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> Inclusion in Elementary Schools: A Survey and Policy Analysis

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Abstract:

This study of reform policy focused on inclusive education in the 1990s in the state of Georgia, United States of America. Program modifications including, individualizing instructional methods, adapting the instructional environment, and lowering maximum class size emerged as significant issues. We found that policies related to these areas were compounded by the less experienced educators not readily accepting change strategies for serving students. Apparently younger educators are engrossed in surviving daily routine and have difficulty coping with the complex demands of change. Regular education teachers have difficulty with the idea of inclusion. Legal aspects dealing inclusion need clarification, especially for regular education teachers.

Introduction

Recently, concern has emerged regarding whether special education is the master or victim of the never ending waves of school reform. Master or victim, special education is submerged in legal and program issues while the waves of reform continue.

One reform issue that is receiving considerable attention in the schools and literature is inclusion. Inclusion focuses on providing services to students in the regular classroom, rather than pulling students out of regular classrooms to receive special services. A primary goal of inclusion is to educate children with disabilities in the regular classroom with appropriate support in their home school or neighborhood.

Presently, there is discussion concerning inclusion vs. full inclusion. Some believe that full inclusion is the appropriate service model, which would mean that all students with disabilities would be served in regular classes. A more moderate view of inclusion is that placement committees should use inclusion as one delivery model for providing the least restrictive environment in continuance of service delivery models.

Baker, Wang, and Walberg (1995) traced the recent events surrounding inclusion to a report issued by the National Academy of Sciences (Heller, Holtzman, & Messick, 1982). The panel of Heller et al. found the classification and placement of children in special education ineffective and discriminatory. The recommendations were that "children be given noninclusive or extra-class placement for special services only if (a) they can be accurately classified, and only if (b) noninclusion demonstrates superior results" (p. 33).

Earlier concepts surrounding inclusion go back to 1975. The Individuals with Disabilities Act (IDEA) of 1990 was initially enacted as The Education of the Handicapped Act (EHA) in 1975. The 1975 law was more often called Public Law 94-142. It mandates processes for children with disabilities, and access to free and appropriate public education (FAPE) in the least restrictive environment (LRE), with age-appropriate peers, to the maximum extent appropriate. LRE is the mandate that has brought the issue of inclusion to the forefront. Inclusive education has been the subject of legal cases (See for example McCarthy, 1994), parents, advocates, policy makers, administrators, and educators. In most situations, each group expounding the positive nature of inclusion has been accused of being biased by those who do not support inclusion or full inclusion.

As with any educational reform, inclusion has drawn mixed reviews. A comparison of the effects of inclusive versus noninclusive educational practices for special education students was completed by Baker (1994), Carlberg and Kavale (1980), and Wang and Baker (1985). A meta-analyses demonstrated a "small-to- moderate beneficial effect of inclusive education on the academic and social outcomes of special needs children" (Baker, Wang, & Walberg, 1995, p. 34). The average effect sizes ranged from 0.08 to 0.44 and all were positive. The average for inclusion effects was 0.195, which was designated as being near the average effect for productive instructional practices. Based on these findings, Baker et al. asserted that the "concern is not whether to provide inclusive education, but how to implement inclusive education in ways that are both feasible and effective in ensuring school success for all children, especially those with special needs" (p. 34).

The outcomes for nondisabled students in classes that include peers with disabilities has been identified as a barrier to inclusion. However, available data reveal no statistically significant effects on the academic outcomes of the nondisabled peers (Staub & Peck, 1995). Parents of the peers reported no harm to their children. Instructional time was not lost by nondisabled students when students with disabilities were included in their classrooms. Additionally, nondisabled peers did not pick up undesirable behaviors from their peers with disabilities.

Opponents of inclusion emphasized the need to maintain a full continuum of services and argued that those expounding "full" inclusion had overlooked this provision of the IDEA.

Vergason and Anderegg (1992, 1993) argued that an inclusive classroom was not in the least restrictive environment interests of most students with disabilities. Fuchs and Fuchs (1994) identified The Association for Persons with Severe Handicaps (TASH) as the leader in the reform movement for inclusion. They warned that TASH did not speak for all groups in their desire for full inclusion; but that ". . . their continued provocative rhetoric will polarize a field already agitated (p. 305)

Several experts say that pullout delivery systems, such as the ones used in special education, are not effective in remediating or habilitating even mild types of disabilities. Further, they contend that teachers in regular classes provide effective instruction that is appropriate for all children and can accommodate individual differences, including students with disabilities (Gartner & Lipsky, 1987; Lilly, 1988; Lipsky & Gartner, 1987; Pugach, 1988; Reschly, 1988a; Reschly, 1988b; Reynolds & Wang, 1983; Reynolds, Wang, & Walberg, 1987; Stainback & Stainback, 1984; Stainback & Stainback, 1985; Stainback & Stainback, 1989; Stainback & Stainback, 1990; Taylor, 1988; Wang & Birch, 1984; Wang, Reynolds, & Walberg, 1986).

Other drawbacks of the resource pull-out program model have been underscored: special education resource rooms often served 12 to 15 diverse students, students brought a variety of needs from several different grade levels, the special education teacher gave very little active instruction, and instruction occurring was skill related and not tied to classroom themes (Yatvin, 1995). Special education teachers did not have the time to link to the regular classroom under the pull-out model and thus, "the phrase quality pull-out program' is a contradiction in terms" (p. 483). Special education teachers were trained less in the academic areas and did not have a holistic approach to teaching and learning. Their focus was on techniques for the unconventional students, behavior management, and diagnosing or remediating deficiencies. Yatvin identified factors that led to the philosophy of inclusion:

1. All children learn best in regular classrooms when there are flexible organizational and instructional patterns in place and human and material supports for those with special needs.

2. A child's belief that he or she is entitled to a place in a community of peers is a precondition for learning.

3. Pull-out programs that impose the extra burdens of academic discontinuity, poor-quality instruction, social anxiety, and low status on special-needs children deprive them of the opportunity for the education they are entitled to and thus violate their civil rights. (p. 484)

Van Dyke, Stallings, and Colley (1995) identified three fundamental arguments to support the philosophy of inclusion. The first argument concerned case law to date and the legal claims to an education in the "least restrictive environment." Inherent in this first argument was a civil rights issue. The second basis rested in the literature concerning "best practices" for the education of students with disabilities. The analyses of data on the progress of students served in special education did not show the student achievement growth expected. The third argument centered on the "rightness" of inclusion. Segregating the students classified them, created bias, and made them different. They were apart from the classroom community.

In October of 1992, the National Association of State Boards of Education (NASBE), released a report calling for an inclusive system of education for all students. The NASBE study group envisions a restructured, inclusive system looking very different from typical schools as they exist today. Students would not progress through the traditional lock-step, age-grade

progression, but would be grouped heterogeneously, based on the particular lesson to be taught. This view of inclusion is significant because it comes from regular education, rather than from the special education arena.

The argument may be far from over, yet there is a need to involve inclusion in the debate, the development, and implementation of policies related to school reform. Often issues such as inclusion and special education are not considered when reform is discussed or implemented.

The issue of inclusive education formed the basis for this study. The focus was on three major areas of concern in the literature: 1. effective strategies for meeting the needs of students, 2. educational change issues regarding inclusion, staff development, collaboration, and communications, and 3. the impacts of implementing inclusive education strategies.

Major Areas of Concern

Educational change and strategies for achieving this goal have recently been approached through school-based management. Actions based on decentralization plans have launched school-based management into the forefront of educational change in the 1990s. Presently, well over 3,000 articles, books, and documents have been published on the subjects of school reform, school-based or site-based management, restructuring, and local management of schools. The trend is obvious. A noteworthy amount of the literature deals with school-based management as a vehicle of reform. Representative examples dealing with the reform movement are found in publications by Glickman (1993), Hess (1994), Lane & Epps (1992), Odden & Wohlstetter (1995), Wohlstetter & Odden (1992).

Lynn (1994) has reviewed publications on restructuring schools (school reform) and categorized works on curricular and instructional reform, the change process as it relates to reform, methods of grouping students, school governance, and collaboration between schools and the community. Another aspect of the literature deals with the influence of site-based management on instruction. Examples of this may be found in descriptions by English (1988), Walberg & Niemiec (1994), and Wohlstetter & Briggs (1994).

The term "inclusion" is not mentioned in the federal law (McCarthy, 1994). However, it has become a key component of current school reform issues for a number of reasons, such as legal mandates, court orders, philosophical beliefs of educators and parents, and decisions made for students with disabilities by committees. At times decisions made regarding inclusion for students with disabilities may appear to conflict with other issues such as raising academic standards for all students or teachers being held accountable for the standardized test scores of the students in their classrooms. These conflicts are all part of the many policy arguments 1,2 surrounding restructuring.

There are some commonalities in restructuring practice which appear consistently in the literature. These include:

1. school-based management with an active teacher role,

2. shared decision making at the district level,

3. cooperative relationships between administrators and local teacher associations, and

4. innovative staff development practices (Center for Policy Research in Education, 1989)

While these commonalities of restructuring are not exhaustive, they do provide a

consistent foundation upon which to focus.

Educational research continues to stress the importance of teachers being more involved in identifying needs and developing the strategies for implementing effective change in our schools (Duttweiler, 1989; Glasser, 1990; Gross, 1985; Putnam, Spiegel, & Bruininks, 1995; Trendall, 1989; Tye & Novotney, 1975). Entrusting teachers with greater power and accountability for school-based changes can have many positive outcomes (Ehrenberg, 1992). First, it can increase the level of participation and support in the development and implementation of innovative reforms (Lieberman, 1990; Nelson, 1989). Second, it has the potential of increasing the sense of efficacy among regular and special education teachers (Ashton & Webb, 1986; Finn, 1986; McDaniel & Dibella-McCarthy, 1989; Shanker, 1986).

The new theory, according to Darling-Hammond (1992), "assumes students are not standardized and teaching is not routine . . . effective teaching techniques will vary for students with different learning styles, different developed intelligences, at different stages of cognitive and psychological development, for different subject areas, and for different instructional goals" (p.24). In order for educators to effectively meet the challenge of educating students according to new expectations, it will be necessary for educators to continually learn and adapt to new situations.

The approach in the past has been to provide one-shot staff development training sessions on topics determined by school administrators. This has been shown to be ineffective and inefficient. According to Ayres and Meyer (1992), teachers must be empowered and recognized as knowing their students and circumstances better than anyone else. Teachers must have ownership in any innovative programs or model implementation in order for change to occur and be successful.

Innovative and effective staff development activities can be implemented to initiate successful school reform. These staff development activities can target teacher attitudes, classroom practices and child outcomes. According to Guskey (1986) there is a temporal sequence to these activities. Staff development activities can provide specific tools for the teachers' use. Staff development activities are most beneficial when teachers ask for the opportunity to be exposed to specific ideas, or teachers can see that training has relevance for them. These new tools can change teachers' classroom practices, which can lead to changes in child outcomes. Improved child outcomes can lead to changes in teachers' beliefs and attitudes.

According to the National Center on Educational Restructuring and Inclusion (1994), systematic staff development and flexible planning time for special education and general education teachers to meet and work together contribute to successful inclusive educational programs. Empowering teachers and collaboration between programs improves both the professional teaching environment and the continuity of educational goals and objectives (Gross, 1985; Oakes, 1989; Sergiovanni & Moore, 1989). If educational systems accept the paradigm of inclusive schools for all children, collaboration can successfully occur. There are several factors, however, which must be overcome in order for this successful collaboration to occur. One factor reported by teachers is that they feel isolated and separated from other professionals in their educational setting. The feelings of separation and/or isolation are magnified by the specialization and stratification of teachers and administrators assigned to distinctly separated programs and functions (Duttweiler, 1989; Stainback & Stainback, 1992; Will, 1986).

A second factor that negatively influences successful collaboration among teachers is the lack of efficacy felt by both general and special education teachers (Ashton & Webb, 1986; Meek, 1988). If teachers do not feel competent in their abilities, it is unlikely that they will expend the effort necessary for successful collaboration.

In order to support collaborative relationships, it is imperative that teachers' feelings of isolation be addressed. In addition, boundaries between programs and separations between responsibilities must be minimized. Also, administrators must redistribute power and provide

opportunities for teachers to provide meaningful information into the operations of the educational setting.

As waves of school reform continue, it is increasingly important that "regular educators" and special educators become aware of policy arguments concerning inclusive education, support for educational change, and effective strategies for meeting the needs of students. Furthermore, educators should actively specify their beliefs and attitudes in these significant debates. The things that practitioners know, think, and believe about the policy issues surrounding inclusive education and reform ideas are important because they are the people who deliver the educational programs to the children.

Purpose of the Study

Because the outcomes of reform are largely dependent upon those that carry out the policy, it seemed logical for us to focus on responses from the people who do the work. Our purpose was to determine the perceptions and beliefs of regular and special education administrators and teachers regarding the provision of services to students, including at-risk students and students with disabilities.

The study targeted the three areas discussed above:

1. Effective strategies for meeting the needs of all students,

2. The support in their district for educational change, and

3. Inclusive education.

We compared responses of the implementers to determine if differences existed regarding these three policy areas. Other factors used for comparison included the total number of years in education and the educational position of the responder. We refer to these factors as independent variables. However, since they could not be manipulated, they are also defined as moderator variables.

These two variables were of interest to us because our professional roles involve training and administration. It was our assumption that if differences were evident, emphasis could be placed on solutions through the literature and our actions as educational leaders. We wanted to know how our clients viewed inclusive education. We assumed that the dependent variables would be influenced by the moderator variables. In particular, we suspected that time in service and the position that the responder held in the school organization would be key influences in their acceptance or rejection of educational reform issues involving inclusion. Dependent variables are shown in Table 3.

Method

Instrumentation

A questionnaire was developed with emphasis on the three areas reviewed above. In addition to requesting demographic information, 24 statements representing dependent variables were to be rated according to a six-point Likert scale (The scale ranged from 1 "strongly disagree" to 6 "strongly agree.").

Validity. Initially, the questionnaire was reviewed by a panel of eight experts to establish face and content validity. The panel of experts represented educators at the state, university, and

local levels who had particular types of expertise that related to this study (Nationally known experts in school reform and special education served on the panel). Recommendations from the panel were consistent in suggesting the changing of wording on specific items, the rationale for specific items and concern about the length of the instrument. Recommendations were incorporated into the survey instrument and the final draft of the instrument was prepared for distribution.

Reliability. Reliability was determined in two phases. In phase I reliability of the instrument was estimated before disseminating it to the random sample of 126 school systems. A pilot study was conducted with 20 educators who were similar to the sample group. They were asked to respond to the instrument. Three weeks later the same 20 educators were asked to respond again.

Each item was examined by using the repeated measure design. The t-test for correlated sample means was used to test for significant differences between the first and second response. Items that exceeded the critical t value of 2.093 were removed from the instrument (Alpha = .05, df = 19). Two items were removed as a result of this analysis.

Phase II of the reliability check involved applying Chronbach's Alpha to data from each section in the final study. According to de Vaus (1986), this test for unidimensionality is used to determine the correlation coefficient between a response and the responses to the other items in the subset. Any response with the item-to-scale coefficient less than .30 was dropped from the data. An alpha coefficient on each subset of .70 was desirable according to de Vaus. Furthermore, any item whose omission would increase the subset alpha to .70 or higher was dropped. The reliability coefficients for the three sections were as follows: Inclusive education (.81), effective strategies (.76), and support for change (.74).

Research Design

A random sample with an error range of 5% was determined according to the sampling formula for surveys suggested by Nunnery and Kimbrough (1971). A total of 126 school districts was selected out of a population of 187 school systems in the state of Georgia. A table of random numbers was used to determine which of the 187 school systems would be selected. After randomly choosing the 126 systems, the following sets of surveys were sent to the selected school systems:

Special Education directors	126 surveys
Elementary School Principals	126 surveys
Regular education teachers	252 surveys
Special education teachers	252 surveys

The first elementary school listed in each of the 126 systems' roster was chosen (Elementary schools that served seventh grade students or higher were not included). Names and addresses were obtained from the Georgia Department of Education (1994). The special education directors were sent questionnaire packets. Additionally, five survey packets were mailed to the selected elementary principals in the 126 school systems. The principals were given directions for completing one questionnaire and distributing the other four to the first two regular education teachers on their roster and the first two special education teachers on their roster.

Data Collection

Each packet included a cover letter explaining the need for the study and its purpose, a questionnaire (postage stamp and return address provided), and a postal card to return indicating participation. The postal card was also used as a way of offering a copy of the summary of the results to the responders. To preserve anonymity, each responder had the opportunity to return an inscribed postal card separately. No phone calls were made to nonresponders, nor were additional reminders distributed.

Dependent Variables and Issues

Three dependent variables emerged from the issues in the literature (See Table 1). Each dependent variable contained a cluster of statements in the questionnaire. Questions deleted through the reliability analysis are indicated in Table 1.

 Table 1

 Cluster of Questions per Area (Dependent Variable) (Part II of Questionnaire)

Area	Cluster of Questions
1. Effective Strategies for Meeting Students' Needs	1,2,*6,*7,*8,*13,15,18,*20,24
2. Support for Educational Change	3,5,10,12,17,21
3. Inclusive Education	4,9,*11,*14,*16,19,22,23

* These questions were deleted in phase II of the reliability check and not used in the analysis of data. Table 3 includes the questionnaire items.

Research Questions

Each set of issues provided a basis for designing a corresponding research question. The research questions below focused on the statistically significant differences among the independent variables (alpha = .05).

Is there a statistically significant difference among the independent variables regarding:

- 1. effective strategies for meeting students' needs,
- 2. support for educational change, and

3. inclusive education?

Findings

Descriptive Data A total of 756 surveys were mailed, and 460 usable surveys were returned for a 64% rate of return. Table 2 shows the return by job title of the responder. The return rates ranged from a high of 82% to a low of 51%. Most of the responders were female (83.7%), while 14.6% were male and the remaining 1.7% did not respond to this item. The mean for total educational experience was 15.8 years.

Table 2Surveys Mailed and Usable Responses

The means for the three subsets of items in Table 1 ranged from 4.3 to 5.0. The highest subset mean was 5.0 for effective strategies for meeting students' needs (n = 448, S. D. = 0.79). Support for educational change received a mean of 4.4 (n = 447, S. D. = 0.91), while the lowest subset mean was 4.3 for inclusive education (n = 449, S. D. = 0.97). The strongest disagreement was with item number 7, "It is important for academic expectations to be the same for all students in a class." This item, however, was eliminated by the reliability analysis and was not used in the study.

Table 3 includes 24 statements (representing the dependent variables) from the questionnaire. They were divided according to the categories shown in Table 1. Statement number one, from the effective strategies category, had the highest mean (5.6).

Statement	N	Mean	S.D.
1*. It is important to make modifications for students who need adaptations to benefit from a particular instructional environment.	459	5.6	.86
2*. Students' progress should be graded according to ability rather than only with standardized measures.	452	5.2	1.10
3**. Our school/school district has a broad continuum of services for meeting the needs of all students.	460	4.5	1.10
4***.Inclusion of students with mild disabilities into regular classes is generally an effective strategy.	449	4.5	1.10
5**. I have input into the program of students with disabilities who are placed in the regular classroom.	448	4.6	1.41
6*. Programs like Chapter 1 are effective.	448	4.4	1.27
7*. Keeping academic expectations consistent for all students is important.	446	2.3	1.60
8*. Maximum class size should be lowered when including students with disabilities.	451	5.2	1.18

Table 3
Dependent Variables and Descriptive Data

9***.The inclusion of students with disabilities into the regular classroom can be beneficial to the other students in the class.	451	4.4	1.32
10**. I have support from my supervisor(s) to try new ideas and implement creative strategies.	448	5.1	1.23
11***. Students should be served in regular classes regardless of disability.	451	2.7	1.43
12**. I have opportunities to talk and plan with my colleagues on a regular basis.	447	4.0	1.62
13*. It is important to keep to keep behavioral expectations the same for all students.	451	3.7	1.76
14***. My school/district is a strong supporter of inclusive education.	443	3.8	1.34
15*. Special education provides a valuable service for students with disabilities.	454	5.4	1.02
16***. Regular teachers must spend a great deal of time with students with disabilities.	450	3.4	1.49
17**. Efforts are made to provide opportunities for mutual planning and collaboration among personnel in my school/district.	453	3.7	1.47
18*. Students should be grouped in ways which allow a wide variety of abilities in each class.	448	4.4	1.42
19***. All students should be included in regular environments to the greatest extent possible.	454	4.9	1.33
20*. Slow learners should receive special help	444	3.9	1.62

outside the regular classroom.

21**. Opportunities for staff development are provided by my school district which meet my needs for professional growth.	453	4.7	1.36
22***. Inclusion in the regular classroom will hurt the educational progress of the student with a disability.	449	2.7	1.40
23***. Placement of a student with a disability into a regular classroom is disruptive to students without disabilities.	449	3.1	1.48
24*. In most cases, students should be grouped by ability.	451	2.8	1.58

* Items used for effective strategies variable.

** Items used for support for change variable.

*** Items used for inclusive education variable.

NOTE: The number of responders varies because of missing cases (Not all people responded to every item)

A one-way analysis of variance was used to test for differences among means for each of the three clusters. The Scheffe' test was applied for post hoc analysis (alpha = .05).

Research Question One. Is there a statistically significant difference among the independent variables regarding attitudes and beliefs of effective strategies for meeting students' needs? Questionnaire items included in this subset are numbers 1, 2, 15, 18, and 24 (Items remaining after elimination the reliability check). Significant differences were found for the variable "total years in education" with respect to effective strategies for students (F=2.98,P < .03). These differences are noted in Table 4.

Source	D.F.	Sum of Squares	Mean Squares	F Ratio	F Prob.
Between Groups	3	5.5	1.83	2.98	.03
Within Groups	432	265.88	.62		
TOTAL	435	266.76			
Group	Count	Mean	Std. Dev.	Std. Erro	r

Table 4Effective Strategies by Total Years in Education

Grp 1 (1 - 9 years)	101	4.80	.752	.075
Grp 2 (10 - 16 years)	117	4.95	.814	.075
Grp 3 (17 - 21 years)	103	5.12	.826	.072
Grp 4 (22 - 38 years)	115	4.95	.790	.077

The post hoc analysis revealed a significant difference between groups 1 and 3. The mean for responders who had been in education for 1 through 9 years was 4.80, while the mean for those who had been in education for 17 through 21 years was 5.12. Group 3 showed the strongest agreement with the effective strategy statements. While group 1 agreed with the effective strategies, their agreement was not as strong as in the other three groups.

As noted in Table 5, there was also a significant difference by current position with regard to effective strategies for meeting the needs of students (F=9.67, P < .01). The Scheffe' test revealed that regular education teachers' perceptions were significantly different from special education teachers', principals', and special education directors' perceptions. Regular education teachers tended to view the effective strategy statements less positively than did the other three groups. The means ranged from 4.65 for regular education teachers to 5.14 for special education directors.

Effective Strategies by Current Role						
Source	D.F .	Sum of Squares	Mean Squares	F Ratio	F Prob.	
Between Groups	3	17.08	5.69	9.67	.01	
Within Groups	432	254.30	.589			
TOTAL	435	271.38				
Group	Count	Mean	Std. Dev.	Std. Error		
SE Teach	135	5.05	.777	.067		
RE Teach	125	4.65	.820	.073		
Principal	79	5.07	.682	.077		
SE Direct	97	5.14	.749	.076		

Table 5
Effective Strategies by Current Role

Research Question Two. Is there a statistically significant difference among the independent variables regarding attitudes and beliefs of the responders and the support they have for educational change? Items for this subset included questions 3, 5, 10, 12, 17, and 21 (see

Table 1).

Total years in education was significant in terms of attitudes and beliefs regarding support for educational change (F= 7.26, P < .01). These differences are noted in Table 6.

		8 9			
Source	D.F.	Sum of Squares	Mean Squares	F Ratio	F Prob.
Between Groups	3	17.15	5.717	7.26	.01
Within Groups	431	339.42	.788		
TOTAL	434	356.57			
Group	Count	Mean	Std. Dev.	Std. Error	
Grp 1 (1 - 9 years)	98	4.24	.900	.090	
Grp 2 (10 - 16 years)	112	4.18	.950	.090	
Grp 3 (17 - 21 years)	108	4.54	.794	.076	
Grp 4 (22 - 38 years)	117	4.65	.900	.083	

Table 6Support for Change by Total Years in Education

The post hoc analysis for data shown in Table 6 revealed a significant difference between group 1 and group 4. Group 2 differed significantly with groups 3 and 4. Group 4, which had been in education 22 through 38 years, most strongly agreed that they had support for educational change with a mean of 4.65. Teachers who had been in education 10 through 16 years (Group 2) Perceived that they had the least amount of support for change of the four groups with a mean of 4.18. Those who had been in education the least amount of time (1 through 9 years) differed significantly with those who had spent the greatest number of years in education (means of 4.24 and 4.65 respectively).

There was also a significant difference by current position with regard to attitudes and beliefs about support for educational change (F=8.08, P < .01)(see Table 7). The post hoc test revealed that special education teachers differed significantly with principals and special education directors, while regular education teachers differed significantly with special education directors. The means ranged from 4.17 for special education teachers to 4.68 for special education directors.

Table 7Support for Change by Current RoleSourceD.F.Sum of
SquaresMean
RatioF
FSquaresRatio

Between Groups	3	18.99	6.330	8.08	.01
Within Groups	431	337.58	.783		
TOTAL	434	356.57			
Group	Count	Mean	Std. Dev.	Std. Error	
SE Teach	136	4.17	.820	.070	
RE Teach	121	4.33	1.040	.095	
Principal	79	4.61	.766	.086	
SE Direct	99	4.68	.854	.086	

Research Question Three. Is there a statistically significant difference among the independent variables regarding attitudes and beliefs toward inclusive education? Questions 4, 9, 19, 22, and 23 are included in this subset (See Table 1).

In Table 8 the analysis of responses for inclusive education reveals a significant difference among responder groups (F = 3.94, p < .01). The Scheffe' test indicated a significant difference between groups 1 and 3. Responders who had been in education 1 to 9 years had the lowest mean (4.11) with regard to inclusive education. Educators who had been in the field 17 to 21 years had the highest mean.

Source	D.F.	Sum of Squares	Mean Squares	F Ratio	F Prob.
Between Groups	3	10.82	3.610	3.94	.01
Within Groups	435	398.20	.915		
TOTAL	438	409.02			
Group	Count	Mean	Std. Dev.	Std. Error	
Grp 1 (1 - 9 years)	97	4.11	1.030	.104	
Grp 2 (10 - 16 years)	113	4.16	1.010	.095	
Grp 3 (17 - 21 years)	111	4.52	.842	.080	
Grp 4 (22 - 38 years)	118	4.30	.941	.087	

Table 8Inclusive Education by Total Years in Education

As shown in Table 9, a significant difference was found among positions for the variable set dealing with inclusive education (F=28.54, P < .01).

		iducution e	y current r		
Source	D.F .	Sum of Squares	Mean Squares	F Ratio	F Prob.
Between Groups	3	67.26	22.420	28.54	.01
Within Groups	435	341.76	.786		
TOTAL	438	409.02			
Group	Count	Mean	Std. Dev.	Std. Error	
Grp 1 (1 - 9 years)	139	4.48	.925	.078	
Grp 2 (10 - 16 years)	122	3.71	.983	.089	
Grp 3 (17 - 21 years)	80	4.21	.824	.092	
Grp 4 (22 - 38 years)	98	4.75	.966	.075	

Table 9Inclusive Education by Current Role

The post hoc analysis revealed a significant difference between regular education teachers and principals; regular education teachers and special education teachers; and regular education teachers and special education directors. A difference was also found between principals and special education directors. Regular education teachers were least positive toward inclusive education (mean = 3.71). Principals were next with a mean of 4.21. Special education teachers were second highest with a mean of 4.48 and the special education directors were most positive toward inclusive toward inclusive education with a mean of 4.75.

Conclusions and Discussion

Responders who had been in education from 17 through 38 years more strongly agreed with each of the three subsets of items than did responders who have been in education for 16 years or less. This is counter to our expectations. We reasoned that recent graduates would have been exposed to more ideas on educational reform. We also assumed that the most recent graduates would be more open to ideas, such as inclusive education. This, however, was not true. It appears that educators who have been in the field for many years feel more strongly that they have support for educational changes and view inclusive education more positively than their less experienced peers. Perhaps educators develop self-confidence with experience. As they master the complex issues of classroom management and the maze of school expectations, there is a greater capacity for accepting the challenges of educational change such as inclusive education. We were surprised that younger professionals did not accept the paradigm shift. The cause of this is not clear and needs to be investigated.

Current role (job position) seems to be an independent variable of great significance. Discrepancies among groups of responders were noted when looking at current roles.

Regular education teachers are least positive about the effective strategy statements. Perhaps they continue to be frustrated with trying to meet the needs of all of their students, even with support from programs such as Chapter I or special education. Policies dealing with effective strategies may need clarification for regular education teachers.

Principals reported the highest mean for items related to support for educational change. This is positive in light of school-based management reform issues. If principals feel that they are empowered to make changes and implement creative strategies, perhaps school reform policies can be integrated at the school level. It is also important to consider ways to empower regular and special education teachers, if inclusive education policies are to be successful at the school level.

Special education teachers' means for support for change items is the lowest of the four groups. If special education teachers are trying to carry out inclusive strategies for their students with disabilities, they may be getting resistance from regular education teachers, based on regular education teachers' responses to the inclusive education items. Special education teachers may also feel isolated and not supported by regular and special education administrators. There may also be a link to what Yatvin (1995) found concerning special education teachers spending time in skill related activities as opposed to instruction tied to themes.

Regular education teachers' mean responses for inclusive education (3.71) are the lowest for any responder group. These results appear to contradict results of a study by Diebold and Trentham (1987), which investigated teacher attitudes toward inclusion in Alabama. The regular educators in this study were positive regarding willingness to teach students with disabilities, feelings of confidence about skills in carrying out the mainstreaming program in the regular classroom, sufficiency of time for carrying out the mainstreaming program, and effects of teacher input into the educational program. If regular educators are ambivalent about supporting inclusive education concepts, it may be very difficult to effectively carry out inclusive strategies.

Special education directors most strongly agree with inclusive education concepts (4.75). We expected this because they are closest to policy formulation and advocacy. They are more attuned to the legal and policy ramifications of inclusive education. Most directors support the theoretical concepts of inclusive education. Special education teachers report the second highest means (4.48). Principals' means are between special education teachers and regular education teachers (4.21).

An Indiana superintendent's response to a national survey regarding inclusion stated that two things were necessary for successful inclusion: "leadership and money" (Regional Center on Educational Restructuring and Inclusion, 1994). The leadership of the principal will be essential in setting up successful inclusion practices. Three elements of leadership were identified by the Center's national inclusion survey: a positive view about the value of education to students with disabilities, a positive view of the capabilities of teachers and schools to accommodate the needs of all students, and a belief that everyone benefits from inclusion.

Rose and Smith (1993) confirm that attitudes regarding inclusion are also a concern with preschool programs. Their national survey resulted in 60% of the respondents citing attitudes as a concern impacting the effective inclusion of preschool children with disabilities into community settings. Their parallel concerns include: teacher preparedness, awareness, communication, and collaboration.

Reviewing the degree of agreement for individual questionnaire items, responders most strongly agree with the statement, "It is important to make modifications for students who need adaptations to benefit from a particular instructional environment" (mean = 5.6). The responses

from this study are very different from the survey completed by Schumm and Vaughn (1991). Their results indicate, "teachers identify adaptations in materials and instruction as neither desirable nor feasible when teaching special learners" (p.22).

The following four statements are the items with the strongest agreement with means > 5.2.

1. It is important to make modifications for students who need adaptations to benefit from a particular instructional environment (mean = 5.6).

2. Special education provides a valuable service for students with disabilities (mean = 5.4).

3. Students' progress should be graded according to ability rather than only with standardized measures (mean = 5.2).

4. Maximum class size should be reduced when students with disabilities are placed in regular classrooms (mean = 5.2).

Implications for Policy

Educational policy makers must understand that "it is important to make modifications for students who need adaptations to benefit from a particular instructional environment." Not only is it important to make modifications for students, it is legally mandated. Another response that weighs heavily on policy implementation is "individualizing instruction." Teachers are willing to individualize instruction, but they usually need assistance in developing these strategies. This assistance translates into additional time and program cost. Policy proposals must include detailed means to reach policy goals. This aspect of the policy process involves legitimating (selecting a proposal, building support, and enacting it as law) and implementing policy (organizing bureaucracies, providing payments and services, and levying taxes) (Dye, 1995, p. 21).

The statement, "Special education provides a valuable service for students with disabilities" received the second highest mean response by those responding to this survey. We see this as an indication that educators in Georgia view special education as effective. Continuing efforts to provide information regarding concepts, such as least restrictive environment and continuum of services is also timely. This effort needs to be recognized in program policy at the pre-service level in such courses an "introduction to exceptional children." It will also need to be emphasized at the school and district level and can be supported at the regional level as needed.

The third highest response to the survey indicates that students' progress should be graded according to ability, rather than only with standardized measures. This issue becomes complicated, as raising academic standards is a priority from the state and national level. Schools, school districts, and states are often rated according to students' scores on standardized tests. Assuring that all students are challenged academically, while allowing students to work at their own ability level, is an issue that is at the heart of school policy reform for the 1990s. Non-graded schools, heterogeneous grouping, inclusive education, collaborative teaching, etc. are components that influence this complex goal of providing appropriate learning opportunities for all students.

"Maximum class size should be reduced when students with disabilities are placed in regular classrooms." This statement was agreed upon by the majority of responders (mean = 5.2). This is an issue that touches on funding policy from the state level. A committee appointed by the Georgia State Board of Education is currently working on funding weights for special education. They are addressing the expense involved in educating students with disabilities. They are also researching funding for different teaching models such as inclusion. We hope that this

will result in policies to reduce maximum class size and generate funds for additional personnel when models such as inclusion, collaboration or team-teaching are used.

Another issue that needs to be addressed is maximum class size for regular education classes. Regular education teachers are expected to educate students with an ever increasing variety of needs. For example, a third grade teacher may have students who are capable of working at a fifth grade level, as well as those who are working at a preschool level. In addition, there may be students with extreme behavior problems, students with learning disabilities, and students who have cerebral palsy, spina bifida, hearing impairments, vision impairments, etc. in this classroom. It is unfair to expect teachers to appropriately educate a classroom of 30 students under these conditions. Therefore, a policy advocating smaller class sizes in Georgia is appropriate.

Implications for Future Research

Based upon the findings of this study, the following recommendations are offered for consideration for future research.

1. This study is limited to the state of Georgia. It may be helpful to determine if the attitudes and beliefs of the responders to this study are similar to those responding to the same issues in other states.

2. The principals, regular education teachers, and special education teachers responding to this study were all working at the elementary school level. It may be beneficial to determine if personnel working at the middle school and high school levels have similar attitudes and beliefs.

3. This study indicates that educators who have been in the field for a longer period of time (17 to 38 years in this study) feel that they have support for educational changes and view challenges such as inclusive education more positively. It may be beneficial to test this hypothesis further. If it is true that experienced educators have a greater capacity for change and difficult challenges, we need to foster this capacity in experienced teachers and provide growth opportunities for less experienced teachers.

4. There is very little research addressing the effectiveness of inclusion. It is crucial to determine if educating students with disabilities in regular classrooms has quantifiable benefits for students with and without disabilities. Studies may include measuring progress on IEP goals in regular classrooms and in pullout situations, interviewing regular education students regarding the inclusion of students with disabilities in their classes, measuring aggressive or inappropriate behaviors of students with disabilities over time in regular and pullout situations, or measuring students' with disabilities interactions with other students over time. These studies would be complex and may be situational, but they would provide a foundation for addressing inclusion as a viable mode for providing services to students with disabilities as opposed to the emotional appeal of inclusion that is reflected in the majority of current literature.

Educating all students in the least restrictive environment is a philosophical and mandated policy goal for Georgia. The responders to this survey recognize the importance of making modifications for students and adapting teaching strategies to meet the needs of a diverse population. Policy must be directed toward improving teaching for learning for all students. Achieving a challenging, appropriate learning experience for every student is a major issue of the 1990s.

End Notes

1. Our thinking regarding policy is strongly influenced by Anderson (1979), Dye (1995), and

Jones (1984).

2. We accept Dye's (1995) definition: ". . . public policy is whatever governments choose to do or not to do." (p. 4)

References

Anderson, J. A. (1979). Public Policy-Making. New York: Holt, Rinehart, Winston.

Ashton, P. A., & Webb, R. B. (1986). Making a difference: Teachers' sense of efficacy and student achievement. New York: Longman.

Ayres, B. & Meyer, L. (1992, February). Helping teachers manage the inclusive classroom. The School Administrator, 30-37.

Baker, E. T. (1994). Meta-analytic evidence for non- inclusive educational practices: Does educational research support current practice for special-needs students? Unpublished doctoral dissertation. Philadelphia: Temple University.

Baker, E. T., Wang, M. C., & Walberg, H. J. (1995). The effects of inclusion on learning. Educational Leadership,42(4), 33-35.

Carlberg, C. & Kavale, K. (1980). The efficacy of special versus regular class placement for exceptional children: A meta- analysis. Journal of Special Education, 14, 295-309.

Darling-Hammond, L. (1992, November). Reframing the school reform agenda. The School Administrator, (22-27).

de Vaus, D. A. (1986). Surveys in social research (Contemporary social research series; II). London: George Allen & Unwin Publishers Ltd.

Diebold, M. H., & Trentham, L. L. (1987). Special educator predictions of regular class teacher attitudes concerning mainstreaming. Teacher Education and Special Education, 10(1), 19-25.

Duttweiler, P. C. (1989). Changing the old ways. Journal of Research and Development in Education, 22(2), 64-66.

Dye, T. R. (1995). Understanding Public Policy (Eighth Ed). Englewood Cliffs, NJ: Prentice-Hall.

English, F. (1988). School-Based Management: A Strategy for Better Learning. Arlington, VA: American Association of School Administrators.

Ehrenberg, C. G. (1992). Beliefs of Regular and Special Education Teachers Regarding Students At-risk: A Qualitative Case Study of Issues and Professional Roles. Unpublished doctoral dissertation, The University of Georgia.

Finn, C. E. J. (1986). We can shape our destiny. Educational Leadership, 44(1), 4-6.

Fuchs, D., & Fuchs, L. (1994). Inclusive school movement and the radicalization of special education reform. Exceptional Children, 60(4), 294-309.

Gartner, A., & Lipsky, D. K. (1987). Beyond special education: Toward a quality system for all

students. Harvard Educational Review, 57, 367-385.

Georgia Department of Education (1994). 1994 Georgia Public Education Directory. Atlanta, Georgia.

Glasser, W. (1990). The quality school. Phi delta Kappan, 71, 425-435.

Glickman, C. D. (1993). Renewing America's schools: A guide for school-based action. San Francisco: Jossey-Bass.

Gross, S. J. (1985). Personal power and empowerment. Contemporary Education, 56(3), 137-143.

Guskey, T. R. (1986). Staff development and the process of teacher change. Educational Researcher, 15(5), 5-12.

Heller, K., Holtzman, W., & Messick, S. (1982). Placing children in special education: a strategy for equity. Washington, D.C.: National Academy of Science Press.

Hess, G. A. (Jr.) (1994). School-based management as a vehicle for school reform. Education and Urban Society, 26 (3), 203-219.

Holtzman, W., & Messick, S. (1982). Placing children in special education: A strategy for equity. Washington, D.C.: National Academy of Science Press.

Jones, C. O. (1984). An Introduction to the Study of Public Policy. Monterey, CA: Brooks/Cole.

Lane, J. J., & Epps, E. G. (Eds.) (1992). Restructuring the schools: Problems and prospects. Berkeley, CA: McCutchan.

Lieberman, A. (1990). Navigating the four C's: Building a bridge over troubled waters. Phi Delta Kappan, 71(7), 531-533.

Lilly, M. S. (1988). The regular education initiative: A force for change in general and special education. Education and Training in Mental Retardation, 23, 253-260.

Lipsky, D., & Gartner, A. (1987). Capable of achievement and worthy of respect: Education for handicapped students as if they were full-fledged human beings. Exceptional Children, 54, 69-74.

Lynn, L. (1994). Bibliography on School Restructuring. Madison, WI: Wisconsin Center for Educational Research, University of Wisconsin-Madison.

McDaniel, E., & Dibella-McCarthy, H. (1989). Enhancing teacher efficacy in special education. Teaching Exceptional Children, 21(4), 34-38.

McCarthy, M. M. (1994). Inclusion and the law: Recent judicial developments. Research Bulletin, 13, 1-4.

Meek, A. (1988). On teaching as a profession: A conversation with Linda Darling-Hammond. Educational Leadership, 46, 11-17.

National Association of State Boards of Education (1992). Winners all: A call for inclusive

schools. Alexandria, Virginia.

National Center on Educational Restructuring and Inclusion (1994). National Survey on Inclusive Education (Number 1). Graduate School and University Center, The City University of New York.

Nelson, R. C. (19 Robins' eggs, teachers and education reform. Phi Delta Kappan, 70, 632-638.

Nunnery, M. Y., & Kimbrough, R. B. (1971). Power, Polls, and School Elections. Berkeley: McCutchan.

Oakes, J. (1989). What educational indicators? The case for assessing the school context. Educational Evaluation and Policy Analysis, 11(2), 181-199.

Odden, E. R., & Wohlsetter, P. (1995). Making school-based management work. Educational Leadership, 52(5), 32-36.

Pugach, M. (1988). Special education as a constraint on teacher education reform. Journal of Teacher Education, 39, 52-59.

Putnam, J. W., Spiegel, A. N., & Bruininks, R. H. (1995). Future directions in education and inclusion of students with disabilities: A Delphi investigation. Exceptional Children, 61(6), 553-576.

Reschly, D. J. (1988a). Special education reform: School psychology revolution. School Psychology Review, 17, 459-475.

Reschly, D. J. (1988b). Obstacles, starting points, and doldrums not withstanding: Reform/revolution from outcomes criteria. School Psychology Review, 17, 495-501.

Reynolds, M., Wang, M., & Walberg, H. (1987). The necessary restructuring of special and regular education. Exceptional Children, 53, 391-398.

Reynolds, M., & Wang, M. C. (1983). Restructuring "special"school programs: A position paper. Policy Studies Review, 2, 189-212.

Rose, D. F., & Smith, B. J. (1993). Preschool mainstreaming: Attitude barriers and strategies for addressing them. Young Children, 48(4), 59-62.

Sergiovanni, T., & Moore, J. (1989). Schooling for tomorrow: Directing reforms to issues that count. Boston, MA: Allyn & Bacon.

Schumm, J., & Vaughn, S. (1991). Making adaptations for mainstreamed students: general classroom teachers' perspectives. Remedial and Special Education, 12(4), 18 - 27.

Shanker, A. (1986). Teachers must take charge. Educational Leadership, 44(1).

Stainback, S., & Stainback, W. (1985). The merger of special and regular education: can it be done? A response to Lieberman and Mesinger. Exceptional Children, 51, 517-521.

Stainback, S., & Stainback, W. (1987). Integration versus cooperation: A commentary on "Educating children with learning problems: A shared responsibility." Exceptional Children, 54, 66-68.

Stainback, S., & Stainback, W. (1989). No more teachers of students with severe handicaps. TASH Newsletter, 15, 9.

Stainback, W., & Stainback, S. (1984). A rationale for the merger of special and regular education. Exceptional Children, 50, 102-111.

Stainback, W., & Stainback, S. (1990). Support Networks for Inclusive Schooling: Interdependent Integrated Education. Baltimore, MD: Paul H. Brooks.

Stainback, S., & Stainback, W. (1992). Curriculum considerations in inclusive classrooms. Baltimore: Paul H. Brookes.

Staub, D., & Peck, C. A. (1995). What are the outcomes for nondisabled students? Educational Leadership, 52(4), 36-41.

Taylor, S. J. (1988). Caught in the continuum: A critical analysis of the principle of the least restrictive environment. Journal of the Association for Persons with severe Handicaps, 13, 41-53.

Trendall, C. (1989). Stress in teaching and teacher effectiveness: A study of teachers across mainstream and special education. Educational Research, 31(1), 52-58.

U. S. Congress (1990). Individuals with Disabilities Education Act of 1990. Washington, D.C.: Author.

Van Dyke, R., Stallings, M. A., & Colley, K. (1995). How to build an inclusive school community: A success story. Phi Delta Kappan, 76(6), 475-479.

Vergason, G. A., & Anderegg, M. L. (1992). Preserving the least restrictive environment. In W. Stainback & S. Stainback (Eds.), Controversial issues confronting special education. Needham Heights, MA: Allyn and Bacon.

Vergason, G. A., & Anderegg, M. L. (1993). Beyond the regular education initiative/inclusion and the resource room controversy. In E. L. Meyen, G. A. Vergason, & R. J. Whelan (Eds.), Educating students with mild disabilities. Denver, CO: Love Publishing.

Walberg, H. J., & Niemiec, R. P. (1994). Is Chicago school reform working? Phi Delta Kappan, 75(9), 713-715.

Will, M. (1986). Educating students with learning problems - a shared responsibility. Exceptional Children, 411-415.

Wang, M. C., & Baker, E. T. (1985-86). Mainstreaming programs: Design features and effects. The Journal of Special Education, 19, 503-521.

Wang, M. C., & Birch, J. W. (1984). Effective special education in regular classes. Exceptional Children, 50, 391-397.

Wang, M. C., Reynolds, M. C., & Walberg, H. J. (1986). Rethinking special education. Educational Leadership, 44, 26-31.

Wohlstetter, P., & Briggs, K. L. (1994). The principal's role in school-based management. Principal, 74 (2) 14, 16-17.

Wohlstetter, P., & Odden, A. (1992). Rethinking school-based management policy and research. Educational Administration Quarterly, 28 (4), 529-549.

Yatvin, J. (1995). Flawed assumptions. Phi Delta Kappan, 76(6), 482-484.

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