educators and administrators indicated almost total agreement with the goal to increase collaborative teaching arrangements (90.1% and 95.0% respectively). General educators, however, were more cautious (77.9% agreement). For recommended "cooperative professional development" (Glatthorn, 1987) to occur, it would appear that all groups should be similar in their agreement. There was also less agreement among general educators with the goal to coordinate curricular activities: general educators (71.8%); special educators (86.0%); and administrators (90.5%).

When examining the responses of special educators and administrators to the goal to negotiate new roles among staff for sharing responsibility for special learners, there appeared to be a discrepancy. Special educators and administrators expressed 70% agreement whereas their agreement was approximately 90% with the goal to increase collaborative teaching arrangements. A possible explanation might be that special educators and administrators are concerned about giving up ownership of roles learned through previous training and now certified by current regulations. Collaboration might be acceptable as long as role of "special" educator is not substituted for co-teacher or administrator is not changed to co-facilitator.

General educators also were hesitant about giving up known roles. Their agreement with the goal to negotiate new roles was 66% which is similar to their 72% agreement with the goal to increase collaborative

teaching arrangements. It appears that general educators are both hesitant about change in teaching arrangements and role. This hesitancy is reflected in the statement of a general educator: "If I wanted to be a special educator, I would have become one."

Thus, it appears that collaboration must be operationally defined. The concept may be acceptable, but the roles played by all groups are perceived as questionable and unclear. Will status be lost? Will more work be required? Will lack of knowledge about content or presentation be revealed? All these uncertainties should be confronted as roles in a restructured system are delineated.

If schools were rational, technical systems where standardized regulations controlled all members' behavior and a tightly coupled system reduced discretionary power, then there would be no need to discuss differences among groups in their beliefs toward collaboration and coordination. However, schools are socially constructed, subjective enactments of individual behavior (Astley & Van de Ven, 1983), and understanding of this issue would be important to REI efforts.

Theorists who study group dynamics have stated that social influences such as reference groups affect behavior. Every reference group has an implicit or explicit set of beliefs and any member who strays from these norms risks social disapproval. Studies have shown that individuals select their particular reference groups because they share the same values and beliefs (Bem, 1970; Gans, 1986; Newcomb, 1967). What happens when beliefs of reference groups conflict? It would appear that before collaborative activities can begin between general educators

and special educators that ways of accommodating different value systems must be designed.

System Level Goals

Special and general educators differed significantly in their beliefs toward system level goals. The goal to pool instructional resources into one unified delivery system was received with more caution by special educators (45.3% agreement) than general educators (51.5%) and administrators (66.8%). This result confirms opponents' arguments that advocates of special needs students perceive the REI as endangering hard-won rights if such entitlements as separate funding are lost and resources are "handed over" to general education (Davis, 1989; Heller & Shilit, 1987; Hentz, 1988). Administrators' higher level of agreement is another example of their preference for goals which would allow them greater flexibility in managing schools' resources (McKinney & Hocutt, 1988).

All groups were in general agreement with the goal to increase teachers' ability to instruct diverse learners. This goal was perhaps perceived as non-threatening to rights of special learners.

Demographic and Experiential Characteristics

There were three main experiential variables which created differences in groups' mean agreement with the goals of REI. The role of the special educator is important to agreement with REI goals. Those special educators who work in centers were significantly more positive in their level of agreement than teachers who work in resource or

self-contained rooms. Special educators' isolation from working directly within the general education system may affect their belief that separation is detrimental to "normalization" of instructional experiences.

Such experiences as inservices, workshops, and courses on teaching diverse learners affected the level of agreement among respondents. Those respondents who had taken 16 or more types of training experiences were more favorable toward the REI than those who had 0-5 such experiences. This result supports researchers who state that training is essential to support positive attitudes among teachers toward accommodating special learners in the general classroom (Larrivee, 1981; Yaffe, 1979). Since 79.8% of general educators and 72.9% of administrators in this study have taken 0-5 courses, it would appear important to consider the influence of training experiences upon attitudes toward the goals of REI. It is interesting to note, however, that in light of research which supports the critical importance of skill training to work with special needs students (Flynn, Gack, & Sundean, 1978; Johnson & Cartwright, 1979; Middleton, Morsink, & Cohen, 1979; Salend & Johns, 1983; Stephens & Braun, 1978) and the association of positive attitudes toward teaching special learners and skill training (Alexander & Strain, 1978; Flynn, Gack, & Sundean, 1978; Gickling & Theobald, 1975), so few general educators and administrators report that they have taken part in training experiences. Although the main effect, participation, was not significant, it is interesting to note that for those educators who had participated in collaborative efforts, level of satisfaction significantly influenced their mean agreement with REI

goals. That is, those respondents who were dissatisfied responded with significant less agreement toward REI goals than those who were satisfied. This result supports researchers who state that the quality of interaction or communication may be more important than the behavior, "collaboration," itself (Ammer, 1984; Gans, 1985; Lilly & Givens- Ogle, 1981; Salend, 1984).

The significant interaction between general education experience and group agreement with REI goals revealed that administrators who had 6-10 years of general education experience were significantly more agreeable to REI goals than special and general educators with the same level of experience. Since strong administrative support has been identified as an important variable for integrative programming (Schubert & Glick, 1981; Brooks, 1979; Budoff, 1972; Dodd, 1980; Larrivee & Cook, 1979; Pugach, 1982; Sivage, 1980; Stephens & Braun, 1980), it would be important to question why administrators with less general education experience would be more positive than counterparts with increased experience. One possible explanation might be that administrators with 10 years of experience had entered the field at the same time PL 94-142 was enacted. They may be more aware of the law's intent for greater inclusion of special learners in general classrooms.

The fact that other demographic and experiential variables did not significantly influence groups' agreement with REI goals would signal positive implications for REI proponents. For example, the result that number of years of special education experience did not affect group differences in their acceptance of REI goals indicated that the charge by

REI proponents (Mesinger, 1985; Lieberman, 1985) that REI is a special education initiative supported by special educators can be questioned.

The experiential variable, participation, did not affect groups' mean agreement with REI goals. That is, whether or not respondents had engaged in cooperative activities with general-special education, their level of agreement was not affected. This result may indicate that although some educators have not participated, they are open to the prospect. It is interesting to note that fewer special educators than general educators reported that they had participated in collaborative programming: 46.9% of special educators, 53.4% of general educators, and 65.3% of administrators. Thus, in light of all groups' positive agreement to the overall goals of the REI, it is surprising that such small percentages of special and general report that they have taken part in these activities. Perhaps this result reflects the statement made by a general educator during the telephone interview, "What we have now isn't the solution; maybe [REI] will be better." Administrators' reported greater participation; however, their comments on the questionnaire indicated that they viewed their participation in more traditional ways; that is, IEPC meetings were given as examples of special- general education collaboration.

Level of school position did not significantly impact upon groups' mean agreement with REI goals. This result does not support researchers who state that secondary level educators are less positive toward integrative programming (i.e., mainstreaming) than elementary teachers (Powers, 1979; Young & Shepherd, 1983). Respondents from grades K-12 were positive in their overall mean agreement with REI goals.

Another variable, extent of respondents' school readiness for interactive programming between special and general education, did not affect groups' mean agreement toward REI goals. Greater percentage of general educators (41.7%) and administrators (44.2%) reported that their schools were involved with collaborative efforts (e.g., co-teaching, teacher assistance teams) than special educators (28.8%). This result indicates that those respondents from schools which have done no planning or at the awareness stage are as receptive toward REI goals as respondents on the other end of the continuum (implementation stage). Because of groups' general agreement to overall REI goals, it appears that there is general receptivity toward REI goals regardless of stages of readiness.

Research Question 2: Do education professionals accept the procedures to implement the goals of the REI?

The level of mean acceptance of all three groups (i.e., general educators, special educators, and administrators) indicated that educational professionals agreed with the procedures of the REI. [Scale ranged from very acceptable (1) to totally unacceptable (5)]. The same ascending level of mean agreement with goals was also observed with groups' mean acceptance of procedures: general educators; special educators; and administrators. Advocates of the REI may interpret this finding as positive. Although the procedures may not have been part of the respondents' repertoire or practiced in their building, educators were still accepting of them. There were significant differences among all three groups; this finding again reflected the same result as found

with mean acceptance of goals. Different levels of acceptance among groups would indicate that training experiences cannot be designed with the same incentives and motivational strategies that would be applicable to general and special educators. Administrators, too, cannot assume that staff share the same enthusiasm for using or learning certain procedures.

Interpretation of positive acceptance among groups does not imply that education professionals will use these procedures. Theorists point out, however, that individuals strive to maintain consistency among the cognitive, affective, and behavioral components of attitudes (Rokeach, 1968). Thus, if educators accept the procedures, they will be more likely to use them (Gutkin & Ajchebaum, 1984).

The result that all groups expressed acceptance of overall procedures has positive implications for REI advocates. Guskey (1986) argued that before attitudes change, behaviors must change. Theorists state that a person's new behavior provides a source from which a new set of inferences are drawn concerning how one feels and believes (Bem, 1970; Sherif, 1965). If special needs students can be accommodated within the general classroom through certain practices, then educators' attitudes toward instructing special needs students will become more favorable. Opponents caution that not only must classroom procedures change to accommodate special learners, but policy makers must simultaneously employ system level procedures (Kauffman, Gerber, & Semmel, 1988). Without simultaneous use of procedures at the classroom, building, and system levels, the REI will become a fragmented venture.

When the 22 procedures were clustered at classroom, building, and system levels, the same order of acceptance was again repeated as reported in the goal clusters. In ascending order of agreement were general educators, special educators and administrators. Significant differences were found between general educators and administrators and general educators and special educators in the classroom and building levels. Possible reasons for these differences are discussed at each level.

Classroom Level Procedures

Two reasons may provide insight as to why there were significant differences in beliefs between general and special educators toward classroom procedures. First, general educators understand the dynamics and demands of a classroom better than special educators who teach in small, individualized settings (Pugach & Raths, 1987). Second, the interventions are generally those that emanate from special education; that is, having an individual orientation based upon behavioral technology (Idol, 1986). The interventions assume a different knowledge base which general educators do not have due to their training (Abidin, 1975; Rosenfield, 1985). Thus, general educators' lower level of acceptance should not be explained by "negative attitudes." Consideration should be given to pragmatic issues which must be confronted when introducing recommended practices.

In light of the above interpretation for differences between general *and* special educators' beliefs, it may not be surprising to learn that *general* educators reported 37.3% agreement with the procedure to include

the teaching of sign language and braille in the general classroom. It appears that these methods are viewed as the realm of special education and thus should be taught in separate settings (Rosenfield, 1985). Special educators expressed 57.0% agreement and administrators, 46.4% agreement; it appears that they, too, are concerned about the pragmatics of such a practice.

Three other procedures were not well-received by groups. The result that 46.6% of general educators agreed with the procedure to make at least three instructional modifications for special learners prior to referring would indicate that they did not favor the proceduralism of prereferral practices (e.g., Graden, Casey, & Christenson, 1985). Possibly general educators thought their avenue to direct support for special learners was being subverted, or perhaps the practice was punitively perceived. The procedure to use mastery learning was accepted by 54.9% of general educators and 59.3% of special educators. Similarly, the procedure to individualize instruction was accepted by 57.7% of general educators and 67.7% of special educators. A possible interpretation might be that mastery learning and individualized instruction were associated with the pragmatics of more work and time in teacher preparation. Other more acceptable procedures such as peer tutoring and cooperative learning may have been associated with student involvement in conducting the procedure.

Building Level Procedures

Although building level practices were generally accepted by groups, there were still significant differences between general and special

educators and administrators and general educators. This result is important to the implementation of these procedures (i.e., co-teaching, participation in building-level instructional teams) because they are based on "renegotiation of roles" (Wang, Reynolds, & Walberg, 1986). That is, new roles of peer consultants, instructional leaders, and co-facilitators would be assumed by all staff. If belief systems are different regarding building level procedures, it is problematic whether necessary role changes are able to occur among all personnel.

Peer coaching was accepted by 65.6% of general educators whereas special educators reported 78.9% agreement and administrators, 87.2% agreement. It appeared that general educators were not as accepting of "collegial learning" as more traditional staff development activities such as inservices. Due to the traditional isolation of general education teachers in a bureaucratic structure (Skirtic, 1987), reciprocal coupling or sharing of ideas has not been a norm.

A discrepancy was noted among respondents in their agreement with the goal to negotiate new roles and the procedures to use co-teaching, consultation, and building-based support teams. Whereas education professionals were in general agreement with the procedures, they were not in general agreement with the goal to negotiate new roles. However, these procedures will require new roles as general educators learn new interventions from their peers, special educators join general educators in large class settings, and administrators share instructional planning with staff. A possible interpretation might be that the concept of new building-level arrangements was acceptable, but when education

professionals felt that former roles had to be relinquished, disagreement occurred. An implication of this result might be that implementation of building-level procedures should occur incrementally with those educators who are willing to assume new roles. Documentation of how roles of co-teacher, consultant, and support team member were learned and performed will aid extended planning for other educators. Assumption of new roles cannot be left to chance; training must ensue (Leggett & Hoyle, 1987; Sharon & Sharon, 1987).

System Level Procedures

Two system level procedures were not well-accepted by general educators and special educators: fund services by block entitlement (i.e., eliminate separate program funding) and waive special program regulations while experimental REI trials are being conducted. Special educators' percentages of acceptance of these two system level procedures were: 30.6% (block funding) and 50.4% (waivers for performance). General educators responded similarly: 43.6% accepted block funding and 50.4% accepted waivers for performance. It appeared that both groups were concerned that rights of special learners may become jeopardized. It is interesting to note that the role of advocate was not played only by special educators; general educators were also concerned for the rights of special needs students. Administrators, on the other hand, expressed greater acceptance of the practice to waive regulations: 71.9%. Their level of acceptance might again be motivated by reduction of paperwork and flexibility of making discretionary decisions (Kauffman, Gerber, & Semmel, 1988). It appears that levels of agreement with system

goals among groups were similar to levels of acceptance of system procedures.

Demographic and Experiential Characteristics.

Two experiential variables affected groups' mean acceptance of REI procedures. The experiential variable, satisfaction, also created significant differences among groups' mean acceptance of procedures. Those respondents who reported greater satisfaction in collaborative general-special activities may have had an opportunity to introduce new practices into the classroom, or they may be more assured that support will be provided in learning or using them.

The variable, school readiness, or extent to which a school was engaging in innovative programming between special and general education, affected groups' acceptance. Those respondents from schools that were implementing programs reported significantly greater acceptance of procedures than respondents from schools which were doing little or no planning. Respondents from these schools were perhaps more aware of procedures listed in the survey, and if they were using them, felt that they were acceptable.

Research Question 3: What levels of assistance are needed for REI procedures to be implemented?

Education professionals indicated their overall acceptance of REI procedures. The question is, are current classroom procedures already practiced by educators or will they require assistance? The result that 79% of educators requested assistance including inservice, consultation, and in-class help indicates that support will be necessary. General

educators indicated in only 16% of their requests that no assistance was necessary to implement classroom procedures. Technical assistance must accompany new demands placed on teachers if they are to instruct special learners in general classrooms (Gallagher, 1976; Maher & Bennett, 1984; Ysseldyke & Algozzine, 1982). What will happen if technical assistance is not provided? Teachers' willingness to work with special learners will be affected (Williams & Algozzine, 1979).

Two traditional forms of assistance, inservice and consultation, were requested by 61% of educators. Although inservice has been acknowledged not to influence organizational change (Cyphert, 1981; Guskey, 1986; Lanier, 1984), it received the largest number of requests. Inservice was selected more times by administrators (40% of requests) than special educators and general educators (27% of their requests). It appears that administrators viewed staff development in more traditional forms than teachers. Consultation received the second highest number of requests. Special educators felt that consultation might be more appropriate (34.% of requests) than general educators (26.5% of requests) as a form of assistance. Special educators may perceive this assistance more favorably than general educators because it is part of their practices (Reisberg & Wolf, 1986). Consultation may not be tenable, however, due to such barriers as insufficient time, preparation, and role definition and overwhelming caseloads (Haight, 1984; Johnson, Pugach, & Hammittee, 1988). In-class assistance would provide more direct help to teachers; however, this level of assistance was education professionals' third choice. Two possible explanations for in-class assistance as their last choice might be that school regularities pose resistance to new

techniques (Sarason, 1982) and teachers might be reticent toward intrusive practices (Martens, Peterson, Witt, & Citrone, 1986).

The result that educators prefer different types of technical assistance confirms the research of those professionals who state that staff development cannot be framed in one-dimensional terms such as inservices (Kauffman, Lloyd, & McGee, 1988). General educators, special educators, and administrators had different needs; thus, technical assistance should be viewed on a multi-dimensional continuum ranging from less intrusive practices like inservices to more intrusive practices like direct assistance in the classroom.

Research Question 4: Is there a relationship between agreement with the goals of REI and acceptability of procedures?

Significant positive correlation between mean agreement with goals and mean acceptance of procedures of the REI are encouraging. Goals provide direction and intent, but procedures structure how the task is to be accomplished. Both features are needed if efforts to unify special and general education into one delivery system are successful.

Research Question 5: What factors will inhibit and promote agreement with the goals of REI and acceptance of procedures?

Pragmatic barriers were identified by 45.8% of all education professionals as factors that will inhibit REI proposals from being implemented. In order of percentage of responses, six primary factors were identified: (1) time for planning; (2) rules and regulations; (3) money; (4) limiting features of school facility such as rural location,

e
o
e
s
m
to
le
ch
ed
an
sh
Ste
pre

shortage of rooms, and separation of support staff from general classrooms; (5) class size; and (6) insufficient and/or inadequate support. Pragmatic factors have been identified as essential to mainstreaming (Larrivee & Cook, 1979; Schubert & Glick, 1981).

It appears that the same factors such as resources (e.g., time, money, personnel) and organizational flexibility (time for planning, scheduling) are repeatedly identified as important to accommodating special needs learners in the general classroom and to the collaboration process between general and special educators (Kauffman, Gerber, & Semmel, 1987). It may be, however, that these factors will always be cited as long as school budgets are limited and traditional structuring of the school day remain unchanged.

Conceptual and affective factors were approximately tied (27% of all educators) as the next order of barriers to the REI. Conceptual factors concerned the different knowledge base between special and general education. Respondents indicated that special education training would be necessary. They also indicated that special learners needed different methods that could only be obtained in special classrooms. As one teacher pointed out, "It's best for them there." Knowledge of special learners and skills in working with them have been cited as important to the mainstreaming process (Larrivee & Cook, 1979), yet 80% of general educators in this study have participated in 0-5 workshops, inservices, and courses in the teaching of special needs learners. It has been shown that with knowledge comes increased competence (Glass & Meckler, 1972; Stephens & Braun, 1980). Until staff development activities and preservice training include the teaching of special learners to change

the belief that this knowledge is not the property of one system, it appears that conceptual factors will continue to be barriers.

Whereas the majority of general educators' responses (58.6%) pertained to pragmatic factors, the majority of responses from special educators (38.9%) pertained to affective factors which were cited as barriers to REI proposals. Special educators reported that such affective factors as negative attitudes and willingness of general educators to accept special learners will impede REI reform. Special educators may not understand the thinking of general educators (Reisberg & Wolf, 1986). Although willingness to teach special learners has been associated with attitudes (Hirshoren & Burton, 1979; Graham et al., 1980), it appears that willingness may more appropriately be associated with practical assistance (Brooks, 1979; Budoff, 1972; Dodd, 1980; Larrivee & Cook, 1979; Pugach, 1982; Sivage, 1980; Stephens & Braun, 1981). Change cannot occur without addressing the perceived needs of its members (Brooks, 1982; Dublinske, 1978; Lieberman & Miller, 1981). Special educators may have to look beyond attitudes and toward pragmatic issues. They may need to problem solve with general educators concerning such problems as finding time to meet.

When considering factors that would promote REI practices at their school, education professionals (33% of responses) cited characteristics of their staff. Characteristics attributed to staffs were willingness, caring, cooperativeness, cohesiveness, and flexibility. REI advocates can view this positive result as supportive of such practices as teacher assistance teams and building based instructional teams which are based on the reported staff characteristics.

Two other factors which respondents indicated as positive influences were: (1) expertise of special educators; and (2) procedures which were already in place for integrating special and general education. General educators and administrators reported that special educators' expertise, caring, and leadership were qualities which would promote REI efforts in their schools. This result contrasts with some research which states that special and general educators do not hold the same regard for each other (Aiello, 1979; Gear & Gable, 1979; Ringlaben & Waller, 1981). Procedures which were already in place such as mainstreaming, use of consultants, and team meetings were cited as providing the foundation for more innovative programming between general and special education. These responses do not indicate the quality of the interaction, however, which may be more important than the procedure itself (Ammer, 1984; Gans, 1985; Lilly & Givens-Ogle, 1981; Salend, 1984).

Discussion of Telephone Interviews

Information about the nature of collaboration between general and special education gained through telephone interviews revealed that educators were dissatisfied. From a total of 28 interviews, only four special educators and one administrator reported positive collaborative efforts. Special educators primarily attributed their dissatisfaction to large case loads, paperwork, no planning period, and little time to talk with general educators. When special educators were asked to describe their interaction with general educators, they discussed resistance and lack of follow through by general educators. One discussion concerned a general educator who failed to keep a point system for a disruptive

student. Another reported that he never heard about what was going wrong with a mainstreamed student until report card time, and then it was too late. One special educator stated that he worked in a special education departmentalized setting where special learners received their academic instruction. He felt comfortable in this role because teachers were satisfied, and he felt he was doing something for them. General educators, on the other hand, stated that they received no specific strategies to try, support help was infrequent, and waiting time to qualify for help could take most of the year.

There appears to be a discrepancy between results reported for participation in general-special education collaboration through the survey instrument and those reported in telephone interviews. Whereas over half of general educators reported their participation in the survey, not one general educator out of the eight who was called responded that they had collaborated with special educators. A similar observation was found with special educators who were telephoned. The results of the survey showed that a little less than half of special educators had collaborated with general educators, but only 4 out of 17 who were telephoned reported collaborative behaviors.

A possible explanation might be that collaboration was defined by the researcher during the telephone interviews. Collaboration was not viewed as dropping a list of instructional modifications for special learners in a general educator's mailbox. Instead, collaboration was defined as ongoing, mutual planning for the needs of students with learning problems in the general classroom. Once the degree and nature of participation was defined, both groups reported less involvement.

Much has been written about the "failure" of mainstreaming (Bogdan, 1983; Lortie, 1978). One unintended consequence of mainstreaming was the "them versus us" mentality (Lortie, 1978). However, it appears that social role theory can help provide one possible explanation for the reported unsatisfactory situations in the interviews. A major determinant of effectiveness in role enactment is the agreement of the person and audience on expectations about performance. Each person is seen as behaving in a differentiated social structure; a structure that consists of both knowledge of the part (beliefs) and evaluations of the adequacy of performance (values) (Sarbin & Allen, 1968). The interviews revealed that special and general educators did not have knowledge of each other's roles and that behaviors were interpreted through their value systems as inadequate. Thus, both groups expected certain behaviors which were not forthcoming. Decisions appeared unilaterally made and were not satisficing to either party. Conway (1985) stated that satisfaction is a function of the type of decision in which a participant is involved as well as degree of involvement. He noted that trust is a better predictor of satisfaction than participation.

It was interesting to discover what made the four special educators different in their reported interactions. In each case, these educators took charge of the situation and created changes through their initiative. These educators also elicited the help of administrators and general educators to begin such activities as directing study halls, co-teaching, and coordinating a study skills curriculum. Skirtic (1987) also pointed out the potential of special educators as leaders in a reform initiative.

The structure of school organization, however, provides an explanation as to why many general-special educator interactions fail to occur in a manner acceptable to both parties. The regularities and policies of the bureaucratic structure do not allow flexibility for meeting time. Educators are locked into organizational patterns which inhibit interaction (Skirtic, 1987). Consequently, educators must seek to restructure these settings through different instructional and supportive arrangements.

B. Conclusions

Based on the results of this study, the following conclusions can be drawn:

1. **There is more agreement with the goals of the Regular Education Initiative among education professionals than is indicated by opponents.**

Education professionals have identified the same barriers to REI proposals as opponents. These educators are realistic about such factors as professional training and schools' ability to flexibly organize functions and resources. Yet in spite of their acknowledgement of the same pragmatics which have impeded mainstreaming efforts, educators are in agreement with the overall goals of REI. Educators' generally positive attitudes may reflect the statement of one teacher, "What we have now is not the solution; maybe [REI] will be better."

Central to the belief system of most general educators, however, is the belief that special needs students should not be educated for most, if not all of the time, in general classrooms. What appears to be a

contradictory conclusion may be the reality that although general educators agree with the goals to collaborate with special educators and use effective techniques, they are not convinced that these goals will result in the accommodation of special needs learners in the general classroom. General educators' perceptions concerning the conceptual boundary between special needs students and special methods and general education students and methods provides a partial explanation for their doubts. Another more pragmatic concern might be that they have little faith that the REI will provide the support they need based on previous experiences.

Special educators' general agreement with REI reflects cautious approval. Their cautious position is primarily due to their concern that rights of special needs students may be denied if system level goals are implemented.

Administrators' positive agreement with REI goals may be linked with their desire to have more flexibility in organizing programs and pooling resources.

This study has shown that there are significant differences in beliefs among administrators, general educators, and special educators toward the classroom, building, and system level goals of the REI. This finding supports other studies which have revealed that special and general educators have different belief and value systems. Attention to the nature of specific goals and demographic and experiential characteristics can pave the way toward effective facilitation of collaborative general-special education efforts.

Differing levels of agreement with the goals of REI also reflected different stages of concern. According to the concept model presented by G. E. Hall (1973), general educators are at the personal stage (uncertainty about demands, personal adequacy in meeting demands, concern with organizational constructs) and special educators and administrators are at the management stage (processes and tasks in using the change). Thus, differences in core beliefs and stages of concern reflect possible areas of dissonance among education professionals toward REI proposals.

2. Education professionals generally accept the overall procedures needed to implement the goals of the REI.

Education professionals' general acceptance of classroom techniques and building level strategies involving collaborative planning, teaching, and coaching are necessary to restructure the separate systems of general and special education. However, general and special educators did not report general agreement with those procedures which are perceived to be the realm of the special classroom (e.g., include braille and sign language instruction in the general classroom) and which involve increased expenditure of teacher planning and preparation time (e.g., individualized instruction and mastery learning). General and special educators were not favorable toward system level procedures which might deny special students entitlements currently protected by regulations. Administrators were more accepting, however, of a system level procedure which would allow increased flexibility in organizing school instruction. Attention to the nature of a procedure and its consequences for the consumer should precede implementation of REI practices.

Education professionals who were in schools which were presently implementing innovative programming for special learners and had who participated in satisfactory general-special education collaborations reported higher acceptance of REI procedures. Greater personal involvement appears to affect acceptance of procedures.

3. Education professionals recognize the need for technical assistance in implementing the REI procedures.

The finding that 80% of the procedures will require some type of inservice, consultation, and in-class help, provides support to researchers who state that technical assistance must accompany new demands placed on teachers to instruct special needs learners in general education classrooms (Gallagher, 1976; Maher & Bennett, 1984; Ysseldyke & Algozzine, 1982). Before implementation of REI practices, there should be a commitment to intense on-going training.

Technical assistance is preferred when provided in more traditional ways. Education professionals view inservice and consultation as more preferable than the use of in-class assistance. Technical assistance should thus be presented as multiple options as educators have different preferences.

4. Education professionals who agree with the goals of REI also accept the proposed procedures.

This relationship is important to the change process. If educators are accepting of learning new procedures or engaging in new instructional behaviors then they may be prepared to agree with many of the goals of

REI. Conversely, those educators who agree with the overall goals of the REI may be more willing to engage in staff development activities to learn new practices to accommodate special learners in their classes.

5. Education professionals believe that pragmatic factors will pose barriers to the REI.

This study confirms researchers' findings that pragmatic factors pose barriers to special-general education programming (Kauffman, Gerber, & Semmel, 1987; Schubert & Glick, 1981). These barriers include resources such as time, money, and personnel and school organizational regularities such as scheduling and time allocation. Attention should turn from investigating educators' "willingness" to teach special learners and toward resolving problems associated with pragmatic factors. Pragmatic factors are often associated with the present structure of the school organization. New ways of organizing personnel and instructing students as outlined in REI practices (e.g., building-based instructional teams, peer-mediated instruction) would seem promising.

There are positive factors present in schools which will promote REI efforts. Education professionals are generally positive about characteristics of their staff. Characteristics of the staff in general (e.g., caring, committed, cooperative) and special educators in specific (e.g., professional, skillful) augur well for the proposals of the REI to become implemented.

C. Recommendations

Recommendations will be addressed to six audiences: (a) general educators, (b) special educators, (c) administrators, (d) advocates; (e) researchers; and (f) policy makers. These recommendations will be made at three levels, classroom, building, and system, to appropriate audiences.

Recommendations are presented as a research agenda for three levels and six populations. These recommendations are general areas that need empirical validation as programmatic research efforts follow.

Classroom Level

General Educators

General educators recognize the need for technical assistance to implement classroom procedures effective for special learners. They also recognize pragmatic barriers such as money for inservices and for added support personnel to aid in this training. New ways of perceiving "training" and organizing social learning experiences must be designed in light of limited resources and different belief systems. Multiple options should be presented from less intrusive (e.g., workshop) to more intrusive (e.g., in-class help) recognizing that individual needs are different.

Instructional practices which require additional preparation time and paperwork such as mastery learning and individualized instruction are unacceptable. Recommended practices should consider the regularities of the general classroom and approximate the skills of the teacher and constraints of the setting.

The caution that teachers have expressed toward the REI is prudent. Efforts should begin slowly and incrementally as problems are encountered. Administrators and special educators will need this cautious stance from general educators; efforts which are too quickly generated may fail and impede future planning. General educators may be more aware of the dynamics of the classroom than special educators and administrators. These realities should be shared, not as obstacles, but as agendas to confront and to problem-solve.

Special Educators

As special educators engage in collaborative efforts to implement strategies effective for special learners, they should regard the skills of general educators as different, not deficient. More work needs to be done with building on "general education practices" which are effective for diverse learning styles and are consonant with the demands of general classroom teachers.

Special educators' caution that system level goals and procedures of the REI may infringe on the rights of special learners should be heeded.

Administrators

Because administrators were more accepting of REI goals and procedures than special and general educators, they should not initiate efforts based on their needs for more flexible administration of programs. The readiness level of their staff may be different.

The challenge will be to reexamine school regularities and resolve some of the pragmatic issues such as a common time for planning among

staff and flexible scheduling. Sharing results of instructional interventions can become as integral a part of scheduled staff meetings as business tasks. Staff meetings can become celebrations where educators can "show off" what they are doing. Pragmatic issues should not be barriers to initiating different instructional and support arrangements.

Administrators should take advantage of staff characteristics to elicit the help of educators who can suggest options and provide leadership. One administrator began a reading program with all third grade students including children with learning problems. General and special educators taught together. He offered his advice, "Begin cautiously and choose the teachers who will make it a success; don't shoot yourself in the foot."

Policy Makers

The prescient remark that Gallagher made in 1976 should not continue to go unheeded:

At the precise moment that there should be a major investment in the support mechanisms of development, training, and technical assistance, these mechanisms may be shunted aside in favor of total preoccupation with service delivery. (p. 148)

Almost 80% of general educators and 73% of administrators reported that they have taken part in 0-5 inservices or workshops on teaching the special learner. One finding was that 80% of educators' responses indicated that they would need technical assistance to implement practices recommended for teaching special learners. Trial efforts in innovative programming must ensure that intensive, on-going training is

incorporated. New terminology should be substituted for "handicapped children" or "special methods" in order to reduce the perception that there are two types of students, methods, and training.

Education professionals will continue to need financial support as educational technology is incorporated into classrooms and the environment made stronger to accommodate diversity of learners. Yet finances are limited. Documentation should be kept of those schools that receive funds and implement integrative practices and those that receive no funds yet experiment with restructuring. How is money expended? What appear to be critical expenses? The procedure, waivers for performance, should accompany all grants and easing of regulations. Accountability must link with performance.

New ways of expanding on-going staff development should occur. It may take mandated arrangements in some cases as voluntary participation may not occur. Respondents in the study indicated their agreement with the goal to develop administrative policies to provide incentives to teach special learners within the general classroom. Incentives should accompany contribution. Incentives need not be monetary; examples are status, special certificate, personal involvement, or whatever may be valued by the person.

Alternative ways of providing increased support in the general classroom need to be investigated in light of pragmatic barriers such as limited support personnel, class size, and inadequate funding. Support can include parent volunteers, older students, and community partnerships with the schools. Recognition can be given in the form of letters of

appreciation. New creative ways of examining "support" with given resources must be done without thinking in terms of "more."

Advocates

Special educators and general educators are concerned that special needs learners will be denied access to an appropriate education in the general classroom if regulations are relaxed. They are advocates for children with learning problems. It may take good faith efforts on the part of advocates as experimental trials are being pursued. Part of this encouragement might be to form partnerships with schools. Support is needed and funds are limited. Advocates could lend support in the classrooms to help teachers with small groups of students. Teachers could provide training sessions for groups of advocates as to how this help could be structured. Money could be raised for selected experts in the field to work directly within a school building instead of large, district inservice events. The Regular Education Initiative is about forming partnerships; partnerships need to reach out and include the community as well.

Researchers

One critical variable, teacher skill, has been identified consistently by researchers as necessary for successful integration of special learners in the general classrooms. Yet it appears that teachers continue to feel that they lack the necessary skills. Researchers should continue their work on ways of incorporating new instructional technology in the classroom. What is acceptable to the consumer? If

acceptable, are strategies feasible given the constraints of large classes? How can teachers employ more efficient classroom management strategies to handle wide ranges of ability and demands? How can teachers use and coordinate skills in everyday contexts? More concern should be shown for practitioners; what do they perceive is practical and in the best interests of students? Professionals should continue to take into account the extent to which innovations will ultimately fit into the classroom ecology.

A second variable, instructional technology, has also been identified as critical to the goal of accommodating diversity of learners in the general classroom. Is there a limit, however, to student diversity which can be accommodated by instructional technology? Under what conditions is it possible to teach a wide range of learners yet still ensure that everyone's rights are protected?

Building Level

General Educators

Expertise to instruct children with learning problems must be viewed as the purview of all education professionals and not limited to perceived "experts." General educators indicated their acceptance of building-based instructional teams, peer coaching, and co-teaching. These practices will focus general educators' attention on general education as a resource. Limited support personnel cannot be used as a reason for not experimenting with different instructional arrangements.

Special Educators

General educators and administrators in the survey named special educators as positive factors in their building to bring about general-special education collaboration. They cited such characteristics as caring, skillful, and professional. Special educators have the credibility to assume leadership roles in initiating innovative efforts. However, all efforts should include the participation of general educators and administrators.

Ways of reducing dissonance of those general educators who are ambivalent about instructing special learners in the general classroom should be explored. One way is to provide knowledge and build on positive beliefs. Another way is to involve a creditable source in planning activities.

Given the pragmatics of school organization, special educators will have to problem solve with general educators and administrators as to how the schedule and activities can be structured in order to provide time to meet. Collaboration involves planning together and sharing responsibility. Expectations of each other's roles should be clearly defined. Satisfaction with the collaborative process was shown to be important to education professionals' acceptance of integrative programming of special learners.

Administrators

General and special educators indicated that they found the goal to empower principals at the building level with the responsibility to coordinate all programs unacceptable. Administrators should examine the initiation of building-based instructional teams to provide joint

instructional leadership among general educators, special educators, and administrators. Administrators can build on staff characteristics such as collegiality and willingness to experiment when organizing this team.

Building-based instructional teams will have to devise strategies to plan for children who have behavioral problems. With few exceptions, general classroom teachers are concerned about the inclusion of disruptive students into their classes. Often these students have learning problems. These children should not be perceived as formidable barriers to REI proposals, but they do have needs which require different types of instructional planning.

Johnson, Pugach, and Hammittee (1988) stated, "The power of the dissonance between the view of the world held by general and special educators does not seem to have been well anticipated" (p. 45). When facilitating meetings between general and special educators, administrators should help them understand others' viewpoints and expectations in order to build on the strengths that they can provide to each other.

It does not appear possible to renegotiate roles of special educators quickly in order to implement building level procedures. Role changes should occur slowly as new practices are tried. The present structure of the school needs to be examined when planning collaborative efforts. The finding that only 13% of special educators view their role as consultants means that arrangements such as co-teaching and consultation will evolve as staff work together.

Policy Makers

In order to encourage collaborative schools, policy makers should allow building-based teams to implement building policy. Education professionals have indicated their acceptance of this procedure, but without acknowledgement from policy makers that they are empowered to make instructional decisions, traditional leadership patterns will remain. This team should represent the school at school board meetings.

Advocates

Parent advisory committees should meet with building level instructional teams and learn about the planning taking place toward collaborative programming. Parents should monitor efforts to see that rights of special needs students are protected as they participate in the process.

Researchers

Because of different conceptual beliefs of education professionals, what preparation for dialogue among the three groups needs to occur? Are there lessons to be gained through earlier studies in group process training and social role theory? How can dialogue be facilitated to bridge the differing belief systems? Are some collaborative approaches more appropriate than others? Are there different stages of collaboration which must occur?

Questions remain about role definitions and expectations in collaborative building procedures. What is the role of the special educator relative to curriculum demands and benchmarks as the equity

versus excellence issue becomes increasingly problematic? How does the administrator handle the roles of facilitator, manager, and co-leader? How does the general educator prepare for the role of co-teacher or co-planner with the special educator?

Researchers should chronicle the development of a fully integrated school in which all special learners are taught in the general classroom. Must the structure of the organization change first or do personnel bring about the restructuring through their innovative efforts?

Can programs be evaluated in terms other than academic gain scores yet demonstrate effectiveness? General education teachers indicated concern that special needs learners will not learn as well in general classrooms. How can learning be measured that both indicates academic performance as well as social and emotional growth?

System Level

Policy Makers

Critics have charged that the REI is a policy in search of data. Yet the charge need not imply schools are wasting their efforts or endangering students' instructional programs. The problems that have led to the REI suggest that a change is needed. By not committing resources and initiating trial efforts, education professionals will never know if REI proposals can work. Although data are insufficient, policy makers can add to the research base by insisting that evaluations accompany all experimental trials.

Policy makers should be alert to the number of education professionals who indicated a "maybe" response to the REI. Overall, 42%

of the respondents indicated that they wanted to see REI practices implemented; 33% were neutral. It seems that many educators are adopting a "wait and see" attitude before committing themselves. Incremental efforts should include plans to support goals and procedures at all three levels, classroom, building, and system. Trial practices which are well-planned with demonstrated results will gain attention. Only by policy makers committing support at these three levels will education professionals, in turn, commit themselves. However, before funding or waivers are granted, policy makers must soon come to terms with defining the REI: Is it a policy, practice, structure, or mission?

The finding that special educators who worked in centers were significantly more accepting of REI goals than special educators who worked in resource and self-contained rooms indicate that trial efforts might begin in some segregated buildings.

Advocates are concerned that system level goals and procedures will lead to denial of rights to those students eligible for special programs. Before trial projects begin, schools must demonstrate how rights of special learners will be protected.

Advocates

Advocates can also lend their support for greater inclusion of special needs students into general classrooms and for those students in centers, into neighborhood schools. Policy makers are reticent to begin trial efforts without the support from advocates. Guarantees to an appropriate education and efforts to provide a more effective instructional delivery system are not mutually exclusive; both can occur at the same time.

Researchers

Researchers should take the opportunity to study the process of policy making as REI policy becomes formed. Is policy based on research-based practice? Who are the policy makers and how do they affect change? How are scarce resources distributed? How will policy decisions toward the REI be evaluated? As the system responds to the REI, researchers should be alert to the history of educational change. Longitudinal research should document REI efforts and trace events. Will REI be different from other "change events"; what will we have learned from trial efforts? Under what conditions might districts be "encouraged" to select more effective classroom and building practices? What rewards are needed? And finally, will program costs be too great to maintain implementation?

In closing, the reader is reminded that the purpose of the study was to address the paucity of information concerning education professionals' perceptions of the Regular Education Initiative. This initiative has the potential for reforming separate "special" programs into one unified delivery system for all children - a change unparalleled in the history of education. Call for reform of this dual system of education has come from outside of the schools, however; the voices of general and special educators and administrators have not been systematically elicited. Without their assent, the Regular Education Initiative may meet the same fate as other change efforts in education. Will the REI bandwagon go to the same funeral, too?

Results indicated that the overall goals and procedures of the REI are generally accepted by the education professionals who responded to this study. Although the results appear promising and indicate readiness for change, caution must follow. First, there were significant differences among general educators, administrators, and special educators concerning their perceptions of the goals and procedures at the classroom, building, and system levels. Trial efforts should proceed with the understanding of those issues relevant to each group's concern. Second, readiness for change cannot be equated with willingness to change. The challenge is to demonstrate results of a restructured system which will bring educators together in shared responsibility for instructing all learners.

APPENDICES

APPENDIX A

TABLE 1A

**TO INTEGRATE SPECIAL LEARNERS MOST OF TIME IN GENERAL CLASSROOMS
BY GROUP AGREEMENT**

	Agree	Neutral	Disagree	Row Total
Gen Ed	51	21	90	162
	31.5	13.0	55.6	26.8
	16.7	37.5	37.2	
Admin	127	14	58	199
	63.8	7.0	29.1	32.9
	41.5	25.0	24.0	
Spec Ed	128	21	94	243
	52.7	8.6	38.7	40.2
	41.8	37.5	38.8	
Column	306	56	242	604
Total	50.7	9.3	40.1	100.0

Chi-Square: 38.06 $p < .001$

TABLE 2A

TO INCREASE INSTRUCTIONAL TIME IN GENERAL EDUCATION BY GROUP AGREEMENT

	Agree	Neutral	Disagree	Row Total
Gen Ed	50	31	81	162
	30.9	19.1	50.1	26.8
	18.7	25.4	37.9	
Admin	112	36	51	199
	56.3	18.1	25.6	32.9
	41.8	29.5	23.8	
Spec Ed	106	55	82	243
	43.6	22.6	33.7	40.2
	39.6	45.1	38.3	
Column	268	122	214	604
Total	44.4	20.2	35.4	100.0

Chi-Square: 29.59 $p < .001$

TABLE 3A

**USE INSTRUCTIONAL METHODS EFFECTIVE FOR SPECIAL EDUCATION
IN GENERAL CLASSROOMS BY GROUP AGREEMENT**

	Agree	Neutral	Disagree	Row Total
Gen Ed	94 57.7 20.1	31 19.0 44.3	38 23.3 56.7	163 26.9
Admin	164 82.4 35.0	20 10.1 28.6	15 7.5 22.4	199 32.9
Spec Ed	210 86.4 44.9	19 7.8 27.1	14 5.8 20.9	243 40.2
Column Total	468 77.4	70 11.6	67 11.1	605 100.0

Chi-Square: 53.06

 $p < .0001$ **TABLE 4A**

**USE INSTRUCTIONAL METHODS EFFECTIVE FOR GENERAL EDUCATION
WITH SPECIAL LEARNERS BY GROUP AGREEMENT**

	Agree	Neutral	Disagree	Row Total
Gen Ed	80 49.1 23.6	50 30.7 37.9	33 20.2 24.8	163 27.0
Admin	142 71.4 41.9	28 14.1 21.2	29 14.6 21.8	199 32.9
Spec Ed	117 48.3 34.5	54 22.3 40.9	71 29.3 53.4	242 40.1
Column Total	339 56.1	132 21.9	133 22.0	604 100.0

Chi-Square: 34.75

 $p < .0001$

TABLE 5A**PROVIDE ADDITIONAL ASSISTANCE WITHOUT LABELING SPECIAL LEARNERS IMPAIRED
BY GROUP AGREEMENT**

	Agree	Neutral	Disagree	Row Total
Gen Ed	112 68.7 24.1	23 14.1 30.7	28 17.2 42.4	163 26.9
Admin	172 86.4 37.1	19 9.5 25.3	8 4.0 12.1	199 32.9
Spec Ed	180 74.1 38.8	33 13.6 44.0	30 12.3 45.5	243 40.2
Column Total	464 76.7	75 12.4	66 10.9	605 100.0

Chi-Square: 20.98

 $p < .0001$ **TABLE 6A****SPEND MORE TIME ALTERING INSTRUCTIONAL PRACTICES TO TEACH SPECIAL
LEARNERS THAN ASSESSING THEM BY GROUP AGREEMENT**

	Agree	Neutral	Disagree	Row Total
Gen Ed	110 67.5 23.7	27 16.6 32.9	26 16.0 44.8	163 26.9
Admin	166 83.4 35.7	18 9.0 22.0	15 7.5 25.9	199 32.9
Spec Ed	189 77.8 40.6	37 15.2 45.1	17 7.0 29.3	243 40.2
Column Total	465 76.9	82 13.6	66 9.6	605 100.0

Chi-Square: 17.03

 $p < .0001$

TABLE 7A

**REDUCE SOCIAL STIGMA BY PROVIDING INCREASED OPPORTUNITY FOR
SOCIAL INTERACTIONS IN GENERAL CLASSROOMS BY GROUP AGREEMENT**

	Agree	Neutral	Disagree	Row Total
Gen Ed	112	30	21	163
	68.7	18.4	12.9	26.9
	23.0	40.0	50.0	
Admin	166	22	11	199
	83.4	11.1	5.5	32.9
	34.0	29.3	26.2	
Spec Ed	210	23	10	243
	86.4	9.5	4.1	40.2
	43.0	30.7	23.8	
Column	488	75	42	605
Total	80.7	12.4	6.9	100.0

Chi-Square: 22.45

 $p < .0001$ **TABLE 8A**

EMPOWER PRINCIPALS TO CONTROL ALL PROGRAMS BY GROUP AGREEMENT

	Agree	Neutral	Disagree	Row Total
Gen Ed	50	43	70	163
	30.7	26.4	42.9	26.9
	20.4	30.3	32.1	
Admin	137	33	29	199
	68.8	16.6	14.6	32.9
	55.9	23.2	13.3	
Spec Ed	58	66	119	243
	23.9	27.2	45.0	40.2
	23.7	46.5	54.6	
Column	245	142	218	605
Total	40.5	23.5	36.0	100.0

Chi-Square: 104.87

 $p < .001$

TABLE 9A**COORDINATE CURRICULAR ACTIVITIES BETWEEN GENERAL AND SPECIAL EDUCATION
BY GROUP AGREEMENT**

	Agree	Neutral	Disagree	Row Total
Gen Ed	127	19	17	163
	77.9	11.7	10.4	26.9
	23.7	45.2	60.7	
Admin	189	7	3	199
	95.0	3.5	1.5	32.9
	35.3	16.7	10.7	
Spec Ed	219	16	8	243
	90.1	6.6	3.3	40.2
	40.9	38.1	28.6	
Column	535	42	28	605
Total	88.4	6.9	4.6	100.0

Chi-Square: 28.68 $p < .001$ **TABLE 10A****INCREASE COLLABORATIVE TEACHING ARRANGEMENTS AMONG
GENERAL AND SPECIAL EDUCATORS BY GROUP AGREEMENT**

	Agree	Neutral	Disagree	Row Total
Gen Ed	117	28	18	163
	71.8	17.2	11.0	26.9
	23.1	42.4	54.5	
Admin	180	13	6	199
	90.5	6.5	3.0	32.9
	35.6	19.7	18.2	
Spec Ed	209	25	9	243
	86.0	10.3	3.7	40.2
	41.3	37.9	27.3	
Column	506	66	33	605
Total	83.6	10.9	5.5	100.0

Chi-Square: 26.32 $p < .001$

TABLE 11A

**NEGOTIATE NEW ROLES AMONG STAFF FOR SHARING RESPONSIBILITY
FOR SPECIAL LEARNERS BY GROUP AGREEMENT**

	Agree	Neutral	Disagree	Row Total
Gen Ed	107	33	23	163
	65.6	20.2	14.1	26.9
	25.7	26.4	35.9	
Admin	140	43	16	199
	70.4	21.6	8.0	32.9
	33.7	34.4	25.2	
Spec Ed	169	49	25	243
	69.5	20.2	10.3	40.2
	40.6	39.2	39.1	
Column Total	416 68.8	125 20.7	64 10.6	605 100.0

Chi-Square: 3.60 $p > .05$

TABLE 12A

**POOL INSTRUCTIONAL RESOURCES INTO ONE UNIFIED DELIVERY SYSTEM
BY GROUP AGREEMENT**

	Agree	Neutral	Disagree	Row Total
Gen Ed	84	46	33	163
	51.5	28.2	20.2	26.9
	25.7	35.1	22.4	
Admin	133	28	38	199
	66.8	14.1	19.1	32.9
	40.7	21.4	25.9	
Spec Ed	110	57	76	243
	45.3	23.5	31.3	40.2
	33.6	43.5	51.7	
Column Total	327 54.0	131 21.7	147 24.3	605 100.0

Chi-Square: 26.76 $p < .001$

TABLE 13A

**INCREASE TEACHER'S ABILITY TO INSTRUCT DIVERSE LEARNERS
BY GROUP AGREEMENT**

	Agree	Neutral	Disagree	Row Total
Gen Ed	132 81.0 24.3	16 9.8 44.4	15 9.2 60.0	163 26.9
Admin	189 95.0 34.7	7 3.5 19.4	3 1.5 12.0	199 32.9
Spec Ed	223 91.8 41.0	13 5.3 36.1	7 2.9 28.0	243 40.2
Column Total	544 89.9	36 6.0	25 4.1	605 100.0

Chi-Square: 22.70 $p < .001$

TABLE 14A

**DEVELOP ADMINISTRATIVE POLICIES THAT PROVIDE INCENTIVES FOR GENERAL
EDUCATORS TO TEACH SPECIAL LEARNERS BY GROUP AGREEMENT**

	Agree	Neutral	Disagree	Row Total
Gen Ed	115 71.0 26.1	30 18.5 27.8	17 10.5 30.4	162 26.8
Admin	144 72.4 32.7	37 18.6 34.3	18 9.0 32.1	199 32.9
Spec Ed	181 74.5 41.1	41 16.9 38.0	21 8.6 37.5	243 40.2
Column Total	440 72.8	108 17.9	56 9.3	604 100.0

Chi-Square: 0.78 $p > .05$

TABLE 15A

USE CURRICULUM-BASED ASSESSMENT BY GROUP ACCEPTANCE

	Agree	Neutral	Disagree	Row Total
Gen Ed	126	30	6	162
	77.8	18.5	3.7	27.0
	24.2	45.5	46.2	
Admin	178	14	3	195
	91.3	7.2	1.5	32.6
	34.2	21.2	23.1	
Spec Ed	216	22	4	242
	89.3	9.1	1.7	40.4
	41.5	33.3	30.8	
Column	520	66	13	599
Total	86.8	11.0	2.2	100.0

Chi-Square: 16.25 $p < .01$

TABLE 16A

TEACH SOCIAL SKILLS IN GENERAL CLASSROOMS BY GROUP ACCEPTABILITY
BY GROUP ACCEPTANCE

	Agree	Neutral	Disagree	Row Total
Gen Ed	141	13	9	163
	86.5	8.0	5.5	27.0
	26.1	31.7	40.9	
Admin	189	7	3	199
	95.0	3.5	1.5	32.9
	34.9	17.1	13.6	
Spec Ed	211	21	10	242
	87.2	8.7	4.1	40.1
	39.0	51.2	45.5	
Column	541	41	22	604
Total	89.6	6.8	3.6	100.0

Chi-Square: 9.95 $p < .05$

TABLE 17A

REALLOCATE INSTRUCTIONAL TIME ON BASIS OF STUDENT BY GROUP ACCEPTANCE

	Agree	Neutral	Disagree	Row Total
Gen Ed	120	25	18	163
	73.6	15.3	11.0	27.0
	24.9	30.5	43.9	
Admin	161	23	15	199
	80.9	11.6	7.5	32.9
	33.5	28.0	36.6	
Spec Ed	200	34	8	242
	82.6	14.0	3.3	40.1
	41.6	41.5	19.5	
Column	481	82	41	604
Total	79.6	13.6	6.8	100.0

Chi-Square: 10.90 $p < .05$

TABLE 18A

PARTICIPATE IN BUILDING-BASED SUPPORT TEAMS BY GROUP ACCEPTANCE

	Agree	Neutral	Disagree	Row Total
Gen Ed	116	36	11	163
	71.2	22.1	6.7	27.1
	23.0	48.0	50.0	
Admin	172	20	4	196
	87.8	10.2	2.0	32.6
	34.1	26.7	18.2	
Spec Ed	216	19	7	242
	89.3	7.9	2.9	40.3
	42.9	25.3	31.8	
Column	504	75	22	601
Total	83.9	12.5	3.7	100.0

Chi-Square: 27.39 $p < .05$

TABLE 19A

TEACH COGNITIVE SKILL STRATEGIES BY GROUP ACCEPTANCE

	Agree	Neutral	Disagree	Row Total
Gen Ed	121 74.7 24.4	26 16.0 37.1	15 9.3 45.5	162 27.0
Admin	169 86.7 34.1	17 8.7 24.3	9 4.6 27.3	195 32.6
Spec Ed	206 85.1 41.5	27 11.2 38.6	9 3.7 27.3	242 40.4
Column Total	496 82.8	70 11.7	33 5.5	599 100.0

Chi-Square: 11.79 $p < .05$

TABLE 20A

USE COMPUTER-ASSISTED INSTRUCTION BY GROUP ACCEPTANCE

	Agree	Neutral	Disagree	Row Total
Gen Ed	142 87.1 23.5	16 9.8 2.6	5 3.1 .8	163 27.0
Admin	182 91.5 33.5	16 8.0 31.4	1 .5 10.0	199 32.9
Spec Ed	219 90.5 40.3	19 7.9 37.3	4 1.7 40.0	242 40.1
Column Total	543 89.9	51 8.4	10 1.7	604 100.0

Chi-Square: 4.27 $p > .05$

CHAPTER 21A

USE COOPERATIVE LEARNING TECHNIQUES BY GROUP ACCEPTANCE

	Agree	Neutral	Disagree	Row Total
Gen Ed	132	18	13	163
	81.0	11.0	8.0	27.0
	25.4	37.5	37.1	
Admin	179	11	8	198
	90.4	5.6	4.0	32.8
	34.4	22.9	22.9	
Spec Ed	209	19	14	242
	86.4	7.9	5.8	40.1
	40.2	39.6	40.0	
Column	520	48	35	603
Total	86.2	8.0	5.8	100.0

Chi-Square: 6.69 $p > .05$

TABLE 22A

PROVIDE FOR PEER TUTORING BY GROUP ACCEPTANCE

	Agree	Neutral	Disagree	Row Total
Gen Ed	128	19	16	163
	78.5	11.7	9.8	27.1
	25.9	27.5	43.2	
Admin	168	19	9	196
	85.7	9.7	4.6	32.6
	33.9	27.5	24.3	
Spec Ed	199	31	12	242
	82.2	12.8	5.0	40.3
	40.2	44.9	32.4	
Column	495	69	37	601
Total	82.4	11.5	6.2	100.0

Chi-Square: 6.37 $p > .05$

TABLE 23A

INCREASE RATES OF PARTICULAR TEACHING BEHAVIORS BY GROUP ACCEPTANCE

	Agree	Neutral	Disagree	Row Total
Gen Ed	144	17	1	162
	88.9	10.5	.6	27.0
	26.6	35.4	11.1	
Admin	184	9	2	195
	94.4	4.6	1.0	32.6
	33.9	18.8	22.2	
Spec Ed	214	22	6	242
	88.4	9.1	5.8	2.5
	39.5	45.8	66.7	
Column	542	48	9	599
Total	90.5	8.0	1.5	100.0

Chi-Square: 7.56 $p > .05$

TABLE 24A

PROVIDE INSTRUCTION VIA HETEROGENEOUS GROUPING BY GROUP ACCEPTANCE

	Agree	Neutral	Disagree	Row Total
Gen Ed	120	26	16	162
	74.1	16.0	9.9	27.1
	26.6	27.1	31.4	
Admin	155	27	12	194
	79.9	13.9	6.2	32.4
	34.4	28.1	23.5	
Spec Ed	176	43	23	242
	72.7	17.8	9.5	40.5
	39.0	44.8	45.1	
Column	451	96	51	598
Total	75.4	16.1	8.5	100.0

Chi-Square: 3.65 $p > .05$

TABLE 25A

**INCLUDE SPECIALIZED INSTRUCTION (BRAILLE, SIGN LANGUAGE)
BY GROUP ACCEPTANCE**

	Agree	Neutral	Disagree	Row Total
Gen Ed	60	39	62	161
	37.3	24.2	38.5	26.9
	20.8	24.8	40.5	
Admin	91	53	52	196
	46.4	27.0	26.5	32.7
	31.5	33.8	34.0	
Spec Ed	138	65	39	242
	57.0	26.9	16.1	40.4
	47.8	41.4	25.5	
Column	289	157	153	599
Total	48.2	26.2	25.5	100.0
Chi-Square:	27.44	p < .001		

TABLE 26A

**MAKE AT LEAST THREE INSTRUCTIONAL MODIFICATIONS PRIOR TO REFERRING BY
GROUP ACCEPTANCE**

	Agree	Neutral	Disagree	Row Total
Gen Ed	75	64	22	161
	46.6	39.8	13.7	27.0
	21.0	33.9	43.1	
Admin	124	56	15	195
	63.6	28.7	7.7	32.7
	34.7	29.6	29.4	
Spec Ed	158	69	14	241
	65.6	28.6	5.8	40.4
	44.3	36.5	27.5	
Column	357	189	51	597
Total	59.8	31.7	8.5	100.0
Chi-Square:	18.29	p < .001		

TABLE 27A

**MODIFY INSTRUCTIONAL PRACTICES FOR SPECIAL LEARNERS USING
THE SAME CURRICULUM BY GROUP ACCEPTANCE**

	Agree	Neutral	Disagree	Row Total
Gen Ed	104 63.8 25.7	17 10.4 27.0	42 25.8 31.1	163 27.0
Admin	134 67.7 33.1	19 9.6 30.2	45 22.7 33.3	198 32.8
Spec Ed	167 69.8 41.2	27 11.2 42.9	48 19.8 35.6	242 40.1
Column Total	405 67.2	39 10.4	135 22.4	603 100.0

Chi-Square: 2.20 $p > .05$

TABLE 28A

USE STUDENT-PACED ACTIVITIES IN GENERAL CLASSROOMS BY GROUP ACCEPTANCE

	Agree	Neutral	Disagree	Row Total
Gen Ed	94 57.7 24.7	22 13.5 25.6	47 28.8 34.6	163 27.0
Admin	136 68.7 35.7	23 11.6 26.7	39 19.7 28.7	198 32.8
Spec Ed	151 62.4 39.6	41 16.9 47.7	50 20.7 36.8	242 40.1
Column Total	381 63.2	86 14.3	136 22.6	603 100.0

Chi-Square: 7.97 $p > .05$

TABLE 29A

USE MASTERY LEARNING APPROACH BY GROUP ACCEPTANCE

	Agree	Neutral	Disagree	Row Total
Gen Ed	89	38	35	162
	54.9	23.5	21.6	27.1
	24.8	26.2	37.2	
Admin	127	41	27	195
	65.1	21.0	13.8	32.6
	35.4	28.3	28.7	
Spec Ed	143	66	32	241
	59.3	27.4	13.3	40.3
	39.8	45.5	34.0	
Column	359	145	94	598
Total	60.0	24.2	15.7	100.0

Chi-Square: 8.34 $p > .05$

TABLE 30A

CO-TEACH (GENERAL-SPECIAL EDUCATORS) BY GROUP ACCEPTANCE

	Agree	Neutral	Disagree	Row Total
Gen Ed	115	32	16	163
	70.6	19.6	9.8	27.1
	24.8	38.1	30.2	
Admin	162	23	11	196
	82.7	11.7	5.6	32.6
	34.9	27.4	20.8	
Spec Ed	187	29	26	242
	77.3	12.0	10.7	40.3
	40.3	34.5	49.1	
Column	464	84	53	601
Total	77.2	14.0	8.8	100.0

Chi-Square: 10.30 $p < .05$

TABLE 31A

**ATTEND INSERVICES TO LEARN ABOUT EFFECTIVE PRACTICES FOR SPECIAL LEARNERS
BY GROUP ACCEPTANCE**

	Agree	Neutral	Disagree	Row Total
Gen Ed	135	16	12	163
	82.8	9.8	7.4	27.1
	25.0	37.2	70.6	
Admin	184	11	1	196
	93.9	5.6	.5	32.6
	34.0	25.6	5.9	
Spec Ed	222	16	4	242
	91.7	6.6	1.7	40.3
	41.0	37.2	23.5	
Column	541	43	17	601
Total	90.0	7.2	2.8	100.0

Chi-Square: 20.46 $p < .001$

TABLE 32A

PARTICIPATE IN BUILDING-BASED SUPPORT TEAMS BY GROUP ACCEPTANCE

	Agree	Neutral	Disagree	Row Total
Gen Ed	116	36	11	163
	71.2	22.1	6.7	27.1
	23.0	48.0	50.0	
Admin	172	20	4	196
	87.8	10.2	2.0	32.6
	34.1	26.7	18.2	
Spec Ed	216	19	7	242
	89.3	7.9	2.9	40.3
	42.9	25.3	31.8	
Column	504	75	22	601
Total	83.9	12.5	3.7	100.0

Chi-Square: 27.39 $p < .001$

TABLE 33A

ENGAGE IN PEER COACHING BY GROUP ACCEPTANCE

	Agree	Neutral	Disagree	Row Total
Gen Ed	107 65.6 22.8	35 21.5 38.9	21 12.9 50.0	163 27.1
Admin	171 87.2 36.5	19 9.7 21.1	6 3.1 14.3	196 32.6
Spec Ed	191 78.9 40.7	36 14.9 40.0	15 6.2 35.7	242 40.3
Column Total	469 78.0	90 15.0	42 7.0	601 100.0
Chi-Square:	26.26	p < .001		

TABLE 34A

WORK WITH CONSULTING TEACHER BY GROUP ACCEPTANCE

	Agree	Neutral	Disagree	Row Total
Gen Ed	146 90.1 26.4	9 5.6 27.3	7 4.3 46.7	162 27.0
Admin	184 93.9 33.3	10 5.1 30.3	2 1.0 13.3	196 32.7
Spec Ed	222 91.7 40.2	14 5.8 42.4	6 2.5 40.0	242 40.3
Column Total	552 92.0	33 5.5	15 2.5	600 100.0
Chi-Square:	4.10	p > .05		

TABLE 35A

FUND SERVICES BY BLOCK ENTITLEMENT BY GROUP ACCEPTANCE

	Agree	Neutral	Disagree	Row Total
Gen Ed	71	55	37	163
	43.6	33.7	22.7	27.1
	26.2	31.8	23.6	
Admin	126	37	33	196
	64.3	18.9	16.8	32.6
	46.5	21.4	21.0	
Spec Ed	74	81	87	242
	30.6	33.5	36.0	40.3
	27.3	46.8	55.4	
Column	271	173	157	601
Total	45.1	28.8	26.1	100.0
Chi-Square:	53.47	p < .001		

TABLE 36A

PROVIDE WAIVERS FOR PERFORMANCE BY GROUP ACCEPTANCE

	Agree	Neutral	Disagree	Row Total
Gen Ed	83	57	23	163
	50.9	35.0	14.1	27.1
	24.0	33.3	27.4	
Admin	141	42	13	196
	71.9	21.4	6.6	32.6
	40.8	24.6	15.5	
Spec Ed	122	72	48	242
	50.4	29.8	19.8	40.3
	35.3	42.1	57.1	
Column	346	171	84	601
Total	57.6	28.5	14.0	100.0
Chi-Square:	29.91	p < .001		

TABLE 37A

ASSISTANCE NEEDED TO USE CURRICULUM-BASED ASSESSMENT BY GROUPS

	None	Inserv	Consult	In-Class Assist	Does Not Apply	Row Total
Gen Ed	34	41	49	27	10	161
	21.1	25.5	30.4	16.8	6.2	26.9
	25.2	22.7	28.7	29.3	52.6	
Admin	45	71	52	25	2	195
	23.5	36.4	26.7	12.8	1.0	32.6
	33.3	39.2	30.4	27.2	10.5	
Spec Ed	56	69	70	40	7	242
	23.1	28.5	28.9	16.5	2.9	40.5
	41.5	38.1	40.9	43.5	36.8	
Column Total	135	181	171	92	19	598
	22.6	30.3	28.6	15.4	3.2	100.0
Chi-Square:	13.37	p > .05				

TABLE 38A

ASSISTANCE NEEDED TO TEACH SOCIAL SKILLS BY GROUPS

	None	Inserv	Consult	In-Class Assist	Does Not Apply	Row Total
Gen Ed	39 23.9 34.8	58 35.6 24.9	29 17.8 20.9	30 18.4 28.0	7 4.3 53.8	163 27.0
Admin	39 19.6 34.8	97 48.7 41.6	33 16.6 23.7	29 14.6 27.1	1 .5 7.7	199 32.9
Spec Ed	34 14.0 30.4	78 32.2 33.5	77 31.8 55.4	48 19.8 44.9	5 2.1 38.5	242 40.1
Column Total	112 18.5	233 38.6	139 23.0	107 17.7	13 2.2	604 100.0
Chi-Square:	34.97	p < .001				

TABLE 39A

**ASSISTANCE NEEDED TO REALLOCATE INSTRUCTIONAL TIME ON BASIS
OF STUDENT NEEDS BY GROUPS**

	None	Inserv	Consult	In-Class Assist	Does Not Apply	Row Total
Gen Ed	25 15.3 32.1	28 17.2 23.7	61 37.4 26.6	39 23.9 30.2	10 6.1 20.4	163 27.0
Admin	24 12.1 30.8	52 26.3 44.1	73 36.9 31.9	31 15.7 24.0	18 9.1 36.7	198 32.8
Spec Ed	29 12.0 37.2	38 15.7 32.2	95 39.3 41.5	59 24.4 45.7	21 8.7 42.9	242 40.1
Column Total	78 12.9	118 19.6	229 38.0	129 21.4	49 8.1	603 100.0

Chi-Square: 13.69 $p > .05$

TABLE 40A

ASSISTANCE NEEDED TO USE BEHAVIOR MANAGEMENT STRATEGIES BY GROUPS

	None	Inserv	Consult	In-Class Assist	Does Not Apply	Row Total
Gen Ed	10 6.1 30.3	56 34.4 28.9	54 33.1 23.2	33 20.2 28.7	10 6.1 35.7	163 27.0
Admin	13 6.6 39.4	89 44.9 45.9	60 30.3 25.8	27 13.6 23.5	9 4.5 32.1	198 32.8
Spec Ed	10 4.1 30.3	49 20.2 25.3	119 49.2 51.1	55 22.7 47.8	9 3.7 32.1	242 40.1
Column Total	33 5.5	194 32.2	233 38.6	115 19.1	28 4.6	603 100.0

Chi-Square: 40.24 $p < .001$

TABLE 43A

ASSISTANCE NEEDED TO USE COOPERATIVE LEARNING BY GROUPS

	None	Inserv	Consult	In-Class Assist	Does Not Apply	Row Total
Gen Ed	32 19.6 47.8	48 29.4 19.8	49 30.1 29.3	26 16.0 25.5	8 4.9 32.0	163 27.0
Admin	13 6.6 19.4	104 52.5 43.0	48 24.2 28.7	26 13.1 25.5	7 3.5 28.0	198 32.8
Spec Ed	22 9.1 32.8	90 37.2 37.2	70 28.9 41.9	50 20.7 49.0	10 4.1 40.0	242 40.1
Column Total	67 11.1	242 40.1	167 27.7	102 16.9	25 4.1	603 100.0

Chi-Square: 33.45 $p < .001$

TABLE 44A

ASSISTANCE NEEDED TO USE PEER TUTORING BY GROUPS

	None	Inserv	Consult	In-Class Assist	Does Not Apply	Row Total
Gen Ed	44 27.5 32.8	47 29.4 22.8	34 21.3 20.4	19 11.9 34.5	16 10.0 44.4	160 26.8
Admin	42 21.4 31.3	87 44.4 42.2	43 21.9 25.7	17 8.7 30.9	7 3.6 19.4	196 32.8
Spec Ed	48 19.8 35.8	72 29.8 35.0	90 37.2 53.9	19 7.9 34.5	13 5.4 36.1	242 40.5
Column Total	134 22.4	206 34.4	167 27.9	55 9.2	36 6.0	598 100.0

Chi-Square: 31.64 $p < .001$

TABLE 45A

ASSISTANCE NEEDED TO INCREASE RATES OF TEACHING BEHAVIORS BY GROUPS

	None	Inserv	Consult	In-Class Assist	Does Not Apply	Row Total
Gen Ed	58	55	28	17	4	162
	35.8	34.0	17.3	10.5	2.5	27.1
	44.6	23.1	18.9	25.4	26.7	
Admin	30	101	40	20	3	194
	15.5	52.1	20.6	10.3	1.5	32.4
	23.1	42.4	27.0	29.9	20.0	
Spec Ed	42	82	80	30	8	242
	17.4	33.9	33.1	12.4	3.3	40.5
	32.3	34.5	54.1	44.8	53.3	
Column Total	130	238	148	67	15	598
	21.7	39.8	24.7	11.2	2.5	100.0

Chi-Square: 44.83 $p < .001$

TABLE 46A

ASSISTANCE NEEDED TO GROUP HETEROGENEOUSLY BY GROUPS

	None	Inserv	Consult	In-Class Assist	Does Not Apply	Row Total
Gen Ed	25	45	41	33	18	162
	15.4	27.8	25.3	20.4	11.1	27.1
	28.7	24.6	24.7	32.0	31.0	
Admin	34	75	45	23	16	193
	17.6	38.9	23.3	11.9	8.3	32.3
	39.1	41.0	27.1	22.3	27.6	
Spec Ed	28	63	80	47	24	242
	11.6	26.0	33.1	19.4	9.9	40.5
	32.2	34.4	48.2	45.6	41.4	
Column Total	87	183	166	103	58	597
	14.6	30.7	27.8	17.3	9.7	100.0

Chi-Square: 18.83 $p < .05$

TABLE 47A

ASSISTANCE NEEDED TO INCLUDE SPECIALIZED INSTRUCTION (BRAILLE AND SIGN LANGUAGE) IN GENERAL CLASSROOMS BY GROUPS

	None	Inserv	Consult	In-Class Assist	Does Not Apply	Row Total
Gen Ed	7 4.3 33.3	25 15.4 26.6	31 19.1 20.3	57 35.2 27.9	42 25.9 33.9	162 27.2
Admin	8 4.1 38.1	42 21.8 44.7	48 24.9 31.4	57 29.5 27.9	38 19.7 30.6	193 32.4
Spec Ed	6 2.5 28.6	27 11.2 28.7	74 30.7 48.4	90 37.3 44.1	44 18.3 35.5	241 40.4
Column Total	21 3.5	94 15.8	153 25.7	204 34.2	124 20.8	596 100.0

Chi-Square: 18.83 $p < .05$

TABLE 48A

ASSISTANCE NEEDED TO MAKE AT LEAST THREE INSTRUCTIONAL MODIFICATIONS PRIOR TO REFERRING BY GROUPS

	None	Inserv	Consult	In-Class Assist	Does Not Apply	Row Total
Gen Ed	17 10.6 26.6	34 21.1 25.4	58 36.0 24.9	22 13.7 32.4	30 18.6 31.3	161 27.1
Admin	25 13.0 39.1	55 28.6 41.0	66 34.4 28.3	20 10.4 29.4	26 13.5 27.1	192 32.3
Spec Ed	22 9.1 34.4	45 18.6 33.6	109 45.0 46.8	26 10.7 38.2	40 16.5 41.7	242 40.7
Column Total	64 10.8	134 22.5	233 39.2	68 11.4	96 16.1	595 100.0

Chi-Square: 12.63 $p > .05$

TABLE 49A

**ASSISTANCE NEEDED TO MODIFY INSTRUCTIONAL PRACTICES FOR SPECIAL LEARNERS
USING THE SAME CURRICULUM BY GROUPS**

	None	Inserv	Consult	In-Class Assist	Does Not Apply	Row Total
Gen Ed	17 10.4 47.2	34 20.9 25.6	51 31.3 26.2	41 25.2 24.6	20 12.3 27.8	163 27.0
Admin	8 4.0 22.2	61 30.8 45.9	55 27.8 28.2	49 24.7 29.3	25 12.6 34.7	198 32.8
Spec Ed	11 4.5 30.6	38 15.7 28.6	89 36.8 45.6	77 31.8 46.1	27 11.2 37.5	242 40.1
Column Total	36 6.0	133 22.1	195 32.3	167 27.7	72 11.9	603 100.0

Chi-Square: 24.41 $p < .01$

TABLE 50A

ASSISTANCE NEEDED TO USE STUDENT-PACED ACTIVITIES BY GROUPS

	None	Inserv	Consult	In-Class Assist	Does Not Apply	Row Total
Gen Ed	26 16.0 38.8	19 11.7 15.1	42 25.9 23.7	45 27.8 31.3	30 18.5 34.1	162 26.9
Admin	15 7.6 22.4	61 30.8 48.4	58 29.3 32.8	39 19.7 27.1	25 12.6 28.4	198 32.9
Spec Ed	26 10.7 38.8	46 19.0 36.5	77 31.8 43.5	60 24.8 41.7	33 13.6 37.5	242 40.2
Column Total	67 11.1	126 20.9	177 29.4	144 23.9	88 14.6	602 100.0

Chi-Square: 28.10 $p < .001$

TABLE 51A

ASSISTANCE NEEDED TO USE MASTERY LEARNING BY GROUPS

	None	Inserv	Consult	In-Class Assist	Does Not Apply	Row Total
Gen Ed	29 17.9 39.7	39 24.1 18.8	34 21.0 25.2	29 17.9 31.2	31 19.1 35.6	162 27.2
Admin	18 9.3 24.7	88 45.6 42.5	41 21.2 30.4	22 11.4 23.7	24 12.4 27.6	193 32.4
Spec Ed	26 10.8 35.6	80 33.3 38.6	60 25.0 44.4	42 17.5 45.2	32 13.3 36.8	240 40.3
Column Total	73 12.3	207 34.8	135 22.7	93 15.6	87 14.6	595 100.0
Chi-Square: 25.32 p < .001						

TABLE 52A

PRAGMATIC BARRIERS TO THE REI AS PERCEIVED BY GROUPS

	Money	Class Size	Time for Planning	Facility	Organiz of Support
Gen Ed	15 17.2 48.4	13 14.9 48.1	20 20.7 39.1	10 11.5 34.5	6 6.9 23.1
Admin	11 12.9 35.5	8 8.2 25.9	15 17.6 32.6	8 9.4 27.6	12 14.1 46.2
Spec Ed	5 6.8 16.1	7 9.6 25.9	14 17.8 28.3	11 15.1 37.9	9 11.0 30.8
Column Total	67 11.1	242 40.1	167 27.7	102 16.9	25 4.1

TABLE 52A (Continued)

PRAGMATIC BARRIERS TO THE REI AS PERCEIVED BY GROUPS

	Scheduling	Admin Support	Training	Rules/Reg	Curric Benchmarks	Row Total
Gen Ed	3 3.4 37.5	6 6.9 37.5	4 4.6 26.7	9 10.3 23.7	3 3.4 33.3	89 35.5
Admin	2 2.4 25.0	- - - - - -	10 9.4 53.3	21 24.7 55.3	1 1.2 11.1	88 34.7
Spec Ed	3 4.1 37.5	10 13.7 62.5	4 4.1 20.0	9 11.0 21.1	5 6.8 55.6	77 29.8
Column Total	8 3.1	16 6.3	17 6.7	39 15.4	9 3.5	254 100.0
Chi-Square: 33.39 $p < .05$ Cells with E.F. < 5: 8 of 30						

TABLE 53A

CONCEPTUAL BARRIERS TO THE REI AS PERCEIVED BY GROUPS

	Knowledge	Ownership	Status Quo	Methods	Lack of Commun
Gen Ed	3 7.1 6.5	- - - - - -	4 14.3 20.0	8 21.4 31.6	7 25.0 43.8
Admin	15 26.3 48.4	2 3.5 66.7	9 15.8 45.0	5 8.8 26.3	3 5.3 18.8
Spec Ed	14 23.7 45.2	1 1.7 33.3	7 11.9 35.0	8 13.6 42.1	6 10.2 37.5
Column Total	33 22.2	3 2.1	20 13.5	20 13.5	16 10.9

TABLE 53A (Continued)

CONCEPTUAL BARRIERS TO THE REI AS PERCEIVED BY GROUPS

	Knowl of Roles	Types of Students	Lack of Vision	EI/Behav	Misc	Row Total
Gen Ed	- -	5	- -	5	- -	32
	- -	14.3	- -	17.9	- -	19.4
	- -	15.4	- -	45.5	- -	
Admin	6	10	2	2	3	57
	10.5	17.5	3.5	3.5	5.3	39.6
	50.0	38.5	100.0	18.2	75.0	
Spec Ed	6	12	- -	4	1	59
	10.2	20.3	- -	6.8	1.7	41.0
	50.0	46.2	- -	36.4	25.0	
Column	12	27	2	11	4	148
Total	8.1	18.2	1.4	7.4	2.8	100.0
Chi-Square: 27.69 $p < .05$ Cells with E.F. < 5: 18 of 30						

TABLE 54A

AFFECTIVE BARRIERS TO THE REI AS PERCEIVED BY GROUPS

	Overload	Dumping	Willingness	Attitude	Elitism
Gen Ed	3	2	5	7	1
	10.0	6.7	13.3	23.3	3.3
	20.0	50.0	11.8	12.7	25.0
Admin	4	1	5	13	2
	11.1	2.8	13.9	36.1	5.6
	26.7	25.0	14.7	23.6	50.0
Spec Ed	8	1	25	35	1
	9.5	1.2	29.8	41.7	1.2
	53.3	25.0	73.5	63.6	25.0
Column	15	4	35	55	4
Total	10.0	2.7	22.7	36.7	2.7

TABLE 54A (Continued)

AFFECTIVE BARRIERS TO THE REI AS PERCEIVED BY GROUPS

	Status	Trust	Resent	Protect	Misc	Row Total
Gen Ed	1	- -	7	2	3	31
	3.3	- -	23.3	6.7	10.0	20.0
	10.0	- -	53.8	50.0	60.0	
Admin	3	5	2	- -	1	36
	8.3	13.9	5.6	- -	2.8	24.0
	30.0	83.3	15.4	- -	20.0	
Spec Ed	6	1	4	2	1	84
	7.1	1.2	4.8	2.4	1.2	56.0
	60.0	16.7	30.8	50.0	20.0	
Column Total	10	6	13	4	5	151
	6.7	4.0	8.7	2.7	3.3	100.0
Chi-Square: 40.33 $p < .001$ Cells with E.F. < 5: 21 of 30						

TABLE 55A

FACTORS THAT PROMOTE THE REI AS PERCEIVED BY GROUPS

	Spec Ed Expertise	Admin	Posit of Auth/ Expert Avail	Staff Charact	Innov Efforts
Gen Ed	31	5	11	47	8
	20.3	3.3	7.2	30.7	5.2
	39.2	13.2	29.7	25.4	28.6
Admin	24	11	18	69	6
	12.8	5.9	9.6	36.9	3.2
	30.4	28.9	48.6	37.3	21.4
Spec Ed	24	22	8	69	15
	10.8	9.9	3.6	31.1	6.3
	30.4	28.9	48.6	37.3	21.4
Column Total	79	38	37	185	29
	14.1	6.7	6.5	32.8	5.1

TABLE 55A (Continued)

FACTORS THAT PROMOTE THE REI AS PERCEIVED BY GROUPS

	Perceived Benefits	Proced in Place	Forced Issues	Misc	None Present	Row Total
Gen Ed	2	28	- -	7	15	154
	1.3	18.3	- -	4.6	9.2	27.2
	15.4	34.1	- -	14.9	30.4	
Admin	3	22	2	24	8	187
	1.6	11.8	1.1	12.8	4.3	33.3
	23.1	26.8	28.6	51.1	17.4	
Spec Ed	8	33	5	16	25	225
	3.6	14.4	2.3	7.2	10.8	39.5
	61.5	39.0	71.4	34.0	52.2	
Column	13	83	7	47	47	566
Total	2.3	14.7	1.2	8.3	8.3	100.0
Chi-Square:	43.20	p < .001	Cells with E.F. < 5: 5 of 30			

APPENDIX B

Dear Educator:

I need your assistance! You were selected for participation through a random sampling of general and special educators and administrators in the state of Michigan. Your assistance in this study is voluntary; I hope, however, that you will choose to participate by completing the enclosed questionnaire.

I am conducting a survey to find out what teachers and administrators in Michigan think about the Regular Education Initiative (REI). What is the REI?

- *a movement initiated at the federal level and supported by researchers in the academic community*
- *merger of general, special, and compensatory education services into a unified service delivery system*
- *instruction of special needs learners (e.g., students with learning and/or behavioral difficulties, students eligible for special education) mainly in general education classrooms.*

Although all of the "specifics" of the REI have not been worked out yet, one thing becomes clear. The REI, if implemented, will have a significant impact upon what **all** teachers and administrators do with regard to special needs learners. Therefore, I would like to know what **you** think about many of the REI proposals.

Please be assured that all information will be handled with the utmost *confidentiality*. There will be no need to identify yourself or your school system. Data will be coded blindly and reported as aggregate scores. The code on the response sheet will facilitate a follow-up procedure. When collection of response sheets is completed, this code will be torn off.

Please return *only* the response sheet (NCR scanning sheet) and last page of questionnaire by April 7. A stamped self-addressed envelope is enclosed for your ease in replying. I will be glad to share the results of this study. If you have any questions or desire the results, please contact me at (517) 355-3036.

Your contribution to this study is most appreciated and valued.

Jane C. Davis
Doctoral Candidate Michigan State University

(Endorsed by Special Education Services, Michigan Department of Education)

SURVEY TO ASSESS PERCEPTIONS TOWARD INTEGRATIVE PROGRAMMING
BETWEEN SPECIAL AND GENERAL EDUCATION (REI)

Instructions: For this survey please use the enclosed NCR scanning sheet.

- 1. Use a #2 pencil to record your response on the answer sheet.*
 - 2. Mark only ONE response to each item.*
 - 3. When asked to skip a series of items, leave the answer sheet for those item(s) blank.*
-

Background Information

1. Please indicate your present assignment or based location:

- (1) Preschool
- (2) Elementary
- (3) Middle/Junior High School
- (4) High School
- (5) Other (e.g., intermediate or district office/center)

2. Which best describes your current position?

- (1) General educator (Grades K-12)
- (2) Administrator
- (3) Special educator (e.g., LD, EMI, SLI, SXI)
- (4) Support personnel for special education (e.g., counselor, Chapter I)

If you indicated (1), (2) or (4) above, please go to item 4.

If you indicated (3) above, please go to item 3.

3. Your role as a special educator:

- (1) Resource room teacher (students served 50% or less of day)
- (2) Resource room teacher + consultant
- (3) Consultant only
- (4) Self-contained teacher (students served more than 50% of day)
- (5) Other

4. Indicate years of experience (if any) as a general educator, K-12:

- (1) 0
- (2) 1-5
- (3) 6-10
- (4) 11-15
- (5) 16+

5. Indicate years of experience (if any) as a special educator or support professional to special education (e.g., psychologist, social worker):

- (1) 0
- (2) 1-5
- (3) 6-10
- (4) 11-15
- (5) 16+

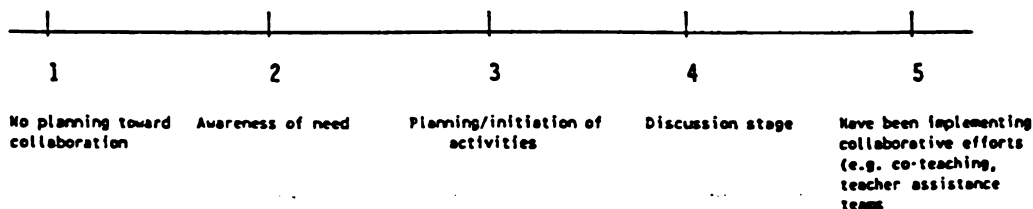
6. I have taken approximately the following number of courses/in-services/workshops regarding the teaching of special needs children:

- (1) 0
- (2) 1-5
- (3) 6-10
- (4) 11-15
- (5) 16+

7. Indicate the highest educational level completed:

- (1) Bachelors
- (2) Masters
- (3) Specialist
- (4) Ph.D.

8. On this continuum, identify the extent that collaborative efforts between general and special education are taking place in your building/district. On the response sheet, mark the number along the continuum that most approximates your current situation:



9. Are you currently participating in collaborative efforts between general and special education?

- (1) No

If yes, how satisfied are you with your participation?

- (2) Very satisfied
- (3) Satisfied
- (4) Neutral
- (5) Dissatisfied
- (6) Very satisfied

Section I: GOALS OF THE REI

These items concern the goals of the Regular Education Initiative (REI); that is, the merger of general, special and compensatory education into a unified instructional delivery system.

To what extent do you agree with the GOAL to ...

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
10. Integrate "special learners" in general education classrooms for most, if not all, of the time.	1	2	3	4	5
11. Provide additional assistance to special learners without labeling them as "impaired."	1	2	3	4	5
12. Increase collaborative teaching arrangements among general and special educators.	1	2	3	4	5
13. Increase instructional time for special learners by keeping them in general education settings (e.g., disruption, lost time in transition).	1	2	3	4	5
14. Coordinate curricular activities between general and special education classrooms.	1	2	3	4	5
15. "Pool" instructional resources (e.g., money, personnel) from separate programs (e.g., Chapter I, special, general education) into one unified delivery system.	1	2	3	4	5
16. Increase teachers' ability to instruct diverse learners.	1	2	3	4	5
17. Develop administrative policies that provide incentives for general educators to serve special needs learners.	1	2	3	4	5
18. Reduce social stigma by providing increased opportunity for social interactions in general education classrooms.	1	2	3	4	5
19. Empower principals to control all programs and resources at building level.	1	2	3	4	5
20. Use instructional methods effective for general education with special learners.	1	2	3	4	5
21. Use instructional methods effective for special education with special learners in general education classrooms.	1	2	3	4	5
22. Spend more time altering instructional practices to teach special learners than assessing and conducting meetings to label them.	1	2	3	4	5
23. Negotiate "new" roles among staff (e.g., specialist as co-teacher) for sharing responsibility for special learners.	1	2	3	4	5

Section II. PROCEDURES OF THE REI

Each item in this section has two parts, A and B.

PART A: Indicate the degree of acceptability with the procedures that implement the REI.

PART B: Would technical assistance be needed to do the following procedures? Indicate the level of assistance that would be needed if the procedure was implemented in your class or building.

Levels of Assistance

- A. No assistance necessary
- B. Short-term assistance such as workshops, inservices
- C. Individual who mainly consults on as-needed basis
- D. Team that provides indirect service by consultation
- E. Formalized support team that provides direct, in-class help
- J. Doesn't apply - dislike procedure and do not want help of any kind



How acceptable is it to ... and what level of assistance is needed to ...

Teach social skills in general classrooms..	24. 1 2 3 4 5	25. A B C D E J
Use computers to assist instruction	26. 1 2 3 4 5	27. A B C D E J
Reallocate instructional time on the basis of student needs	28. 1 2 3 4 5	29. A B C D E J
Use behavior management strategies for special learners in general classrooms...	30. 1 2 3 4 5	31. A B C D E J
Use the same curriculum for special learners but modify instructional practices in general classrooms	32. 1 2 3 4 5	33. A B C D E J
Use student-paced activities (i.e., students working individually at their own rate) in general classrooms	34. 1 2 3 4 5	35. A B C D E J
Use cooperative learning techniques (i.e., students working together toward group and individual goal) in general classes..	36. 1 2 3 4 5	37. A B C D E J

Provide for peer tutoring (i.e., one student tutoring another) in general classes	38. 1 2 3 4 5	39. A B C D E J
Teach cognitive strategies (e.g., self-monitoring, self-questioning) in general classrooms	40. 1 2 3 4 5	41. A B C D E J
Increase rates of particular teaching behaviors (e.g., using praise, checking responses, providing directives).....	42. 1 2 3 4 5	43. A B C D E J
Include "specialized instruction" such as using braille and sign language within general education classroom	44. 1 2 3 4 5	45. A B C D E J
Use on-going monitoring of student performance in curriculum materials	46. 1 2 3 4 5	47. A B C D E J
Provide for highly structured, teacher-directed, mastery learning approach	48. 1 2 3 4 5	49. A B C D E J
Provide instruction via small <u>heterogeneous</u> learning groups	50. 1 2 3 4 5	51. A B C D E J
Make at least 3 instructional modifications prior to formal diagnostic testing	52. 1 2 3 4 5	53. A B C D E J

* * The following items do not have Part B * *

Work with consulting teacher	54. 1 2 3 4 5
Co-teach (general-special educators)	55. 1 2 3 4 5
Participate in building-based support teams for instructional assistance	56. 1 2 3 4 5
Engage in peer coaching (general-general educators; general-special educators) ..	57. 1 2 3 4 5
Attend inservices, workshops to learn about effective practices for special learners.	58. 1 2 3 4 5
Fund services by block entitlement (e.g., one sum of money for all programs).....	59. 1 2 3 4 5
Provide "waivers for performance" (e.g., waiving special education regulations while trial efforts are piloted)	60. 1 2 3 4 5

61. In general, do you personally want to see REI efforts implemented?

1	2	3	4	5
Not at all		Maybe		Definitely

Section IV. FACTORS IMPORTANT TO THE REALIZATION OF THE REI

Please respond directly on this page to the following two items:

62. Name ONE factor in your building/district which you feel inhibits or restricts integrative efforts between special and general education:

63. Name ONE factor in your building/district which you feel promotes integrative efforts between special and general education:

Thank you for taking the time to complete this questionnaire. If you would not mind my calling you to learn more about how educators feel toward the REI, please complete the enclosed post card.

PLEASE ENCLOSE YOUR RESPONSE SHEET AND THIS PAGE ONLY

IN THE SELF-ADDRESSED STAMPED ENVELOPE

I will be conducting a follow-up to this survey. If you do not mind my calling you, please write your name and telephone number.

(Can be first name) _____ Tel. No. _____

A good time to call is _____

Of course your name will not be associated with any report of research findings.

Thank you,
Jane Davis

Hi!

About a week ago, I sent you a survey regarding the Regular Education Initiative.

Your response is very important. It will help inform policymakers how you feel toward this controversial issue.

PLEASE ... Don't Forget!

If you have questions, contact me:
(517) 355-3036.

Thank you for responding,
Jane Davis

Dear Fellow Educator:

You are probably overloaded with many things to do right now ... I understand! Please consider this request.

I missed hearing from you. Perhaps you mislaid the previous questionnaire or it was torn by the cat. Another questionnaire is enclosed with the hope that you will return it in the stamped envelope.

Know that your response does matter. Too often, critical decisions are made in education without adequate input from those most directly affected by such decisions. That could happen as well with the Regular Education Initiative. To prevent this, please make your response known.

If you have any questions about the survey, please contact me: (517) 355-3036.

Thank you for responding - others will benefit from your perceptions and experience.

Yours very sincerely,



Jane C. Davis
Doctoral Candidate
Michigan State University

MICHIGAN STATE UNIVERSITY

UNIVERSITY COMMITTEE ON RESEARCH INVOLVING
HUMAN SUBJECTS (UCRIHS)
206 BERKELEY HALL
(517) 353-9738

EAST LANSING • MICHIGAN • 48824-1111

March 10, 1989

IRB# 89-120

Jane C. Davis
1544 E Spartan Village
East Lansing, MI 48823

Dear Ms. Davis:

RE: "PERCEPTIONS OF GENERAL AND SPECIAL EDUCATORS TOWARD THE
ACCEPTABILITY AND FEASIBILITY OF GOALS AND PROCEDURES OF
THE REGULAR EDUCATION INITIATIVE IRB# 89-120"

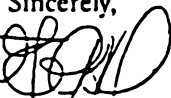
The above project is exempt from full UCRIHS review. The proposed research protocol has been reviewed by another committee member. The rights and welfare of human subjects appear to be protected and you have approval to conduct the research.

You are reminded that UCRIHS approval is valid for one calendar year. If you plan to continue this project beyond one year, please make provisions for obtaining appropriate UCRIHS approval one month prior to March 10, 1990.

Any changes in procedures involving human subjects must be reviewed by UCRIHS prior to initiation of the change. UCRIHS must also be notified promptly of any problems (unexpected side effects, complaints, etc.) involving human subjects during the course of the work.

Thank you for bringing this project to my attention. If I can be of any future help, please do not hesitate to let me know.

Sincerely,



John K. Hudzik, Ph.D.
Chair, UCRIHS

JKH/sar

cc: D. Burke

LIST OF REFERENCES

LIST OF REFERENCES

- Abidin, R.R. (1975). Negative effects of behavioral consultations: "I know I ought to, but it hurts too much." Journal of School Psychology, 13, 51-57.
- Affleck, J.Q., Madge, S., Adams, A., & Lowenbraun, S. (1988). Integrated classroom versus resource model: Academic viability and effectiveness. Exceptional Children, 54, 339-348.
- Aiello, B. (1979). Teachers ask about handicapped children and the new laws. Education Unlimited, 1, 33-36.
- Alexander, C., & Strain, P.S. (1978). A review of educators' attitudes towards handicapped children and the concept of mainstreaming. Psychology in the Schools, 15, 390-396.
- Alfonso, R.J., & Goldsberry, L. (1982). Colleagueship in supervision. In T.J. Sergiovanni (Ed.). Supervision of teaching. Alexandria, VA: Association for Supervision and Curriculum Development.
- Algozzine, B., Christenson, S., & Ysseldyke, J.E. (1982). Probabilities associated with the referral to placement process. Teacher Education and Special Education, 5, 19-23.
- Algozzine, B., & Curran, T.J. (1979). Teachers' perceptions of children's school success as a function of their behavioral tolerances. Journal of Education Research, 72, 344-347.
- Algozzine, B., & Maheady, L. (Eds.). (1986). In search of excellence: Instruction that works in special education classrooms. [Special Issue]. Exceptional Children, 52.
- Algozzine, B., & Maheady, L. (1986a). When all else fails, teach! Exceptional Children, 52, 487-488.
- Algozzine, B., Ysseldyke, J.E., & Hill, C. (1982). Psychoeducational decision making as a function of the number of devices administered. Psychology in the Schools, 19, 328-334.
- Allen-Meares, P., & Pugach, M. (1982). Facilitating interdisciplinary collaboration on behalf of handicapped children and youth. Teacher Education and Special Education, 5, 30-36.

- Allport, G.W. (1935). Attitudes. In C.M. Murchison (Ed.). Handbook of social psychology. Worchester, MA: Clark University Press.
- Allport, G.W. (1968). The nature of prejudice. Cambridge, MA: Addison-Wesley.
- Aloia, G.F., & Aloia, S.D. (1982). Variations in expectations of the mainstreamed handicapped child by regular and special education teachers. Journal for Special Educators, 19, 13-19.
- Ammer, J.J. (1984). The mechanics of mainstreaming: Considering the regular educators' perspective. Remedial and Special Education, 5, 15-20.
- Anderson-Inman, L. (1986). Bridging the gap: Student-centered strategies for promoting the transfer of learning. Exceptional Children, 52, 562-572.
- Arends, R.I. (1982). The meaning of administrative support. Educational Administration Quarterly, 18, 79-92.
- Argyris, C., & Schon, D. (1979). Organizational learning: A theory of action perspectives. Reading, MA: Addison-Wesley.
- Arter, J.A., & Jenkins, J.R. (1979). Differential diagnosis-prescriptive teaching: A critical appraisal. Review of Educational Research, 49, 517-555.
- Asch, S.E. (1952). Social psychology. Englewood Cliffs, NJ: Prentice Hall.
- Astley, W.C., & Van de Ver, A.H. (1983). Central perspectives and debates in organizational theory. Administrative Science Quarterly, 28, 245-273.
- Bacharach, S.B. (1983). Strategies choice and collective action: Organizational determinants of teachers' militancy. Ithaca, NY: School of Industrial and Labor Relations, Cornell University, State University of New York.
- Baldrige, J.V., & Deal, T. (Eds.) (1983). The dynamics of organizing change in education. Berkeley, CA: McCutchan.
- Barngrover, E.A. (1975). A study of educators' preferences in special education programs. Exceptional Children, 37, 754-755.
- Bauer, H. (1975). The resource teacher - A teacher consultant. Academic Therapy, 10, 299-304.

- Bauwens, J., Hourcade, J., & Friend, M. (1989). Cooperative teaching: A model for general and special integration. Remedial and Special Education, 10, 17-22.
- Bem, D.J. (1970). Beliefs, attitudes, and human affairs. Belmont, CA: Brooks/Cole.
- Bendix, R. (1960). Max Weber: An intellectual portrait. Garden City, NJ: Doubleday.
- Bensky, J.M., Shaw, S.F., Grouse, A.S., Bates, H., Dixon, B., & Beane, W.E. (1980). Public Law 94-142 and stress: A problem for educators. Exceptional Children, 47, 24-29.
- Berdie, D.R., & Anderson, J.F. (1974). Questionnaires: Design and use. Metuchen, NJ: Scarecrow Press.
- Bergen, J.R., & Tombari, M.L. (1976). Consultant skill and efficiency and the implementation and outcomes of consultation. Journal of School Psychology, 14, 3-13.
- Bickel, W.E., & Bickel, D.D. (1986). Effective schools, classrooms, and instruction: Implications for special education. Exceptional Children, 52, 489-500.
- Biklen, D. (1987). In pursuit of integration. In M.S. Berres & P. Knoblock (Eds.). Program models for mainstreaming: Integrating students with moderate to severe disabilities (pp. 19-39). Rockville, MD: Aspen.
- Blackhurst, A.E., Bott, D.A., & Cross, D.P. (1987). Noncategorical special education personnel preparation. In M.C. Wang, M.C. Reynolds, & H.J. Walberg (Eds.). Handbook of special education: Research and practice (Vol. 1, pp. 313-330). New York: Pergamon.
- Blumberg, A. (1974). Supervisors and teachers: A private cold war. Berkeley, CA: McCutchan.
- Bogdan, R. (1983). "Does Mainstreaming work?" Is a Silly Question. Phi Delta Kappan, 64, 427-428.
- Bogdan, R. (1986). The sociology of special education. In R.J. Morris & B. Blatt (Eds.). Special education research and trends (pp. 344-359). New York: Pergamon.
- Bogdan, R. & Kugelmass, J. (1984). Case studies of mainstreaming: A symbolic interactionist approach to special schooling. In L. Barton & S. Tomlinson (Eds.). Special education and social interests (pp. 173-191). New York: Nichols.
- Boleman, L.G., & Deal, T.E. (1984). Modern approaches to understanding and managing organizations. San Francisco: Jossey-Bass.

- Borg, W.R., & Gall, M.D. (1983). Educational research: An introduction. New York: Longman.
- Boucher, C.R. (1981). Teachers' decision about mainstreaming. Education Unlimited, 3, 9-11.
- Brim, O.G. (1966). Socialization through the life cycle. In O.G. Brim & S. Wheeler (Eds.). Socialization after childhood: Two essays. New York: Wiley & Sons.
- Brooks, M. (1982). School organizational renewal. Educational Forum, 47, 37-46.
- Buchmann, M.. (1985). Improving education by talking: Argument or conversation? Teachers College Record, 86, 441-453.
- Budoff, M. (1972). Providing special education without special classes. Journal of School Psychology, 10, 199-205.
- Burrell, G., & Morgan, G. (1979). Sociological paradigms and organizational behavior. Exeter, NH: Heinemann.
- Burrello, L.C., & Sage, D.D. (1979). Leadership and change in special education. Englewood Cliffs, NJ: Prentice-Hall.
- Butler, J.A., & Singer, J.D. (1987). The Education for All Children Handicapped Act: Schools as agents of social reform. Harvard Educational Review, 57, 125-152.
- Campbell, D.T. (1963). Social attitudes and other acquired behavioral dispositions. In S. Koch (Ed.). Psychology: A study of a science. New York: McGraw-Hill.
- Carlberg, C., & Kavale, K. (1980). The efficacy of special versus regular class placement for exceptional children: A meta-analysis. The Journal of Special Education, 14, 295-309.
- Carnine, D. (1989). Teaching complex content to learning disabled students: The role of technology. Exceptional Children, 55, 524-533.
- Carpenter, R.L. (1980). Informal consultation and special education teachers. Education Unlimited, 2, 14-17.
- Cegelka, W.J., & Tyler, J.L. (1970). The efficacy of special class placement for the mentally retarded in proper perspectives. Training School Bulletin, 67, 33-68.
- Center Y., & Ward, J. (1984). Integration of mildly handicapped cerebral palsied children into regular schools. The Exceptional Child, 31, 104-113.

- Center Y., Ward, J., Parmenter, T., & Nash, R. (1985). Principals' attitudes towards the integration of disabled children into regular schools. The Exceptional Child, 32, 149-161.
- Chadwick, B.A., Bahr, H.M., & Albrecht, S.L. (1984). Social science research methods. Englewood Cliffs, NJ: Prentice-Hall.
- Chalfant, J.C., Pysh, M.U., & Moultrie, M. (1979). Teacher assistance team: A model for within building problem solving. Learning Disabilities Quarterly, 2, 85-86.
- Cherniss, C. (1980). Staff burnout: Job stress in the human services. Beverly Hills, CA: Sage.
- Childs, R.E. (1981). Perception of mainstreaming by regular classroom teachers who teach mainstreamed educable mentally students in the public schools. Education and Training of the Mentally Retarded, 16, 225-227.
- Clark, C.M., & Peterson, P.L. (1986). Teachers' thought processes. In M.C. Wittrock (Eds.). Handbook of research on teaching. (pp. 255-296). New York: MacMillan.
- Conway, J. A. (1985). The myth, mystery, and mastery of participative decision making in education. Educational Administration Quarterly, 3, 11-40.
- Copeland, W.D. (1978). Processes mediating the relationship between cooperating-teacher behavior and student-teacher classroom performance. Journal of Educational Psychology, 70, 95-100.
- Corey, S.M. (1953). Action research to improve school practices. New York: Teachers College Press, Columbia University.
- Cost of educating special students \$6,335 per pupil. (1988, December, 22). Washington Post, A 19.
- Cox, H., & Wood, J.R. (1980). Organizational structure and professional alienation: The case of public school teachers. Peabody Journal of Education, 58, 1-6.
- Cross, K.P. (1984). The rising tide of school reform reports. Phi Delta Kappan, 65, 119-123.
- Cyphert, F. (1981). Administrative leadership in inservice. Monograph, Columbus: Ohio State University.
- Davis, W.E. (1989). The Regular Education Initiative debate: Its promises and problems. Exceptional Children, 55, 440-447.

- Dawes, R.M. (1984). Approaches to the measurement of attitude. In R.J. Jones (Ed.). Attitudes and attitude change in special education. Reston, VA: Council for Exceptional Children.
- Dawes, R.M., & Smith, T.L. (1985). Attitude and opinion measurement. In G. Lindzey & E. Aronson (Eds.). Handbook of social psychology (Vol. I). New York: Random House.
- Deal, T.E., & Kennedy, A. (1982). Corporate cultures: The rites and rituals of corporate logic. Reading, MA: Addison-Wesley.
- Delquadri, J., Greenwood, C., Wharton, D., Carter, J.J., & Hall, R.V. (1986). Classwide peer tutoring. Exceptional Children, 52, 535-542.
- Deshler, D.D., & Schumaker, J.B. (1986). Learning strategies: An instructional alternative to low-achieving adolescents. Exceptional Children, 52, 583-590.
- Diebold, M.H., & Trentham, L.L. (1987). Special educator predictions of regular class teacher attitudes concerning mainstreaming. In D.S. Marozas & D.C. May (Eds.). Issues and practices in special education. New York: Longman.
- Dillman, D.A. (1983). Mail and other self-administered questionnaires. In P.H. Rossi & J.D. Wright (Eds.). Handbook of survey research. New York: Academic Press.
- Dixon, B., Shaw, S.F., & Bensky, J.M. (1980). Administrators' role in fostering the mental health of special services personnel. Exceptional Children, 47, 30-36.
- Dodd, J. (1980). Mainstreaming. English Journal, 69, 51-55.
- Donaldson, J. (1980). Changing attitudes toward handicapped persons: A review and analysis of research. Exceptional Children, 46, 504-514.
- Doris, S. & Brown, R. (1980). Toleration of maladaptive classroom behaviors by regular and special educators. Fresno, CA: California State University. (ERIC Document Reproduction Service No. ED 211 456).
- Dublinske, S. (1978). PL 94-142: Developing the individualized education program (IEP). American Speech and Hearing Association, 20, 380-397.
- Dunn, L.M. (1968). Special education for the mildly retarded-Is much of it justifiable? Exceptional Children, 35, 5-22.
- Dybwad, G. (1980). Avoiding misconceptions of mainstreaming, the least restrictive environment and normalization. Exceptional Children, 47, 85-88.

- Edgar, E., & Levine, P. (1987). An update of the Washington State follow-along studies. Unpublished manuscript, working paper of the Networking and Evaluation Team, CDMRC, University of Washington, Seattle.
- Edmonds, R. (1979). Effective schools for the urban poor. Educational Leadership, 37, 15-24.
- Educational Advocates Coalition. (1980). Federal compliance activities to implement the Education for All Handicapped Children Act (PL 94-142). April 16.
- Elizur, D. (1970). Adapting to innovation. Jerusalem: Jerusalem Academic Press.
- Engelmann, S., & Carnine, D. (1982). Theory of instruction: Principles and applications. New York: Irvington.
- Epps, S., & Tindall, G. (1987). The effectiveness of differential programming in serving students with mild handicaps: Placement options and instructional planning. In M.C. Wang, M.C. Reynolds, and H.J. Walberg (Eds.). Handbook on Special Education: Research and Practice (Vol. 1, pp. 213-252). New York: Pergamon.
- Evans, S. (1980). The consultant role of the resource teacher. Exceptional Teacher, 46, 402-405.
- Feidman, D., & Altman, R. (1985). Conceptual systems and teacher attitudes toward placement of mildly retarded students. American Journal of Mental Deficiency, 9, 345-351.
- Feiman-Nemser, S., & Floden, R.E. (1986). The cultures of teaching. In M.C. Wittrock (Ed.). Handbook of research on teaching. New York: Macmillan.
- Festinger, L. (1957). A theory of cognitive dissonance. Evanston, IL: Row, Peterson.
- Fine, M.J. (1967). Attitudes of regular and special class teachers toward the educable mentally retarded child. Exceptional Children, 33, 429-430.
- Fine, M., & Asch, A. (1988). Disability beyond stigma: Social interaction, discrimination, and activism. Journal of Social Issues, 44, 3-22.
- Firestone, W.A. (1979). Butte-angels camp: Conflict and transformation. In R.E. Herriott & N. Gross (Eds.). The dynamics of planned educational change: Case studies and analyses. Berkeley, CA: McCutchan.

- Fishbein, J., & Ajzen, I. (1975). Belief, attitude, intention, and behavior. Reading, MA: Addison-Wesley.
- Flynn, J., Gack, R., & Sundean, D. (1978). Are classroom teachers prepared for mainstreaming? Phi Delta Kappan, 59, 562.
- Forness, S.R., & Kavale, K.A. (1984). Education of the mentally retarded: A note on policy. Education and Training of the Mentally Retarded, 19, 239-245.
- Foster, W. (1986). Paradigms and promises. Buffalo, NY: Prometheus.
- Friend, M. (1984). Consultation skills for resource teachers. Learning Disability Quarterly, 7, 246-250.
- Frith, G.H., & Lindsey, J.D. (1981). The effects of inservice training on regular educators' attitudes toward handicapped students. Education Unlimited, 3, 29-31.
- Fullan, M. (1982). The meaning of educational change. New York: Teachers College, Columbia University Press.
- Furey, E.M., & Straunch, J.D. (1983). The perception of teacher skills and knowledge by regular and special educators of mildly handicapped students. Teacher Education and Special Education, 6, 46-50.
- Galagan, J.E. (1985). Psychoeducational testing: Turnout the lights, the party's over. Exceptional Children, 52, 288-299.
- Gallagher, J. (1976). Organizational needs for quality special education. In M.C. Reynolds, (Ed.). Future of education for exceptional students - emerging structures. Minneapolis, MN: National Support Systems Project.
- Gans, K.D. (1985). Regular and special educators - handicap integration attitudes and implications for consultants. Teacher Education and Special Education, 8, 188-197.
- Gans, K.D. (1986). Life values, regular educators, and special educators. Teacher Education and Special Education, 9, 71-76.
- Gans, K.D. (1987). Willingness of regular and special educators to teach students with handicaps. Exceptional Children, 54, 41-45.
- Gartner, A., & Lipsky, D.K. (1987). Beyond special education: Toward a quality system for all students. Harvard Educational Review, 57, 367-395.
- Gear, G.H., & Gable, R.K. (1979). Educating handicapped children in the regular classroom: Needs assessments in teacher preparation. Journal of Research and Development in Education, 12, 36-45.

- Gerber, M.M. (1984). The sixth annual report to Congress on PL 94-142. Is Congress getting the whole story? Exceptional Children, 51, 209-224.
- Gerber, M.M., & Semmel, M. I. (1984). Teachers as imperfect tests: Reconceptualizing the referral process. Educational Psychologist, 19, 137-148.
- Gersten, R., Walker, H., & Darch, C. (1988). Relationship between teachers' effectiveness and their tolerance for handicapped students. Exceptional Children, 54, 433-438.
- Gickling, E.R., & Theobald, J.T. (1975). Mainstreaming: Affect or effect. Journal of Special Education, 9, 317-320.
- Glass, G.V. (1983). Effectiveness of special education. Policy Studies Review, 2, 65-74.
- Glass, R.M., & Meckler, R.S. (1972). Preparing elementary teachers to instruct mildly handicapped children in regular classrooms. Exceptional Children, 39, 152-156.
- Glatthorn, A.A. (1987). Cooperative professional development: Peer-oriented options for teacher growth. Educational Leadership, 45, 31-35.
- Goddard, H.H. (1912). The Kallikak family: A study of the heredity of feeble-mindedness. New York: Macmillan.
- Goldberg, I.I., & Cruickshank, W.M. (1958). The trainable - Are they the public schools' responsibility? National Education Association Journal, 47, 622.
- Goldsberry, L.F. (1984). Reality - Really? Educational Leadership, 41, 10.
- Goldsberry, L.F. (1986, April). Colleague consultation: Another case of fools rush in. Paper presented at the annual meeting of the American Educational Research Association, San Francisco, CA.
- Good, T.L. (1981). Teacher expectations and student perceptions: A decade of research. Educational Leadership, 38, 415-421.
- Goodlad, J.I. (1983). A place called school: Prospects for the future. New York: McGraw-Hill.
- Goodman, L. (1985). The effective schools movement and special education. Teaching Exceptional Children, 17, 102-105.
- Gorman, C. (1988, December 19). The literacy gap. Time, pp. 56-57.

- Graden, J., Casey, A., & Christenson, S. (1985). Implementing a prereferral intervention system: Part I, the model. Exceptional Children, 51, 377-384.
- Graham, S., Hudson, F., Burdo, N., & Carpenter, D. (1980). Education personnel's perception of mainstreaming and resource room effectiveness. Psychology in the Schools, 17, 128-134.
- Greenburg, D. (1987). A special educator's perspective in interfacing special and general education: A review for administrators. Reston, VA: Council for Exceptional Children.
- Griffiths, D.E. (Ed.). (1964). Behavioral science and educational administration. (63rd Yearbook of the National Society for the Study of Education, Pt. 2). Chicago: University of Chicago Press.
- Gross, B. (1964). The managing of organizations: Vol. 1. New York: Macmillan.
- Guess, D., & Thompson, B. (In press). Preparation of personnel to educate students with severe and multiple disabilities: A time for change? In L. Meyer, C. Peck, & L. Brown (Eds.). Critical issues in the lives of people with severe disabilities.
- Guskey, T.R. (1986). Staff development and the process of teacher change. Educational Researcher, 17, 5-12.
- Guskin, A.E., & Guskin, S.L. (1970). A social psychology of education. Reading, MA: Addison-Wesley.
- Gutkin, T.B., & Ajchenbaum, M. (1984). Teachers' perceptions of control and preferences for consultative services. Professional Psychology: Research and Practice, 15, 565-570.
- Haber, S. (1964). Efficiency and uplift: Scientific management in the Progressive Era 1890-1920. Chicago: University of Chicago Press.
- Hagerty, G.J., & Abramson, M. (1987). Impediments to implementing national policy change for mildly handicapped students. Exceptional Children, 53, 315-324.
- Haight, S.L. (1984). Special education teacher consultant: Idealism versus realism. Exceptional Children, 50, 507-515.
- Hall, G.E., Wallace, R.C., & Dossett, W.A. (1973). A developmental conceptualization of the adoption process within educational institutions. Austin: Research and Development Center for Teacher Education, University of Texas.
- Hallahan, D.P., & Kauffman, J.M. (1978). Exceptional children: Introduction to special education. Englewood Cliffs, NJ: Prentice-Hall.

- Hallahan, D.P., Keller, C.E., & Ball, D.W. (1986). A comparison of prevalence rate variability from state to state for each of the categories of special education. Remedial and Special Education, 7, 8-14.
- Hallahan, D.P., Keller, C.E., McKinney, J.D., Lloyd, J.W., & Bryan, T. (1988). Examining the research base of the Regular Education Initiative. Journal of Learning Disabilities, 21, 29-35.
- Havelock, R.G. (1973). The change agent's guide to innovation in education. Englewood Cliffs, NJ: Educational Technology Publications.
- Heller, H.W., & Schilit, J. (1987). The Regular Education Initiative: A concerned response. Focus on Exceptional Children, 20, 1-6.
- Heller, K.A., Holtzman, W.H., & Messick, S. (Eds.). (1982). Placing children in special education: A strategy for equity. Washington, DC: National Academy Press.
- Hentz, P.B. (1988). The Regular Education Initiative-CON. Paper presented at the meeting of the Fifth Annual Pacific Northwest Institute on Special Education and the Law, Institute for the Study of Education Policy, College of Education, University of Washington, Seattle.
- Herriott, R.E., & Firestone, W.A. (1983). Two images of schools as organizations: A replication and elaboration. Philadelphia: Research for Better Schools, Inc.
- Hersh, R., & Walker, H.M. (1983). Great expectations: Making schools objective for all children. Policy Studies Reviews, 2, 147-188.
- Hirshoren, A., & Burton, T. (1979). Willingness of regular teachers to participate in mainstreaming handicapped children. Journal of Research and Development in Education, 12, 93-100.
- Hobbs, N. (1980). An ecologically oriented service-based system for the classification of handicapped children. In E. Salzinger, J. Antrobus, & J. Glick (Eds.). The ecosystem of the "risk" child (pp. 271-290). New York: Academic Press.
- Hocutt, A.M., Cox, J.L., & Pelosi, J. (1984). A policy-oriented study of special education service delivery system (Vol. I). (RTI Rep. No. RTI/2706-06/OIFR). Research Triangle Park; NC: Research Triangle Institute.
- Hodgkinson, H.L. (1985). All one system: Demographics of education-Kindergarten through graduate school. Washington, D.C.: Institute for Educational Leadership, Inc.

- Hoffman, E. (1975). The American public schools and the deviant child: The origins of their involvement. Journal of Special Education, 9, 415-523.
- Hops, H., Beickel, S.L., & Walker, H.M. (1976). Contingencies for Learning Academic and Social Skills (CLASS): Manual for consultants. Eugene, OR: Center at Oregon for Research in the Behavioral Education of the Handicapped, University of Oregon.
- Howey, K.R., Matthes, W.A., & Zimpher, N.L. (1987). Issues and problems in staff development. Elmhurst, IL: North Central Regional Educational Laboratory.
- Howey, K.R., & Vaughan, J.C. (1983). Current patterns of staff development. In G.A. Griffin (Ed.). Staff development: The eighty-second yearbook of the National Society for the Study of Education (pp. 92-117). Chicago: The University of Chicago Press.
- Hudson, F., Graham, S., & Warner, M. (1979). Mainstreaming: An examination of the attitudes and needs of regular classroom teachers. Learning Disability Quarterly, 2, 58-62.
- Hutson, H., & Silvernail, D.L. (1980). Inservice education: A perceptual check. Education Unlimited, 2, 8-9.
- Idol, L. (1986). Collaborative school consultation. Reston, VA: The Council for Exceptional Children.
- Idol, L., Paolucci-Whitcomb, P., & Nevin, A. (1986). Collaborative consultation. Austin, TX: PRO-ED.
- Idol-Maestas, L. (1983). Special educator's consultation handbook. Austin, TX: PRO-ED.
- Idol-Maestas, L., Lloyd, S., & Lilly, M.S. (1981). A non-categorical approach to direct service aid teacher consultation. Exceptional Children, 48, 213-220.
- Idol-Maestas, L., & Ritter, S. (1985). A follow-up study of resource/consulting teachers. Teacher Education and Special Education, 8, 121-131.
- Iriarte, A.U. (1980). Teacher preparation programs: A commitment to change. Education Unlimited, 2, 22-24.
- Jewell, J. (1985). One school's search for excellence. Teaching Exceptional Children, 17, 140-144.
- Johnson, A., & Cartwright, C. (1979). The roles of information and experience in improving teachers' knowledge and attitudes about mainstreaming. Journal of Special Education, 13, 453-462.

- Johnson, D.W., & Johnson, R.T. (1980). Promoting constructive student-student relationships through cooperative learning. Minneapolis, MN: National Support System Project.
- Johnson, D.W., & Johnson, R.T. (1986). Mainstreaming and cooperative learning strategies. Exceptional Children, 52, 553-561.
- Johnson, D.W., & Johnson, R.T. (1987). Research shows the benefits of adult cooperation. Educational Leadership 45, 27-30.
- Johnson, E.R. (1908). The function of the special class. National Education Association Journal of Proceedings and Address of the 46th Annual Meeting, 114-118.
- Johnson, J.S. (1969). Change in student teacher dogmatism. Journal of Educational Research, 62, 224-226.
- Johnson, L.J., Pugach, M.C., & Hammittee, D.J. (1988). Barriers to effective special education consultation. Remedial and Special Education, 9, 41-47.
- Johnson, R.T., & Johnson, D.W. (1981). Mainstreaming handicapped students into science classrooms. In M.E. Corrick (Ed.), Teaching handicapped students science. Washington, D.C.: National Education Association.
- Johnson, R.T., & Johnson, D.W. (1984). Classroom learning structure and attitudes toward handicapped students in mainstream settings. In R.L. Jones (Ed.). Special education in transition: Attitudes toward the handicapped. Reston, VA: Council for Exceptional Children.
- Joyce, B.R., & Showers, B. (1981). Improving inservice training. In B.R. Joyce, L. Peck, & C. Brown (Eds.). Flexibility in teaching: An excursion into the nature of teaching and training. New York: Longman.
- Kagan, S. (1985). Cooperative learning resources for teachers. Riverside, CA: Department of Psychology, University of California.
- Kahle, L.R., & Berman, J.J. (1979). Attitudes cause behaviors: A cross-lagged panel analysis. Journal of Personality and Social Psychology, 37, 315-321.
- Kakalik, J.S., Furry, W.S., Thomas, M.A., & Carney, M.F. (1981). The cost of special education. Santa Monica, CA: The Rand Corporation. Sponsored under Contract No. 300-79-0733 (USDE).
- Kanter, R.M. (1981). Career growth and organizational power: Issues for educational management in the 1980s. Teacher College Record, 82, 553-566.

- Katz, D. (1960). The functional approach to the study of attitudes. Public Opinion Quarterly, 24, 163-204.
- Kauffman, J.M. (1981). Historical trends and contemporary issues in special education in the United States. In J.M. Kauffman & D.P. Hallahan (Eds.). Handbook of special education (pp. 3-23). Englewood Cliffs, NJ: Prentice-Hall.
- Kauffman, J.M., Gerber, M.M., & Semmel, M.I. (1988). Arguable assumptions underlying the regular education initiative. Journal of Learning Disabilities, 21, 6-11.
- Kauffman, J.M., & Hallahan, D.P. (Eds.). (1976). Teaching children with learning disabilities: Personal perspectives. Columbus, OH: Charles E. Merrill.
- Kauffman, J.M., Lloyd, J.W., & McGee, K.A. (1988). Adaptive and maladaptive behavior: Teachers attitudes and their technical assistance needs. Unpublished manuscript, University of Virginia, Charlottesville.
- Kavale, K.A. & Glass, G.V. (1982). The efficacy of special education interventions and practices: A compendium of meta-analysis findings. Focus on Exceptional Children, 15, 1-16.
- Keller, H.R. (1981). Behavioral consultation. In J.C. Conoley (Ed.). Consultation in the schools (pp. 59-100). New York: Academic Press.
- Keogh, B.K. (1987). Learning disabilities: Diversity in search of order. In M.C. Wang, M.C. Reynolds, & H.J. Walberg (Eds.). Handbook of special education: Research and practice (Vol. 2). Elmsford, NY: Pergamon Press.
- Keogh, B.K. (1988). Perspectives on the Regular Education Initiative. Learning Disabilities Focus, 4, 3-5.
- Kerr, M.M., & Zigmond, N. (1986). What do high school teachers want? A study of expectations and standards. Education and Treatment of Children, 9, 239-249.
- Kirk, S.A., & Gallagher, J.J. (1986). Educating exceptional children. Boston, MA: Houghton Mifflin.
- Klein, N.K., Pasch, M., & Frew, T.W. (1979). Curriculum analysis and design for retarded learners. Columbus, OH: Merrill.
- Knoll, J., & Meyer, L. (n.d.). Principles and practices for school integration of students with severe disabilities: An overview of the literature. Syracuse, NY: Center on Human Policy.

- Kokaska, C. (1976). California trainers of special educators view the implications of mainstreaming. In P.H. Mann (Ed.). Shared responsibility for handicapped students: Advocacy and programming (pp. 74-77). Coral Gables, FL: University of Miami Training and Technical Assistance Center.
- Kozuch, J.A. (1979). Implementing an educational innovation: The constraints of the school setting. High School Journal, 62, 223-231.
- Kuhn, T.S. (Ed.). (1970). The structure of scientific revolutions (2nd ed.). Chicago: University of Chicago Press.
- Lane, W.R., Corwin, R.G., & Monahan, W.G. (1967). Foundations of educational administration: A behavioral analysis. New York: Macmillan.
- Lanier, J.L. (1984). Research on teacher education. (Occasional Paper No. 80). East Lansing: Institute for Research on Teaching, Michigan State University.
- Larrivee, B. (1981). Effects of inservice training intensity on teachers' attitudes toward mainstreaming. Exceptional Children, 48, 34-39.
- Larrivee, B., & Cook, L. (1979). Mainstreaming: A study of the variables affecting teacher attitudes. Journal of Special Education, 13, 315-324.
- Lawrence, P.R., & Lorch, J.W. (1967). Organization and environment: Managing differentiation and integration. Boston: Graduate School of Business Administration, Harvard University.
- Lazerson, M. (1983). The origins of special education. In J.G. Chambers & W.T. Hartman (Eds.). Special education policies: Their history, implementation, and finance. (pp. 15-47). Philadelphia: Temple University Press.
- Leggett, D., & Hoyle, S. (1987). Preparing teachers for collaboration. Educational Leadership, 45, 58-64.
- Leinhardt, G., & Pally, A. (1982). Restrictive educational settings: Exile or haven. Review of Educational Research, 52, 557-578.
- Lewin, K. (1951). Field theory in social science. New York: Harper.
- Lichtenstein, S. (1987). Dropouts: A secondary special education perspective. Unpublished manuscript.
- Lieberman, A. (1986). Collaborative research: Working with, not working on... . Educational Leadership, 43, 28-32.

- Lieberman, A. (1988). Expanding the leadership team. Educational Leadership, 45, 4-8.
- Lieberman, A., & Miller, L. (1981). Synthesis of research on improving schools. Educational Leadership, 38, 583-586.
- Lieberman, L.M. (1985). Special education and regular education: A merger made in heaven? Exceptional Children, 51, 513-516.
- Lilly, M.S., & Givens-Ogle, L.B. (1981). Teacher consultation: Present, past, and future. Behavioral Disorders, 6, 73-77.
- Lipsky, D.K., & Gartner, A.G. (1989). Beyond separate education. Baltimore: Brookes.
- Little, J.W. (1982). Norms of collegiality and experimentation: Workplace conditions of school success. American Educational Research Journal, 19, 325-340.
- Lloyd, J. (1984). "How shall we individualize instruction - Or should we?" Remedial and Special Education, 5, 7-15.
- Lloyd, J.W., Crowley, E.P., Kohler, F.W., & Strain, P.S. (1988). Redefining the applied research agenda: Cooperative learning, prereferral, teacher consultation, and peer-mediated instruction. Journal of Learning Disabilities, 21, 43-52.
- Longo, P. (1982). Mainstreaming: The promise and the pitfalls. Urban Education, 17, 157-159.
- Lortie, D. (1975). Schoolteacher: A sociological study. Chicago: University of Chicago Press.
- Lortie, D. (1978). Some reflections on renegotiation. In M.C. Reynolds (Ed.). Futures of education for exceptional students (pp. 235-244). Reston, VA: Council for Exceptional Children.
- MacMillan, D.L., Jones, R.L., & Meyers, C.E. (1976). Mainstreaming the mildly retarded: Some questions, cautions, and guidelines. Mental Retardation, 14, 3-10.
- MacMillan, D.L., Meyers, C., & Yoshida, R. (1978). Regular class perceptions of transition programs for EMR students and their impact on the students. Psychology in the Schools, 15, 9-103.
- Madden, N.A., & Slavin, R.E. (1983). Mainstreaming students with mild handicaps: Academic and social outcomes. Review of Educational Research, 53, 519-569.

- Maheady, L., Towne, R., Algozzine, B., Mercer, J., & Ysseldyke, J. (1983). Minority overrepresentation: A case for alternative practices prior to referral. Learning Disabilities Quarterly, 6, 448-456.
- Maher, C.A., & Bennett, R.E. (1984). Planning and evaluating special education services. Englewood Cliffs, NJ: Prentice-Hall.
- Mann, P.H. (1976). Mainstreaming: An evolutionary concept of mutual responsibility. In P.H. Mann (Ed.). Shared responsibility for handicapped students: Advocacy and programming (pp. 27-36). Coral Gables, FL: University of Miami Training and Technical Assistance Center.
- Mannino, F.V., & Shore, M.F. (1975). The effects of consultation: A review of the literature. American Journal of Community Psychology, 3, 1-21.
- March, J.G. (1981). Footnotes to organizational change. Administrative Science Quarterly, 26, 563-577.
- March, J.G., & H.A. Simon (1958). Organizations. New York: Wiley & Sons.
- Marston, D. (1986). Does categorical teacher certification benefit the mildly handicapped child? Exceptional Children, 53, 423-431.
- Marston, R., & Leslie, D. (1983). Teacher perceptions from mainstreamed versus nonmainstreamed teaching environments. Physical Educator, 40, 8-15.
- Martens, B.K., Peterson, R.L., Witt, J.C., & Citrone, S. (1986). Teacher perceptions of school-based interventions. Exceptional Children, 53, 213-223.
- McCloskey, M.L., & Quay, L.C. Effects of coaching on handicapped children's social behavior and teachers' attitudes in mainstreamed classrooms. The Elementary School Journal, 87, 425-435.
- McDill, E.L., Natriello G., & Pallas, A.M. (1985). Raising standards and retaining students: The impact of the reform recommendations on potential dropouts. Review on Educational Research, 55, 415-433.
- McFaul, S.A., & Cooper, J.M. (1984). Peer clinical supervision: Theory vs. reality. Educational Leadership, 41, 4-9.
- McGregor, D.M. (1960). The human side of enterprise. New York: McGraw-Hill.
- McGuire, W.J. (1969). The nature of attitudes and attitude change. In G. Lindzey and E. Aronson (Eds.). The handbook of social psychology. Reading, MASS: Addison-Wesley.

- McKinney, J.D., & Hocutt, A.M. (1988). Policy issues in the evaluation of the Regular Education Initiative. Learning Disabilities Focus, 4, 15-23.
- McNeely, R.L. (1983). Organizational patterns, work, and burnout in the public schools. Urban Education, 18, 82-97.
- Medway, F.J. (1982). School consultation research: Past trends and future directions. Professional Psychology, 13, 422-430.
- Medway, F.J., & Updyke, J.F. (1985). Meta-analysis of consultation outcome studies. American Journal of Community Psychology, 13, 489-505.
- Mehan, H. (1984). Institutional decision-making. In B. Rogoff & J. Lave (Eds.). Everyday cognition: Its development in social context (pp. 41-66). Cambridge, MA: Harvard University Press.
- Mehan, H. (1986). Handicapping the handicapped: Decision-making in students' educational careers. Stanford, CA: Stanford University Press.
- Mesinger, J.F. (1985). Commentary on "A rationale for the merger of special and regular education" or, is it now time for the lamb to lie down with the lion? Exceptional Children, 51, 510-512.
- Meyer, J.W., & Rowan, B. (1977). Institutionalized organizations: formal structure as myth and ceremony. American Journal of Sociology, 83, 340-363.
- Meyer, J.W., & Rowan, B. (1978). The structure of educational organizations. In M.W. Meyer (Ed.). Environments and organizations. (pp. 78-109). San Francisco: Jossey-Bass.
- Michigan State Board of Education. (1988). Fingertip facts. Lansing, MI.
- Middleton, E., Morsink, C., & Cohen, S. (1979). Program graduates: Perceptions of need for training in mainstreaming. Exceptional Children, 45, 256-263.
- Miller, S.R., & Sabatino, D.A. (1978). An evaluation of the teacher consultant model as an approach to mainstreaming. Exceptional Children, 45, 86-91.
- Miller, S.R., Sabatino, D.A., & Larsen, R.P. (1980). Issues in the professional preparation of secondary school special educators. Exceptional Children, 46, 344-350.
- Mills, vs. Board of Education of the District of Columbia and Others, 348 F. supp. 866. (D.C. 1972).

- Mintzberg, H. (1979). The structuring of organizations. Englewood Cliffs, NJ: Prentice-Hall.
- Morsink, C. (1979). Implementing PL 94-142: The challenge of the 80s. Education Unlimited, 1, 20-22.
- Murmane, R.J. (1981). Interpreting the evidence on school effectiveness. Teachers College Record, 83, 19-34.
- Myles, B.S., & Simpson, R.L. (1989). Regular educators' modification preferences for mainstreaming mildly handicapped children. Journal of Special Education, 22, 479-489.
- Nadler, B., & Shore, K. (1980). Individual education programs: A look at realities. Education Unlimited, 2, 30-33.
- Newcomb, T.M. (1967). Personality and social change. New York: Dryden Press.
- Noar, M., & Miligram, R.M. (1980). Two preservice strategies for preparing regular class teachers for mainstreaming. Exceptional Children, 47, 126-127.
- O'Sullivan, P.J., Marston, D., & Magnusson, D. (1987). Categorical special education teacher certification: Does it affect instruction of mildly handicapped students? Remedial and Special Education, 8, 13-18.
- Palincsar, A.S. (1986). Metacognitive strategy instruction. Exceptional Children, 53, 118-123.
- Parten, M. (1950). Surveys, polls, and samples. New York: Harper & Row.
- Patterson, J.L., Purkey, S.C., & Parker, J.V. (1986). Productive school systems for a nonrational world. Alexandria, VA: Association for Supervision and Curriculum Development.
- Payne, R., & Murray, C. (1974). Principals' attitudes toward integration of the handicapped. Exceptional Children, 41, 123-125.
- Pennsylvania Association for Retarded Children (PARC) vs. Commonwealth of Pennsylvania, 343 F. Supp. 279 (E.D., PA., 1972).
- Pepitone, A. (1966). Some conceptual and empirical problems of consistency models. In S. Feldman (Ed.). Cognitive consistency. New York: Academic Press.
- Perlmutter, B.F., & Parus, M.V. (1983). Identifying children with learning disabilities: A comparison of diagnostic procedures across school districts. Learning Disability Quarterly, 6, 321-329.

- Pernell, E., McIntyre, L., & Bader, L.A. (1986). Mainstreaming: A continuing concern for teachers. Education, 106, 131-137.
- Peterson, D., Albert, S.S., Foxworth, A.M., Cox, L.S., & Tilley, B.K. (1985). Effective schools for all students: Current efforts and future directions. Teaching Exceptional Children, 17, 106-110.
- Pfeffer, J. (1982). Organizations and organization theory. Marshfield, MA: Pitman.
- Pieterse, M., & Center, Y. (1984). The integration of eight Down's syndrome children into regular schools. Australia and New Zealand Journal of Developmental Disabilities, 10, 11-20.
- Polsgrove, L., & McNeil, M. (1989). The consultation process: Research and practice. Remedial and Special Education, 10, 6-13.
- Post, L., & Roy, W. (1985). Mainstreaming in secondary schools: How successful are plans to implement the concept? NASSP Bulletin, 69, 71-79.
- Powers, D.A. (1979). Mainstreaming. EMR pupils at the secondary level: A consideration of the issues. The High School Journal, 63, 102-108.
- Prasse, D.P., & Fafard, M. (1982). Interdisciplinary training and professional interaction: A training challenge. Teacher Education and Special Education, 5, 26-29.
- Pugach, M. (1982). Regular classroom teacher involvement in the development and utilization of IEPs. Exceptional Children, 48, 371-374.
- Pugach, M. (1986). The national education reports and special education: Implications for teacher preparation. Exceptional Children, 53, 308-314.
- Pugach, M., & Lilly, S.M. (1984). Reconceptualizing support services for classroom teachers: Implications for teacher education. Journal of Teacher Education, 35, 48-55.
- Pugach, M., & Raths, J.D. (1987, April). Prelude to merger: An analysis of teaching roles in special and general education. Paper presented at the annual meeting of the American Educational Research Association, Washington, D.C.
- Pugach, M., & Whitten, M.E. (1987). The methodological content of teacher education for learning disabilities: A problem of duplication. Learning Disability Quarterly, 10, 291-300.
- Purkey, S.C., & Smith, M.S. (1983). Effective Schools: A Review. The Elementary School Journal, 83, 427-452.

- Raison, S.B. (1979). Curriculum modification for special needs at the secondary level. Education Unlimited, 1, 19-21.
- Ramos, A.G. (1981). The new science of organization: A reconceptualization of the wealth of nations. Toronto: University of Toronto Press.
- Reid, E. (1986). Practicing effective instruction: The exemplary center for reading instruction approach. Exceptional Children, 52, 510-521.
- Reisberg, L., & Wolf, R. (1986). Developing a consulting program in special education: Implementation and intervention. Focus on Exceptional Children, 19, 1-15.
- Reschly, D.J. (1984). Beyond IQ test bias: The National Academy panel's analysis of minority EMR overrepresentation. Educational Researcher, 13, 15-19.
- Reschly, D.J. (1987). Learning characteristics of mildly handicapped students: Implications for classification, placement, and programming. In M.C. Wang, M.C. Reynolds, & H.J. Walberg (Eds.). Handbook of special education: Research and practice. (Vol. 1, pp. 35-58).
- Research on the effectiveness of mainstreaming. (1987). Reston, VA: ERIC Clearinghouse on Handicapped and Gifted Children.
- Reynolds, B., Martin-Reynolds, J., & Mark, F. (1982). Elementary teachers' attitudes toward mainstreaming educable mentally retarded students. Education and Training of the Mentally Retarded, 17, 171-176.
- Reynolds, M.C. (1982). Teaching exceptional children in all America's schools. Reston, VA: The Council for Exceptional Children.
- Reynolds, M. C. (in press). Students with special needs. In Knowledge base for beginning teachers. Project of the American Association of Colleges for Teacher Education.
- Reynolds, M.C., & Lakin, C. (1987). Noncategorical special education: Models for research and practice. In M.C. Wang, M.C. Reynolds, & H. J. Walberg (Eds.). Handbook of special education: research and practices. (Vol. 1, pp. 331-356). New York: Pergamon.
- Reynolds, M.C., & Wang, M.C. (1983). Restructuring "special" school programs: A position paper. Policy Studies Review, 2, 189-212.
- Ringlaben, R.P., & Price, R. (1981). Regular classroom teachers' perceptions of mainstreaming students. Exceptional Children, 47, 302-304.

- Ringlaben, R.P., & Weller, C. (1981). Mainstreaming the special educator. Education Unlimited, 3, 19-22.
- Rokeach, M. (1968). Beliefs, attitudes, and values. San Francisco: Joseey-Bass.
- Rokeach, M. (1975). The nature of human values. New York: Free Press.
- Roper, S.S., & Hoffman, D.E. (1986). Collegial support for professional improvement: The Stanford Collegial Evaluation Program. (ASSC Bulletin Series). Eugene, OR: University of Oregon.
- Rosenfield, S. (1985). Teacher acceptance of behavioral principles. Teacher Education and Special Education, 8, 153-158.
- Rosenholtz, S.J. (1988). Teachers' workplace: A study of school organization. New York: Longman.
- Rossi, P.H., Wright, J.D., & Anderson, A.B. (Eds.). (1983). Handbook of survey research. New York: Academic Press.
- Rubin, H.J. (1983). Applied social research. Columbus: Merrill.
- Ryor, J. (1978). PL 94-142: The perspective of regular education. Learning Disability Quarterly, 1, 6-14.
- Safran, S.P., & Safran, J.S. (1987). Teachers' judgments of problem behaviors. Exceptional Children, 54, 240-244.
- Salden, S.J. (1984). Factors contributing to the development of successful mainstreaming programs. Exceptional Children, 50, 409-416.
- Salend, S.J., & Hankee, C. (1981). Successful mainstreaming: A form of communication. Education Unlimited, 3, 47-48.
- Salend, S.J., & Johns, J. (1983). Changing teacher commitment to mainstreaming. Teaching Exceptional Children, 15, 82-85.
- Sansone, J., & Zigmond, N. (1986). Evaluating mainstreaming through an evaluation of students' schedules. Exceptional Children, 52, 452-458.
- Sapier, J., & Gower, R. (1982). The skillful teacher. Carlisle, MA: Research for Better Teaching.
- Sapon-Shevin, M. (1987). The national education reports and special education: Implications for students. Exceptional Children, 53, 300-307.
- Sargent, L.R. (1981). Resource teacher time utilization: An observational study. Exceptional Children, 47, 420-425.

- Sarason, S.B. (1982). The culture of school and the problem of change (2nd ed.). Boston: Allyn & Bacon.
- Sarason, S.B., & Doris, J. (1979). Educational handicap, public policy, and social history. New York: Free Press.
- Sarbin, T.R., & Allen V.L. (1968). Role theory. In G. Lindzey & E. Aronson (Eds.). Handbook of school psychology. Cambridge, MA: Addison-Wesley.
- Sax, G. (1980). Principles of educational and psychological measurement and evaluation. Belmont, CA: Wadsworth.
- Scheaffer, R.L., Mendenhall, W., & Ott, L. (1986). Elementary survey sampling. Boston: Duxbury.
- Scheff, M.R. (1970). Some theoretical aspects of attitudes and perceptions. (Working Paper No. 15). Toronto: University of Toronto.
- Scheibe, K.E. (1970). Beliefs and values. New York: Holt, Rinehart & Winston.
- Schein, E.H. (1969). The mechanisms of change. In W. Bennis, K. Bennis, & R. Chinn (Eds.). The planning of change (2nd ed.). New York: Holt, Rinehart & Winston.
- Schmelkin, L.P. (1981). Teachers and non-teachers' attitudes toward mainstreaming. Exceptional Children, 48, 42-47.
- Schmuck, R.A. (1977). The second handbook of organizational development in schools. Eugene, OR: Center for Educational Policy and Management, University of Oregon.
- Schmuck, R.A. (1980). The school organization. In J.H. McMillan (Ed.). The social psychology of school learning. New York: Academic Press.
- Schubert, M.A., & Glick, H.M. (1981). Least restrictive environment programs: Why are some so successful? Education Unlimited, 3, 11-13.
- Scott, J.J., & Smith, S.C. (1987). From isolation to collaboration: Improving the work environment in teaching. (NCREL Report No. ILS-704). Elmhurst, IL: North Central Regional Educational Laboratory.
- Scriven, M. (1983). Comments on Gene Glass. Policy Studies Review, 2, 79-84.

- Semmel, M.I., Gottlieb, J., & Robinson, N.M. (1979). Mainstreaming: Perspectives on educating handicapped children in the public school. In D.C. Berliner (Ed.). Review of research in education (pp. 223-279). Washington, DC: American Educational Research Association.
- Sergiovanni, T.J. (1985, March). Instructional supervision: A research agenda for the future. Paper presented at the annual meeting of the American Educational Research Association, Chicago.
- Sharon, Y., & Sharon, S. (1987). Training teachers for cooperative learning. Educational Leadership, 45, 20-26.
- Shaw, S. & Bensky, J.M. (1980). Strategies for dealing with burnout among special educators. Education Unlimited, 2, 21-23.
- Shepard, L.A. (1987). The new push for excellence: Widening the schism between regular and special education. Exceptional Children, 53, 327-329.
- Shepard, L.A. & Smith, L.A. (1981). Evaluation of the identification of perceptual communicative disorders in Colorado. Boulder: University of Colorado.
- Sherif, C.W. (1965). Attitude and attitude change. Westport, CT: Greenwood Press.
- Shotel, J.R., Iano, R.P., & McGettigan, J.F. (1972). Teacher attitudes associated with the integration of handicapped children. Exceptional Children, 38, 677-683.
- Simpson, R.L., & Edwards, L.L. (1980). Mainstreaming behavior disordered students: A perspective. Journal of Research and Development in Education, 13, 58-73.
- Sivage, C.A. (1980). The organizational context of mainstreaming. The Directive Teacher, 2, 16-17.
- Sizer, T.R. (1973). Three major frustrations: Rumination of a retiring dean. Phi Delta Kappan, 54, 632-635.
- Skirtic, T.M. (1987). An organizational analysis of special education reform. Fairfax Station, VA: The National Inquiry Into the Future of Education for Students with Special Needs.
- Slavin, R.E. (1987). Cooperative learning and the cooperative school. Educational Leadership, 45, 7-13.
- Smith, M.L. & Glass, G.V. (1987). Research and evaluation in education and the social sciences. Englewood Cliffs, NJ: Prentice-Hall.
- Spodek, B. (1982). What special educators need to know about regular classrooms. The Educational Forum, 46, 295-307.

- Spring, J. (1980). Educating the worker-citizen: The social economic, and political foundations of education. New York: Longman.
- Stainback, S., & Stainback W. (1982). Influencing the attitudes of regular class teachers about the education of severely retarded students. Education and Training of the Mentally Retarded, 17, 88-92.
- Stainback, W., & Stainback S. (1984). A rationale for the merger of special and regular education. Exceptional Children, 51, 102-111.
- Stainback, S., Stainback, W., & Forest, M. (Eds.). (in press). Educating all students in the mainstream of regular education. Baltimore: Brookes.
- Stainback S., Stainback, W., Strathe, M., & Dedrick, C. (1983). Preparing regular classroom teachers for the integration of severely handicapped students. Education and Training of the Mentally Retarded, 18, 205-209.
- Stephens, T.M., & Braun, B.L. (1980). Measures of regular classroom teachers' attitudes toward handicapped children. Exceptional Children, 46, 292-294.
- Strain, P.S., & Odom, S.L. (1986). Peer social initiations: Effective intervention for social skills development of exceptional children. Exceptional Children, 52, 543-552.
- Taylor, F.W. (1948). Scientific management. New York: Harper & Row. (Original work published 1911).
- Taylor, S.J. (1988). Caught in the continuum. A critical analysis of the principles of least restrictive environment. Journal of the Association for Persons with Severe Handicaps, 13, 41-53.
- Thurstone, L.L. (1931). The measurement of attitude. Chicago: University of Chicago Press.
- Tikunoff, W., Ward, B., & Griffin, G. (1979). Interactive research and development on teaching. Final report. San Francisco: Far West Laboratory for Educational Research and Development.
- Towner, A.G. (1984). Modifying attitudes toward the handicapped: A review of the literature and methodology. In R.L. Jones (Ed.). Attitudes and attitude change in special education. Reston, VA: Council for Exceptional Children.
- Townsend, B. (1987, November/December). America's changing face. State Legislatures. pp. 14-18.
- Triandis, H.C. (1971). Attitude and attitude change. New York: Wiley & Sons.

- Tropea, J.L. (1988). Urban schools' backstage order and children at risk: An historical perspective. A paper presented for the Rockefeller Archive Center Conference on Children at Risk, Mt. Kisco, New York.
- Tucker, J. (1980). Ethnic proportions in classes for the learning disabled: Issues in nonbiased assessment. Journal of Special Education, 14, 93-105.
- Tyler, R.W. (1987). Foreword. In R.L. Sinclair & W.J. Ghory (Eds.). Reaching marginal students: A primary concern for school renewals. Chicago: National Society for the Study of Education.
- Tymitz-Wolf, B.L. (1982). Extending the scope of inservice training for mainstreaming effectiveness: Perspectives from a longitudinal study. Teacher Education and Special Education, 5, 17-23.
- U.S. Department of Education. (1985). Seventh annual report to Congress on the implementation of the Education for All Handicapped Act. Washington, DC: U.S. Government Printing Office.
- U.S. Department of Education. (1988). Tenth annual report to Congress on the implementation of the Education for All Handicapped Act. Washington, DC: U.S. Government Printing Office.
- Van Sickle, J.H. (1908-1909). Provision for exceptional children in the public schools. Psychological Clinic, 2, 102-111.
- Viadero, D. (1988). Researchers' critique escalates the debate over "Regular Education" for all students. Education Week, 7, 20.
- Voeltz, L., Bailey, E., Nakamura, A., & Azama, M. (1979). A needs assessment of special education inservice training priorities for teachers. Education Perspectives, 18, 12-17.
- Walker, H.M. (1983). The social behavior survival program: A systematic approach to the integration of handicapped children into less restrictive settings. Education and Treatment of Children, 6, 421-441.
- Walker, H.M., & Lamon, W.E. (1987). Social behavior standards and expectations of Australian and U.S. teacher groups. Journal of Special Education, 21, 56-80.
- Walker, L.J. (1987). Procedural rights in the wrong system: Special education is not enough. In A. Gartner & T. Joe (Eds.). Images of the disabled/disabling images. New York: Praeger.
- Wang, M.C., & Birch, J.W. (1984). Comparison of a full-time mainstreaming program and a resource room program. Exceptional Children, 51, 33-40.

- Wang, M.C., & Reynolds, M.C. (1985). Avoiding the "Catch 22" in special education reform. Exceptional Children, 51, 497-502.
- Wang, M.C., Reynolds, M.C., & Walberg, H.J. (1986). Rethinking special education. Educational Leadership, 44, 26-31.
- Wang, M.C., Reynolds, M.C., & Walberg, H.J. (1987). The necessary restructuring of special and regular education. Exceptional Children, 53, 391-398.
- Wang, M.C., Vaughn, E.D., & Dytman, J.A. (1985). Staff development: A key ingredient of effective mainstreaming. Teaching Exceptional Children, 17, 112-120.
- Wang, M.C., & Walberg, H.J. (Eds.). (1985). Adapting instruction to individual differences. Berkeley, CA: McCutchan.
- Warger, C.L., & Trippe, M. (1982). Preservice teacher attitudes toward mainstreamed students with emotional impairments. Exceptional Children, 49, 246-252.
- Wasserman, D.R. (1979). Educating the exceptional child: Mainstreaming and beyond. The Directive Teacher, 2, 6-8.
- Watts, W.A. (1984). Attitude change: Theories and methods. In R.L. Jones (Ed.). Attitudes and attitude change in special education. Reston, VA: Council for Exceptional Children.
- Weatherley, R., & Lipsky, M. (1977). Street level bureaucrats and institutional innovation: Implementing special education reform. Harvard Education Review, 47, 171-197.
- Weick, K.E. (1976). Educational organizations as loosely coupled systems. Administrative Science Quarterly, 1-19.
- Weick, K.E. (1982). Administering education in loosely coupled schools. Phi Delta Kappan, 63, 673-676.
- Weick, K.E. (1985). Sources of order in underorganized systems: Themes in recent organizational theory. In Y.S. Lincoln (Ed.). Organization theory and inquiry: The paradigm revolution (pp. 106-138). Beverly Hills, CA: Sage.
- Weinberg, E. (1983). Data collection: Planning and management. In P.H. Rossi, & J.D. Wright (Eds.). Handbook of survey research. New York: Academic Press.
- Weiner, R. (1985). PL 94-142: Impact on the schools. Washington, DC: Capital Publications.
- West, J.F., & Idol, L. (1987). Consultation in special education. (Part I). Journal of Learning Disabilities, 20, 388-408.

- Wicker, A.W. (1971). Attitudes versus actions: The relationship of verbal and overt responses to attitude objects. Journal of Social Issues, 25, 41-78.
- Will, M. (1985, December). Educating children with learning problems: A shared responsibility. Paper presented at the annual meeting of the Wingspread Conference, Racine, Wisconsin.
- Will, M. (1986). Educating children with learning problems: A shared responsibility. Exceptional Children, 52, 411-415.
- Will, M. (1986a). Educating students with learning problems: A shared responsibility. Washington, DC: Office of Special Education and Rehabilitative Services.
- Williams, R.J., & Algozzine, B. (1979). Teachers' attitudes toward mainstreaming. The Elementary School Journal, 80, 63-67.
- Wise, A.E. (1979). Legislated learning: The bureaucratization of the American classroom. Berkeley: University of California Press.
- Witt, J.C., & Elliott, S.N. (1985). Acceptability of classroom management procedures. In T.R. Kratochwill (Ed.). Advances in school psychology. Hillsdale, NJ: Erlbaum.
- Witt, J.C., Elliott, S.N., & Martens, B.K. (1983). Factors that influence teachers' acceptance of classroom interventions. Paper presented at the annual meeting of the American Educational Research Association, Montreal.
- Wolf, M.M. (1978). Social validity: The case for subjective measurement or how applied behavior analysis is finding its heart. Journal of Applied Behavior Analysis, 11, 203-214.
- Wolfensberger, W. (1972). The principal of normalization in human services. Toronto: National Institute on Mental Retardation.
- Wood, J.W. (1984). Adapting instruction for the mainstream: A sequential approach to teaching. Columbus, OH: Merrill.
- Wood, J.W. (1989). Mainstreaming: A practical approach for teachers. Columbus, OH: Merrill.
- Wyatt, vs. Stickney, 344 F. Supp. 373, 387, 396 (M.D., Ala, 1972).
- Yaffe, E. (1979). Experienced mainstreamers speak out. Teacher, 96, 61-63.
- Yates, J.R. (1985). Current and emerging forces impacting special education. In H.J. Prehm (Ed.). The future of special education (pp. 13-74). Reston, VA: Council for Exceptional Children.

- Yee, A.H. (1969). Do cooperating teachers influence the attitudes of student teachers? Journal of Educational Psychology, 60, 327-332.
- Young, J.L., & Shepherd, M.L. (1983). The adjustment of the educable mentally retarded to the regular classroom - the teacher's perspective. Hattiesburg, MS: University of Southern Mississippi. (ERIC Document Reproduction Service No. ED 258-372).
- Ysseldyke, J.E. (1987). Classification of handicapped students. In M.C. Wang, M.C. Reynolds, & H.J. Walberg (Eds.). Handbook of special education: Research and practice (Vol. 1, pp. 253-271). New York: Pergamon.
- Ysseldyke, J.E., & Algozzine, B. (1982). Critical issues in special and remedial education. Boston: Houghton Mifflin.
- Ysseldyke, J.E., Algozzine, B., & Epps, S. (1983). A logical and empirical analysis of current practices in classifying students as handicapped. Exceptional Children, 50, 160-166.
- Ysseldyke, J.E., Algozzine, B., Richey, L.S., & Graden, J. (1982). Declaring students eligible for learning disability services: Why bother with the data? Learning Disability Quarterly, 5, 37-44.
- Ysseldyke, J.E., Algozzine, B., Shinn, M.R., & McGue, M. (1982). Similarities and differences between low achievers and students labeled learning disabled. The Journal of Special Education, 16, 73-85.
- Ysseldyke, J.E., Christenson, S.L., & McVicar, R. (1988). Instructional grouping arrangements used with mentally retarded, learning disabled, emotionally disturbed, and nonhandicapped students. Journal of Educational Research, 81, 305-311.
- Ysseldyke, J.E., Christenson, S.L., Thurlow, M.L., & Bakewell, D. (in press). Are different kinds of instructional tasks used by different categories of students in different settings? School Psychology Review.
- Ysseldyke, J.E., Christenson, S.L., Thurlow, M.L., & Shiba, R. (1987). Academic engagement and active responding of mentally retarded, learning disabled, emotionally disturbed, and nonhandicapped elementary students. (Research Report No. 4). Minneapolis: University of Minnesota, Instructional Alternatives Project.
- Ysseldyke, J.E., Thurlow, M.L., Christenson, S.L., & Weiss, J. (1987). Time allocation to instruction of mentally retarded, learning disabled, emotionally disturbed, and nonhandicapped elementary students. The Journal of Special Education, 21, 43-55.

- Zimbardo, P., Ebbesen, E.B., & Maslach, C. (1977). Influencing attitudes and changing behavior. Reading, MA: Addison-Wesley.
- Zucker, L.G. (1981). Institutional structure and organizational processes: The role of evaluation units in schools. In A. Bank and R.C. Williams (Eds.). Evaluation and decision-making (CSE Monograph Series, No. 10). Los Angeles: UCLA Center for the Study of Evaluation.

MICHIGAN STATE UNIV. LIBRARIES



31293007537065