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The Adaptation of Regular Elementary Classrooms for Children With Moderate and Severe Disabilities: Inclusion Practices from the Principal's Perspective

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THE ADAPTATION OF REGULAR ELEMENTARY CLASSROOMS FOR CHILDREN WITH MODERATE AND SEVERE DISABLITIES: INCLUSION PRACTICES FROM THE PRINCIPAL'S PERSPECTIVE

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The committee read and examined his dissertation, supervised his defense of it in oral examination, and decided to recommend that his study be submitted to the Graduate Council and the Associate Vice-President for Research and Dean of the Graduate School, in partial fulfillment of the requirements for the degree of Doctor of Education.

(Chairman, Graduate Committee)

Signed on behalf of the Graduate Council

Associate Vice-President for Research and Dean of the Graduate School

ABSTRACT

THE ADAPTATION OF REGULAR ELEMENTARY CLASSROOMS FOR CHILDREN WITH MODERATE AND SEVERE DISABLITIES: INCLUSION PRACTICES FROM THE PRINCIPAL'S PERSPECTIVE

by

Jerry R. Herman

This study examined the perceptions of elementary school principals in Tennessee regarding the desirability and feasibility of adapting regular elementary classrooms and programs for the inclusion of children with moderate and severe disabilities. The purpose of the study was to add an administrative dimension to current research on inclusive educational programming for children typically educated in special (CDC) class settings.

Data collection for the descriptive design of the study was accomplished by use of a 40 item survey instrument with a 7-point Likert-type scale for each construct (i.e. desirability and feasibility). Four ten item subscales addressed the areas of Staff Organization, Curriculum, Materials, and Instructional Methodology and the demographic factors of gender, age, teaching and administrative experience, training, and system size were examined for effect.

Responding elementary principals in this study identified 95% of the presented adaptations as significantly more desirable than feasible with demographic factors having little or no effect. Moderate to high scores on the feasibility scale, however, indicated that principals do not view implementation of the adaptations as impractical. Conclusions of the study emphasize that the differing views of desirability and feasibility may be attributed to either a perceived lack of available resources or administrative autonomy or both, that adaptations may become less desirable and feasible as the time required for implementation increases, that adaptations of the curriculum were viewed as less desirable than other types of adaptations, and that the active participation of parents in curriculum design was viewed among the least desirable and feasible of all adaptations.

DEDICATION

To Silvia, who taught me to love.

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CHAPTER 1

Introduction

Although segregation in many forms has existed in the United States since the colonial period, a considerable body of evidence exists which suggests that integration is actually the major cultural goal in America; even, perhaps, that the drive to create an integrated society was a fundamental inducement for many of the European immigrants to our "new world." Anthropologically, integration may be viewed as a measure of cultural unity (Kneller, 1978), although some have suggested that it is more of a theoretical condition than an achievable reality (Kroeber, 1952). Whether or not complete social integration is ever attained, Kneller's notion of cultural unity appears to be a central theme in our nation's social evolution; a theme which continues to impact all aspects of society.

American history is replete with examples of significant cultural adjustments related to social, political, economic, and educational integration. The Bill of Rights and the Constitution with its several amendments have established a firm foundation for the movement to include all citizens in the national framework. The thirteenth amendment (1865) ending slave labor and the nineteenth amendment (1920) securing voting rights for women are but two examples of inclusionary moves having enormous national impact. The

issues surrounding integration, however, remain volatile and it is not surprising that some authors view it as bearing directly on the nature of society itself (Barton, 1989; Gearheart & Weishahn, 1980). To the extent that political and legislative decisions can be seen as a reflection of national cultural values, the movement toward integration and inclusion of all citizens, while slow to develop, may reasonably be accepted as a major force in American society. Such integration is currently evident for Tennesseeans with disabilities (Summerville, 1995).

The movement toward greater integration, characterized both by purposeful direction and caution, is especially evident within the field of education. The religious and political ideology of early leaders caused them to envision an educated populace, although significant progress toward the realization of this vision did not begin until the first half of the nineteenth century. In the earliest stages, steps toward the creation of a comprehensive educational system for the general public were taken with caution and perhaps even skepticism. Decades of educational experimentation passed, for example, before the State of Massachusetts initiated the use of public tax dollars at the state level in 1837. A firm commitment to universal public education was absent prior to this time. Beginning in New England in the mid-nineteenth century and spreading rapidly through the other states,

increasing numbers of children gained access to public schooling, but not all children.

Withholding educational opportunity from certain children continued as a common and accepted practice. Blacks, Chinese, and moderately and severely disabled children, for example, remained outside newly formed educational systems well into the current century (Barton, 1989; Berres & Knoblock, 1987). Near the end of the nineteenth century and following enormous political debate, the U.S. Supreme Court institutionalized the doctrine of "separate but equal" (Plessy v. Ferguson, 1896) forestalling efforts toward racial integration in schools. Although Justice Harlan of Kentucky issued a stirring dissent to the Plessy v. Ferguson decision, for moderately and severely disabled students, what began optimistically with community residential facilities around mid-century turned to disappointment and frustration. By the turn of the century attitudes favoring integration had changed in favor of increased long-term segregation.

The emergence of the special class organizational structure within public schools gained rapid acceptance and segregated special classes became the benchmark for educating students with moderate and severe disabilities early in the twentieth century. The growth of the special class placement practice continued for more than five decades and segregated special classrooms remain a common placement option today. A U.S. Supreme Court decision (Brown v. Board of Education of

Topeka, 1954) addressing civil rights issues in education, however, also spawned a movement of unheralded proportions within the area of special education.

With the Brown decision equal educational opportunity for all children eventually became a formally recognized national expectation (Wang & Walberg, 1985) and the importance of the Brown decision was quickly realized by other minority groups, including those with disabilities. As advocacy for the rights of all disabled children grew, educational services for these children also began to receive substantive attention. The passage of Public Law 88-164, the Mental Retardation Facilities and Community Health Centers Construction Act of 1963, followed by the establishment of the Division of Handicapped Children and Youth, was an undeniable indication of growing federal interest in assistance to children with disabilities. Spurred by judicial successes in the civil arena, advocates for the rights of disabled children in public schools also began to turn to the courts. In 1971, the Pennsylvania Association for Retarded Children successfully filed suit against that State for failing to provide appropriate educational services for the developmentally disabled. In a 1972 decision (Mills v. District of Columbia Board of Education), a U.S. District Court ruled that all children, regardless of the nature of their handicap, were entitled to an appropriate, publicly funded education as a basic constitutional right. The Pennsylvania court ruling had

an especially important impact on the issue of segregation of moderately and severely disabled students by stating that programs for disabled children should be like programs provided for non-disabled children (Berres & Knoblock, 1987).

If legislative decisions can be interpreted as a reflection of public sentiment and cultural direction, national endorsement of these earlier landmark decisions came with the passage of the Education for All Handicapped Children Act, Public Law 94-142 in 1975, mandating accommodations for "the diverse needs of individual students in regular classrooms" (Wang & Walberg, 1985, p 88). The Least Restrictive Environment (LRE) language of PL 94-142 established that the education of handicapped children must, to the maximum extent possible, take place with children who are not handicapped (20 U.S.C. 1412 [5][B]). The Americans With Disabilities Act of 1990 (ADA) continues to broaden the scope of accountability, even extending protection to persons with AIDS and HIV disease. Given the sheer numbers of children with disabilities, typically exceeding fifteen percent of public school populations, the delivery of educational services to the disabled has now become a major concern affecting the entire education profession.

For many integration proponents, the years following the passage of PL94-142 have been frustrating given the slowness of the process and the many questions which remain unanswered (Berres & Knoblock, 1987; Gearheart & Weishahn, 1980).

Especially troublesome has been the long list of probing questions concerning the potential lack of benefits derived from special class programs for children with moderate or severe disabilities (Budoff, 1972; Cloud, 1992; Dunn, 1968; Jenkins, Pious, & Jewell, 1990; Wang & Walberg, 1985).

Attempts to serve students with special educational needs prior to the turn of the century typically occurred within the regular classroom due to a lack of other alternatives. When required to perform standard academic work alongside their nondisabled peers, however, disabled students appeared significantly unsuccessful. The dismal academic record of these students in competition with their nondisabled peers led many to conclude that special classes were necessary for those who were not deemed appropriate for institutionalization. The proliferation of special classes which began early in the twentieth century, and which has enjoyed great professional and popular acceptance, continues today. Serious questions, however, have been raised about whether special classes really offer disabled students an "appropriate" education or an education that is "better" than that obtainable in an integrated setting (Cloud, 1992; Dunn, 1968; Gearheart & Weishahn, 1980; Kober, 1992; Lilly, 1988; Partin, 1994; Raynes, Snell, & Sailor, 1991; Reynolds, Wang, & Walberg, 1987; Stainback & Stainback, 1992).

If judicial direction and educational reform trends are an accurate indication, public education should expect to

experience continued pressure toward the integration of an ever-widening range of learners including the moderately and severely disabled. Indeed, in 1985, Madeleine Will, then Assistant Secretary for Special Education and Rehabilitation (OSERS) under President Bush, identified school integration as the "...fundamental issue confronting parents and professionals." (cited in Biklen, 1988, p 28) and the inclusion theme has been carried strongly forward by OSERS Assistant Secretary Robert Davila. Today, the operative term for the educational integration of disabled students into the mainstream of regular public education is "inclusion" and the Tennessee State Department of Education and related state organizations are clearly advocating movement toward greater inclusion of the disabled (J. Fisher, personal communication, June 16, 1993; Summerville, 1995).

In response to this growing inclusion initiative, researchers have also been investigating specific issues surrounding the adaptations necessary if regular classrooms are to become inclusive of children with disabilities. Questions regarding the desirability and feasibility of making adaptations (Deshler & Schumaker, 1986; Schumm & Vaughn, 1991), willingness of teachers to make adaptations (Hawkins, 1992; Rodden-Nord, 1991), types and methods of adaptations (Ayres, 1992; Stainback & Stainback, 1992; Wheeler, 1991), and adaptations in assessment techniques (Conn, 1992; Putnam, 1992; Vallies, 1992; Worthen, 1993) have assisted in

clarifying the issues and positions of various stakeholders about the inclusion of disabled learners. The majority of these writings focus on the regular and special classroom teachers and on disabled students and their nondisabled peers. In an extensive literature search, Schumm and Vaughn (1991) were unable to identify any significant body of literature focusing on specific classroom curricular adaptations for disabled students. Even more scarce are studies of administrative perspectives of such adaptations. Sage and Burrello (1994), while recognizing the significant influence of principals, found a similar lack of investigation into "the manner in which principals use their influence in different school contexts" (p. 223).

The growing pressure for more inclusive programs for disabled students has been accompanied by simultaneous pressures within the educational restructuring movement to increase the authority and overall leadership role of the school principal. This increased pressure is as true for Tennessee (Lowery, 1993; McAlister, 1991) as for other areas of the United States (Richardson, Short, Prickett, & Flanigan, 1991; Rossman & Anthony, 1992). Many states are experiencing change in the organization and delivery of educational services to disabled students. These changes are being brought on primarily by State Department of Education regulation, legislation, and judicial mandate rather than by

the purposeful and systematic effort of educators who are concerned with the inclusion of disabled students.

Also of significance is federal legislation (EAHCA PL 94-142, 1975, as amended) placing broad decision making authority for the educational placement of each disabled students in the hands of a multi-disciplinary team. Because EAHCA regulation requires that a representative of the public agency, other than the child's teacher (300.344, amended 1989), be a member of this decision making team, and because the principal or a principal designate typically fulfills this responsibility, the principalship became a key position in placement determinations for disabled students.

Sage and Burrello (1994) describe the current restructuring movement as "becoming synonymous with such terms as decentralized governance, site-based management, and shared decision making" (p.223). Sage and Burrello's concept of the principal's increasing responsibility for involvement in design, leadership, management, and implementation of programs for "all" (p. 223) students is consistent with other authors describing the changing roles of school leaders (Giangreco, 1992; Staff, 1990; Stainback & Stainback, 1992; Villa & Thousand, 1992).

Evidence which has accumulated over the last three decades suggests that further inclusion of disabled students into regular public school classrooms may be expected (Reynolds, Wang, & Walberg, 1987). With classroom adaptation

as a central issue, the task remaining is to further identify factors which will assist parents and educators in making sound decisions about when and how to approach inclusive programs. With principals occupying significantly influential roles, information on their views of inclusive programs for disabled students will be a prerequisite to effective planning and change in the public schools.

Statement of the Problem

The inclusion of disabled students in regular classrooms, especially those students who have been receiving their education in special classes, appears to affect and to be affected by the attitudes of professional staff (Allen, personal communication, July 19, 1993; Berres & Knoblock, 1987; Giangreco, Dennis, Cloninger, Edelman, & Schattman, 1993; Miller, Clarke, Malcarne, Lobato, Fitzgerald, & Brand, 1991; Reynolds, Martin-Reynolds, & Mark, 1982). Summarizing recent literature on the Regular Education Initiative (REI), Jenkins, Pious, and Jewell (1990) address the 'inclusion versus special class' argument in this way: "...there is both large-scale agreement that the way we educate low-achieving children is seriously flawed and large-scale disagreement about how to make it better" (p 480).

Questions, both philosophical and pedagogical, are abundant, yet convincing evidence about the desirability and feasibility of inclusive programs is scarce. Especially

troublesome is the lack of data regarding the attitudes and perceptions of principals on the issue of adapting traditional regular classroom programs and delivery systems to serve children with moderate and severe disabilities. With expanding authority and leadership responsibilities, opportunities to influence the future of public schools will often fall most solidly on these key administrative positions. If these questions are to be resolved and a smooth transition toward a more inclusive system of public education is to occur, additional research from the administrative perspective will be needed.

Purpose of the Study

This study will add an administrative dimension to current research on inclusive educational programming for disabled students typically educated in special class settings in Tennessee. Specifically, the purpose of the study will be to investigate the perceptions of Tennessee elementary school principals concerning the desirability and feasibility of adapting typical elementary classrooms for the inclusion of moderately and severely disabled students.

Research Questions

The questions addressed in this research study focus on the perceptions of elementary principals regarding the desirability and feasibility of various strategies for

adapting typical regular elementary schools and classrooms for moderately and severely disabled students who are or have traditionally been served in special (CDC) classes. Four basic categories of adaptations are investigated in the attempt to identify particular adaptations or patterns of adaptations toward which principals demonstrate either particular concern or support. Additional questions based on demographic issues which may tend to influence such attitudes will also be investigated.

QUESTION 1: To what extent do principals view the adaptation of traditional staff responsibilities and school organization (the delivery system) as desirable and feasible?

H_0^1: There will be no difference between the perceived desirability and feasibility of adapting traditional staff organization in elementary schools as viewed by elementary principals in Tennessee.

QUESTION 2: To what extent do principals view the adaptation of the regular grade level curriculum as desirable and feasible?

H_0^2: There will be no difference between the perceived desirability and feasibility of adapting the regular grade level curriculum in elementary schools as viewed by elementary principals in Tennessee.

QUESTION 3: To what extent do principals view the adaptation of regular instructional materials as desirable and feasible?

H_0^3: There will be no difference between the perceived desirability and feasibility of adapting regular instructional materials in elementary schools as viewed by elementary principals in Tennessee.

QUESTION 4: To what extent do principals view the adaptation of traditional teaching and assessment methods as desirable and feasible?

H_0^4: There will be no difference between the perceived desirability and feasibility of adapting traditional teaching and assessment methods in elementary schools as viewed by elementary principals in Tennessee.

QUESTION 5: Which adaptations do elementary principals in Tennessee identify as the least/most desirable and feasible?

QUESTION 6: To what extent are principal perceptions of desirability and feasibility related to the following variables:

A. Current or prior teaching experience with inclusive programs in the regular classroom.

H_0^5: There will be no difference in the perceived desirability and feasibility of adapting traditional elementary school programs and services between elementary principals in Tennessee having current or prior regular, inclusive, classroom teaching experience and principals without such experience.

B. Formal college coursework/training in special education.

H_0^6: There will be no difference in the perceived desirability and feasibility of adapting traditional elementary school programs and services between elementary principals in Tennessee based on the amount of formal/college coursework in special education.

C. Presence/absence of a special class program in the current or a previous administrative assignment.

H_0^7: There will be no difference in the perceived desirability and feasibility of adapting traditional elementary school programs and services between elementary principals in Tennessee based on the amount presence/absence of a special class (CDC) program in the current or a previous administrative assignment.

D. Teaching experience in special education with moderately or severely disabled students.

H_0^8: There will be no difference in the perceived desirability and feasibility of adapting traditional elementary school programs and services between elementary principals in Tennessee based on the existence/absence of teaching experience in special education with moderately or severely disabled students.

E. Demographic factors of gender, age, years of administrative experience, and system size.

H_0^9: There will be no difference in the perceived desirability and feasibility of adapting traditional elementary school programs and services between elementary principals in Tennessee based on respondent gender.

H_0^{10}: There will be no difference in the perceived desirability and feasibility of adapting traditional elementary school programs and services between elementary principals in Tennessee based on respondent age.

H_0^{11}: There will be no difference in the perceived desirability and feasibility of adapting traditional elementary school programs and services between elementary principals in Tennessee based on years of respondent administrative experience.

H_0^{12}: There will be no difference in the perceived desirability and feasibility of adapting traditional elementary school programs and services between elementary principals in Tennessee based on system size.

Significance of the Study

"If the struggle for integration includes the commitment to create a society in which the necessity for segregation is removed, then the task is complex and demanding" (Barton, 1989, p 43). If childhood disabilities occurred only rarely or were restricted to limited geographical areas or grades or ages, the questions addressed in this and other related studies would be of much less immediate concern. The fact is, however, that children with disabilities can be found in every public school district in America, perhaps, literally, in every school district in the world. They may be found in every age and grade category and the extent of their disabilities varies widely. The questions investigated in this study focus on the perceptions and attitudes of school administrators at a time when the call for greater decision making autonomy at the building level is gaining increased

support (Giangreco, 1992; Sage & Burrello, 1994). The study is intended to produce evidence about attitudinal factors which influence decisions about the inclusion of special class, disabled students in typical elementary public school classrooms from the perspective of those who are most responsible for designing and implementing such integrated programs (i.e. school principals).

The results of this study should assist in the process of constructing working theories about the practice of integrating disabled students into public school classrooms. Since attitudes regarding inclusion appear to be so critical (McDonnell, 1987), results should serve to influence the attitudes and behaviors of all similar stakeholder groups in the integration process.

Limitations

1. Grade Level Limitations: Although special classes for disabled students in public schools exist at all grade levels, this study focuses only on students enrolled in grades Kindergarten through eight. While pedagogical or organizational similarities may be observed or inferred in educational programming for the disabled in other grade levels or in post-secondary or adult programs, no effort is made to identify factors beyond those applicable to the elementary grades.

2. Classroom Limitations: The goal of this study is to add to the body of knowledge about inclusive programming in typical elementary public school classrooms. Respondents are asked to limit their consideration of each item to its impact on regular elementary classrooms with funding, staffing, and organizational characteristics typical of public elementary schools in Tennessee. Elementary classrooms with unusually high funding levels and unique or irregular staffing are not under investigation in this study.

3. Geographical Limitations: Although inclusion itself has no geographical limitations, this study is limited to public elementary school classrooms in the State of Tennessee. It will remain the task of national and international investigators to assimilate the results of this and other related studies into a larger framework of theory and practice.

4. Statistical Limitations for Grade Variability: While some authors (Schumm & Vaughn, 1991) have indicated likely differences regarding classroom adaptation based on grade level assignments, the variation in grade organization in elementary schools in Tennessee makes individual grade level comparisons difficult at best. For this reason the researcher has elected to forgo the use of individual grade level as a variable.

Definitions

1. Disability: The definition for disability is found in Public Law 94-142, The Education for All Handicapped Children Act of 1975 and Public Law 101-476, The Education of the Handicapped Act Amendments of 1990 which renames PL 94-142 The Individuals with Disabilities Education Act (IDEA). Specific disabilities, defined federally, include mentally retarded, hard of hearing, deaf, speech impaired, visually handicapped, seriously emotionally disturbed, orthopedically impaired, other health impaired, specific learning disabilities, autism, and traumatic brain injury.

2. Moderately and Severely Disabled Students: In the present study, moderately and severely disabled should be interpreted as referring to a student who (1) has been identified by standardized assessment(s) as having one or more disabilities, (2) has been determined eligible for special education and related services by an assessment team, and (3) whose disabilities are so significant that the student is or might typically be receiving educational services in a special class (CDC) setting. Moderately and severely disabled students may be differentiated from other disabled students primarily on the basis of the degree of cognitive, physical, and social ability with the assumption that other disabled students (e.g. learning disabled students) have not typically been educationally self-contained in special classes.

3. Special Class: A special class is a group of disabled students organized for the purpose of instruction and supervised by a special education teacher in an environment segregated from nondisabled peers, often in schools other than those closest to the child's home. In Tennessee, special classes are typically called Comprehensive Development Classes (CDC).

4. Elementary School: For the purposes of this study, an elementary school is a Tennessee public school serving grades kindergarten through eight or any combination of these grades with the exception that junior high schools serving grades seven through nine and special schools have been excluded.

5. Typical Regular Elementary Classroom: A typical regular elementary classroom is one in which students are randomly placed to form a heterogeneous instructional unit. The student population from which each classroom membership is drawn is the same as for other classrooms within the same grade and school.

6. Integration: Integration is an anthropological term for the cultural mixture of persons with differences (Kneller, 1978). Literature review reveals that the term integration is often used interchangeably with the terms mainstreaming and inclusion in the discussion of educational practices.

7. Mainstreaming: The term mainstreaming refers to the general educational practice of mixing students with disabilities with nondisabled students in the school setting

as required by PL 94-142 (20 USC 1412 [5][B]). The term mainstreaming refers to the placement of any disabled student, including students with very mild disabilities, in an environment with nondisabled students. Some authors and researchers use the term mainstreaming interchangeably with integration and inclusion. Because of these two terminology concerns, authors who have selected mainstreaming as their term of preference are identified by enclosing the term in quotation marks.

8. Inclusion: Inclusion is used to refer to the regular classroom placement of moderately and severely disabled students who have traditionally received their education in special classes. While no attempt is made to define or differentiate between the terms inclusion and full-inclusion, inclusion is used to refer to a program in which a disabled student would receive the "majority" of his/her education, including academic instruction, in the regular classroom alongside students without disabilities.

9. Least Restrictive Environment (LRE): The least restrictive educational enviromnent for a disabled student is the public school placement which matches or most closely resembles the placement of unlabeled and nondisabled students.

10. Desirability: The extent to which respondents perceive adaptations to traditional educational practices as an appropriate and desirable goal for their school.

11. Feasibility: The extent to which respondents perceive adaptations to traditional education practices as practical for implementation in their setting.

Overview of the Study

This study is organized and presented in five chapters. Chapter one presents an introduction to the history and issues surrounding the integration of disabled students and places the study into historical and professional perspective. Chapter two presents a review of relevant literature and research, discusses the general context of the study and theoretical framework, and provides a summary of review findings for each theoretical topic. Chapter three identifies the sample and population from which the sample was drawn, sampling methods and rationale, research design and rationale, the instrument, reliability and validity issues, procedures, and data analysis techniques and rationale. Chapter four presents and discusses the collected data and the results of analysis, and chapter five presents summary and conclusion discussions for the study and suggests implications for both additional research and practical application.

CHAPTER 2

Review of the Literature

The issues surrounding the integration of disabled people are by no means new in our society. Issues surrounding inclusive educational programming to meet the needs of disabled students are, likewise, not new. The review of research and related literature for this study was undertaken to establish a clear and firm foundation for the interpretation of collected data with regard to educational integration. The focus of the study is the elementary principal in Tennessee. Questionnaire items were developed to survey the opinions of principals regarding the adaptation of regular elementary classrooms for the instruction of disabled students whose educational needs are so significant that they have typically spent the majority of their educational lives in self-contained (CDC) special education classrooms (i.e. special classes).

The first major area of review deals with the attitudes of professional educators. Questions regarding teacher preparation and confidence, the effect of experience with disabled students, the effect of knowledge and training, the effect of student ability level, and other related variables have each been addressed by previous research and professional opinion; primarily from the perspective of classroom teachers. The review of such research and literature assists in

establishing a desirability and feasibility framework for the interpretation of data collected in this study.

With clear legislative and judicial movement toward greater inclusion of disabled students in the mainstream of public education have come questions about program organization. In conjunction with these questions has come a wide body of literature suggesting how to design and implement successful inclusion programs; the major theme is the adaptation of the traditional regular classroom approach to public education. The review of literature on adaptation, the second major area of review, provides a framework for the creation of a survey questionnaire and provides an opportunity to discuss similarities and differences of opinion among teachers and principals. The chapter concludes with a summary of findings.

General Attitudes Toward Inclusion

Given the decades of special class and special school practices and past efforts to secure the protection of equal educational rights for disabled students, it is not surprising to find strong, even intense, opinions and emotional reactions to inclusive practices. While inclusion might appear to some as a timely change and improvement in the delivery of educational services to the disabled, it may represent a movement backward in time to others. There are clearly

opposing points of view with regard to inclusion as evidenced by both research and professional opinion.

In Tennessee, the Assistant Commissioner of Education for Special Education has encouraged inclusion projects and has established a department goal of including children "...to the extent possible, into regular education classrooms" (J. Fisher, personal communication, June 16, 1993). At the same time, the superintendent of the state's second largest school system reported delaying the appointment of a new director of special education until he finds someone sharing his vision of educating disabled students in less isolated settings (Benjamin, 1993). Equally powerful perhaps are research studies and professional opinions supporting inclusion.

Two recent qualitative studies present especially convincing evidence of the potential positive effects of inclusion. In Vermont (Giangreco, Dennis, Cloninger, Edelman, & Schattman, 1993), a study of 19 general education teachers found that most believed students with severe disabilities derived many benefits from placement in their classrooms and that the teachers themselves as well as nondisabled peers also described positive and "transforming" (p. 359) experiences. In an in-depth qualitative study of an inclusive elementary school in New York (Salisbury, Palombaro, & Hollowood, 1993), more than two years of collected data revealed positive and evolutionary changes in structures, policies, pedagogy, and attitudes in a collaborative decision making environment

greatly influenced by the support and leadership of the building administration.

A Texas study (Perez, 1989) of the attitudes of 781 elementary teachers toward the inclusion of mildly mentally retarded students into elementary classes found that teachers, in general, exhibited positive attitudes. A wide variety of other studies, professional papers, and journal articles supporting inclusion from assorted perspectives are also readily available (Ayres & Meyer, 1992; Conn, 1992; Flynn, Gacka, & Sundean, 1978; Reynolds, Martin-Reynolds, & Mark, 1982; Wright, Leonard, Robinson, Turner, & Thomas, 1993).

Investigations of parent perceptions have also yielded evidence of positive attitudes (Giangreco, Dennis, Cloninger, Edelman, & Schattman, 1993; Miller, et al., 1992; Strully, J., Buswell, B., New, L., Strully, C., & Schaffner, B., 1992). The Giangreco study, for instance, involved 81 parents of nondisabled students whose children shared classrooms with severely disabled students. Giangreco found that a majority of the parents identified their child's experience as positive and that it had a positive effect on the child's social/emotional growth and did not interfere with the general educational program. The Miller study, involving parents of 304 disabled and nondisabled students, revealed similar positive feelings about inclusive programming.

Concerns, on the other hand, are also evident and well articulated. Coates (1989), in a survey of 94 regular

classroom teachers, investigated the extent to which teachers agreed or disagreed with a series of statements on the Regular Education Initiative (i.e. inclusion). Responses indicated disagreement with many of the arguments of inclusion proponents and support of the current special education delivery system including the current method of identifying students for special education. More recent studies show evidence of continued concern and reservation. Semmel, Abernathy, Butera, & Lesar (1991), for example, found that attitudes among the 381 special and regular educators surveyed favored current special education practices (pullout programs) in elementary schools. More recently, Colorado teachers demonstrated an inability to settle on one side of the issue or the other as evidenced by contradictory statements made in a survey of 246 teachers (Pearman, Huang, Barnhart, & Mellblom, 1992) where more than 90% of respondents disagreed that they had sufficient time for cooperative instructional planning.

While research demonstrating the superiority of special class placement has not been produced, there is obviously strong reservation about inclusion as an alternative. This review of literature on attitudes is divided into three major categories dealing with the effect of teaching experience, teacher knowledge and training, and student performance levels. Finally, this section will review literature dealing specifically with the principalship.

The Effect of Experience

Research into the effects of experience with disabled students on attitudes toward inclusion reveals inconsistent findings. In a study of 781 elementary teachers in seventeen school districts in a fourteen county area of southeast Texas (Perez, 1989), teachers having prior experience working with mentally retarded children exhibited more positive attitudes, in general, toward inclusion than did teachers without such experience. One-Way MANOVA and lambda test results revealed significant mean differences in teacher responses toward "mainstreaming" when compared on the basis of teacher ages but failed to find significant differences based on years of teaching experience or prior experience with "mainstreamed" mildly mentally retarded (MMR) children. It may be important, however, to note that the study's findings supported the conclusion that elementary teachers with prior experience teaching "mainstreamed" MMR children did have a more positive attitude toward general mainstreaming concepts than did other teachers without such experience and that elementary teachers in general had positive attitudes toward "mainstreaming" MMR children.

Hayes and Gunn (1988) also investigated the effect of experience on attitudes toward inclusion. In a comparison of two primary schools, one with and one without an inclusion program, a significant relationship was found between the amount of teaching experience with disabled students and

positive attitudes toward mainstreaming with experienced teachers exhibiting significantly more positive attitudes. "Post hoc comparisons, using Scheffe's technique, indicated that respondents with a great deal or some experience scored significantly higher than those with very little experience and the former also scored significantly higher than those with no experience." (p. 34-35) Researchers noted that their results substantiated earlier studies.

Giangreco, et al., in a study of 19 general education teachers in Vermont in grades kindergarten through nine (Giangreco, Dennis, Cloninger, Edelman, & Schattman, 1993), found that even though teachers exhibited initial negative reactions to the placement of a student with severe disabilities in their classroom, most (17) evaluated the experience as positive for the disabled students, the nondisabled students, and themselves. Although the sample was not random, (participants volunteered to accept students with severe disabilities into their classes) their responses were revealing. Inclusion was initiated with the understanding that it was not permanent and that placement could be rejected. The semi-structured interview procedure and followup survey revealed that the initial negative terms used by teachers, such as "...reluctant, scared, worried..." (p. 363), were replaced with terms like "...successful, amazed,... [and] wonderful..." (p. 364).

Some researchers have found no significant effect of teaching experience on attitudes toward inclusion. In a study of 139 elementary teachers from school districts in southwest Ohio (Roberts, 1990), experience with inclusion was found to have no effect with regard to teacher attitude. An earlier dissertation study in southwestern Ohio (Reynolds, Martin-Reynolds, & Mark, 1982) produced similar results. Using a two part survey questionnaire, the doctoral dissertation study (Mark, 1982) revealed no significant mean differences between the attitudes of 610 teachers based on prior teaching experience with mentally retarded students. From a population of 768 elementary teachers in 60 separate buildings (at least one Educable Mentally Retarded (EMR) classroom was located in each building) 610 responses did not yield significant mean differences in four clusters of statements on the basis of age, training, teaching experience, grade levels, or prior experience teaching "mainstreamed" EMR children. Reynolds, Martin-Reynolds, and Mark did report, however, that respondents (72.4%) tended to agree that EMR students do benefit from "mainstreaming" by being exposed to a variety of teachers.

In a more recent study replicating an earlier investigation (Rajchel, 1990), 289 regular elementary and junior high teachers in northern Illinois responded to an attitude questionnaire. While the attitudes of respondents, both experienced and nonexperienced in mainstreaming, did not

show a significant difference statistically as it did in his earlier study (1982), results revealed that teachers experienced with mainstreamed disabled students showed a sizable decrease in positive attitudes toward mainstreaming as compared to the original study.

The effect of teaching experience on attitudes toward inclusion has been shown to be both positive and neutral. The following section will review studies involving the effect of knowledge and professional training on attitudes toward inclusion.

The Effect of Knowledge and Training

If there is any consensus of opinion among educators with regard to inclusion, it is that they agree on the need to be knowledgeable about inclusion in practice and the need for training, both preservice and inservice. Among the studies reviewed for this research, one of the most common classroom teacher concerns is the extent to which teachers are prepared for the inclusion experience. Strategies for successful inclusion programs consistently identify training and staff development as a key component (Ayres & Meyer, 1992; Conn, 1992; Denti, 1991).

Earlier studies reveal that teachers feel unqualified. In a study of 1726 regular classroom teachers and administrators in Pennsylvania (Flynn, Gacka, & Sundean, 1978), researchers found that, although the majority of

respondents agreed that mainstreaming was desirable, (75% either agreed or were undecided) they did not believe they were adequately prepared. Fifty eight percent disagreed or strongly disagreed that they were prepared to teach mainstreamed students and another 21% were undecided. Of additional concern is the fact that 80% of regular education teachers favored inservice courses but less than 40% said they would be willing to enroll in a graduate course. The results of a 1980 doctoral dissertation (Mark, 1982) showed similar results where 58.3% of regular classroom respondents in Ohio disagreed or strongly disagreed that they had enough training and experience to teach EMR students. More recent studies (Giangreco, Dennis, Cloninger, Edelman, & Schattman, 1993; Hanrahan, Goodman, & Rapagna, 1990) yielded similar results.

While many studies reveal widespread general concerns about training, several researchers have investigated how attitudes about inclusion are affected specifically by training. Although some have shown little or no effect of preservice training activity (Cooper, 1990; Jarvis & French, 1990), several studies indicate a clear relationship. Using observational procedures, a study of 22 teachers was conducted at Michigan State University (Pernell, McIntyre, & Bader, 1985). After 30 hours of formal instruction in mainstreaming, subjects who were initially negative to neutral on mainstreaming displayed positive attitudes. Teachers continued, however, to have reservations about the likelihood

of success indicating that although training did affect attitudes it lacked an experience component necessary to convince teachers that success is possible.

Other studies substantiate the positive effect of training on attitudes toward inclusion. Walker (1989) surveyed teachers from 15 schools in Berkshire County, Massachusetts regarding their attitude toward mainstreaming and responses were analyzed along with several teacher and school variables. The number of credit hours teachers had earned in special education was shown to be significantly related to positive teacher attitudes toward mainstreaming. Farley (1992), investigating the relationship between the attitudes of principals and teachers toward "mainstreaming" and the level of comfort participants felt toward special education and mainstreaming in Virginia middle schools, also found the positive effect of training significant.

Prospective elementary education teachers were observed while implementing classroom activities in a study conducted in Illinois (Leyser, 1988). While interacting with both disabled and nondisabled students from among a group of 30 first to sixth graders, the experimental group of 15 female prospective teachers who had received training in special education exhibited more positive attitudes toward working with mainstreamed students. Mainstreamed pupils in the controlled settings, incidently, exhibited more inappropriate behaviors than did the mainstreamed pupils in the experimental

groups. Leyser concluded that training was effective in increasing positive attitudes toward mainstreaming of teachers in the experimental group.

The attitudes of principals, regular education teachers, resource room teachers and special education teachers of the severely disabled were investigated in order to determine the effect of differing levels of student disability (Denti, 1991). The researcher's prediction of a positive relationship between special education training and coursework and more favorable attitudes toward integration of the severely handicapped in regular classrooms was supported. Denti concluded that increased specific special education knowledge and experience is a key factor in developing positive attitudes toward inclusion and that encouraging teachers to engage in specialized training would assist in supporting integration efforts.

In related research, McFerrin (1988) found significant differences between the attitudes of regular and special education teacher educators toward mainstreaming. Ninety seven regular education and 82 special education teacher educators attending two national conferences were surveyed using the Attitudes Toward Mainstreaming Scale (ATMS). The results of a comparison of means for the two groups revealed a significant difference in attitudes with special education teacher educators being more positive toward mainstreaming.

Although some research has failed to establish a clear link between training in special education and positive attitudes toward inclusion, the literature reviewed for this study indicates that training and knowledge about disabled students does result in establishing a more positive attitude. Another factor which may affect professional attitudes is student skill levels. Mildly disabled and profoundly disabled students exhibit very different behaviors and needs. The following section reviews literature relating to student performance.

The Effect of Student Ability

A research project currently in progress in the Green Bay, Wisconsin public schools and reported in a paper presented at the 1992 AERA Annual Meeting (Tompkins, 1992) illustrates a third significant factor affecting attitudes toward inclusive programs. Tompkins reports that while 21 of 24 responding educators and support staff agreed or strongly agreed that "mainstreaming" was a desirable educational outcome, the majority believed that more severely disabled students should not receive all of their education in the regular classroom. Nine of the 24 teachers surveyed felt that integration was appropriate only if students could meet the pre-set requirements of the class. The more differences a student exhibited from predetermined expectations, the less supportive of full inclusion a teacher was likely to be. The

results of the Green Bay project are substantiated by several other studies indicating that greater student disabilities tend to be reflected by more negative teacher attitudes toward inclusion and that greater student potential and school success tend to be reflected by greater willingness and support for inclusion (Hanrahan Goodman, & Rapagna, 1990; Hawkins, 1992; Hayes & Gunn, 1988; Schuum & Vaughn, 1991).

Results of a study of 200 music and physical educators in a metropolitan Washington, D.C. school system (Hawkins, 1992) revealed that teachers were reluctant to mainstream students with moderate to severe disabilities. Subjects were especially concerned with student characteristics which would (1) cause a reduction of time and attention to other students, (2) necessitate significant adaptations in teaching methods and require special teaching skills, and (3) require extensive support services during class time. Respondents also felt it was important to be included in placement decisions.

A significant study into the attitudes of teachers regarding the desirability and feasibility of adapting regular education classrooms for the disabled was conducted by Schuum and Vaughn (1991) in a metropolitan school district in the southeastern United States. Ninety six regular classroom teachers in elementary, middle, and high school groups participated in the study. Ninety percent of participants reported they had taught disabled students in the mainstream

at some point in their careers though only 13% held certification in special education.

Employing a 30 item instrument using a seven point Likert-type scale, Schuum and Vaughn found the sample mean for desirability for all 30 items to be 6.35 with a mode of seven on every item. Respondents clearly saw the adaptation of regular classrooms as desirable. The mean for all items among elementary subjects (n=25) was 6.53 with a mode of 7 for each item. Analysis of data revealed significant differences in all 30 items with all adaptations being viewed as more desirable than feasible. The researchers stated that the adaptations which were perceived as least desirable required "...more than social or motivational support from the general education teacher" (p 22).

Findings in the Schuum and Vaughn study have significant implications for the current study with regard to levels of student ability. Even though Schuum and Vaughn did not differentiate between mildly and moderately and severely disabled students on their questionnaire, they stated that "teachers identif(ied) adaptations in materials and instruction as neither desirable nor feasible when teaching special learners" (p. 22). Identified as the least desirable AND least feasible were adaptations of regular materials and the use of alternative materials. If teachers have concerns about adapting materials and instruction for disabled students in general, their level of concern may be even greater when

considering adaptations specifically for students with moderate and severe disabilities.

As pointed out by Hayes and Gunn (1988), there is already considerable evidence indicating that "teachers are more negative if the child's difficulties are of a cognitive and/or emotional nature" (p. 32). Substantiating evidence has been generated in a study among regular and special school educators in Montreal (Hanrahan, Goodman, & Rapagna, 1990) in which 35 special school teachers and 41 second and third grade teachers responding to a survey were asked to "indicate those areas of the inventory that should receive priority when preparing children from...(special) classes for mainstreaming into regular classrooms" (p. 471). The researchers concluded that regular classroom teachers gave higher priority to reading and writing ability and to behavior than did special school teachers. Although the researchers admitted that the results were inconsistent with their earlier study among kindergarten and first grade teachers, they suggested several explanations including the possibility that teachers may change their priorities for "mainstreaming" as children get older. Conflicting results may also stem from the fact that kindergarten and first grade teachers normally focus more on socialization than do teachers in the higher grades.

Training concerns and the generally negative feelings regarding classroom adaptations expressed by classroom teachers suggest that the greater the disability of the

student the more negative will be teacher attitudes about adapting their regular classroom program to accommodate for students with disabilities. Specific concerns regarding student cognitive and emotional ability further suggest that negative attitudes may be even stronger when discussing the inclusion of students with moderate and severe disabilities such as those typically found in special class settings. The following section will review literature relating to the principalship.

Principal Views on Inclusion

Although positive administrative attitudes regarding inclusion are considered essential for successful program implementation (Allen, personal communication, July 19, 1993; Wiedmeyer & Lehman, 1991) and positive principal attitudes and knowledge about inclusion have positive effects on teachers and program results (Walker, 1989) specific data regarding the attitudes of principals toward adapting regular classroom practices is limited. Some research, however, is available regarding the general attitudes of principals toward inclusion. While one study (Greene, 1991) found no significant differences between the attitudes of principals and elementary teachers in South Carolina, most studies indicate more positive attitudes among principals than other sampled groups.

Farley (1992), in a study of the relationship between the attitudes of principals and teachers toward "mainstreaming" and the level of comfort participants felt toward special education and mainstreaming in sixty-five large and small middle schools in the state of Virginia, found that principals had more favorable attitudes toward mainstreaming than teachers and that teacher attitudes can be influenced by principals. Similar results are reported in several additional studies (Center & Ward, 1987; Riedel, 1991; Ruf, 1990).

One possible explanation for a more positive principal attitude may be found in the results of a study by Sherwood (1991) in school districts in the mid-west. Because of the responsibility placed upon principals to select teachers for inclusionary programs, 85 pairs of teachers and principals were surveyed in an effort to determine how well principals would be able to predict the attitudes of regular classroom teachers toward the inclusion of disabled students in their classrooms. Survey results revealed that, while principals were able to identify teachers who were supportive and willing to participate in inclusive programs, they overestimated teachers' confidence in their instruction and management skills and in the availability of time for implementing an inclusive program.

Other possible explanations for a more positive attitude on the part of principals include their distance from day to

day classroom instruction and their possible heightened awareness of legal mandates relative to the Least Restrictive Environment (LRE) language of legislation and judicial decisions.

Summary

Differences of opinions relative to inclusive educational programs clearly exist and reports of research and professional opinion can be found to substantiate a variety of viewpoints (Partin, 1994). The review of research and literature for this study indicates that experience is not a good predictor of attitude toward inclusion, that training tends to promote positive attitudes toward inclusion, that teacher attitude may become increasingly negative as student disability becomes more severe, and that principals tend to be more positive than teachers about the concept of inclusion. The second major focus of review is on research and literature dealing with adaptations to traditional practices.

Changes in Traditional Pedagogy

In 1986, the U.S. Department of Education, Office of Special Education and Rehabilitative Services (OSERS) released a significant and frequently cited report; Educating Students With Learning Problems: A Shared Responsibility. This report, based on the work of an OSERS task force, included the following notable comments:

> [The] Task Force delineated what it perceived to be weaknesses in current approaches to the education of students with learning problems and suggested strategies for correcting these weaknesses. (p.v) [and]
>
> Although for some students the "pullout approach" may be appropriate, it is driven by a conceptual fallacy: that poor performance in learning can be understood solely in terms of deficiencies in the student rather than deficiencies in the learning environment. (p.9)

The OSERS report lists four obstacles existing in regular classrooms: (1) insufficient instructional time, (2) weak support systems for teachers, (3) lack of empowerment for principals, and (4) rigid reliance on traditional instructional practices geared to average students. The second major area for review in the current study will focus on this last obstacle.

The overriding focus of the OSERS report is the necessity for adaptations to current educational environments. The premise, as inferred by the quotation above, is that public education must begin to tailor educational programs to meet individual student needs. Adaptations, in this review, fall into three general categories: (1) adaptations of curriculum and instructional materials, (2) adaptations of delivery systems, and (3) adaptations of instructional methodology. The goal of all adaptations is understood to be the individualization of educational programs for students with disabilities.

Adaptations of Curriculum and Materials

Not long after the passage of PL 94-142 in 1975, Childs (1979) noted that newer definitions of mental retardation had resulted in categories of disabled students even more educationally distinctive than by previous definitions. Addressing the differences between the mentally retarded and children of normal intelligence, Childs stated that "no matter how hard one may try to equate the two groups, it cannot be done. There are mentally retarded children in our world and they need a special curriculum" (p. 300). Although his suggestion that "many educators have decided that EMR children can handle regular class curriculum" (p. 299) may be somewhat presumptuous given current research, Childs' call for a differentiated curriculum is shared by many education professionals today. Curriculum and the instructional materials used to assist in the teaching/learning process are two factors which have received significant recognition when inclusive programming is discussed.

Nickels (1993), in a paper presented to the Sixth Annual Leadership Conference on LRE, emphasized the need for adapted materials. Nickels' nine guidelines for adaptations include six which relate directly to or have significant implication for the adaptation of instructional materials and the fourth of her four general guidelines for regular settings is "adapt regular curriculum materials" (p. 5).

These two authors, whose studies are 14 years apart, identify closely related and important aspects of inclusionary programs. The need for individualization was the driving force behind both works. Brunner & Majewski (1990) state the case succinctly: "The secret of (our staff's) success is a well-researched, faculty-developed curriculum that takes into account the needs and strengths of individual learners" (p. 21). Between 1979 and 1993 many authors in the field of education have indicated similar beliefs although actual classroom practices continue to show evidence of wide variation.

In a study of 200 regular classroom teachers working with educable mentally retarded students in the mainstream, Childs (1981) found that only 39.5% used a textbook different from that used with average students and that 59.9% of those teachers taught the same curriculum to both EMR and regular students. Results of Childs' study indicated that 73% of the curriculum for a mainstreamed EMR student was the regular grade-level curriculum. Since teachers reported feeling unprepared, a lack of necessary resources, and a lack of consultant services, it is not surprising that only 46% felt that EMR students should be placed in their classrooms.

The need for adaptations is also evident, although unintentional, in the writings of experienced teachers who sometimes reveal the shortcomings of traditional practices. Ohanian (1990), in citing the pitfalls of education in the

mainstream, writes of her concern for 12-year-old Charles in her third grade classroom, for "educable" Lucille laboring over the structure of the cell, and for Arnold (with an IQ of 68) trying to explain the difference between communism and democracy. Facing the reality of Lucille's failure on her biology test, Ohanian vowed "never again to drill children on such inappropriate material" (p. 219).

The concerns of both proponents and opponents of inclusion often deal with the same issues and echo the OSERS reported concern for making educational programs relevant for disabled learners. Whereas Ohanian would advocate removing disabled students from rigidly structured programs where they are unable to succeed at a predetermined rate and level, others advocate the creation of a more flexible regular classroom environment which includes new and/or adapted curriculum and instructional materials.

A Michigan superintendent (Conn, 1992), writing of his school district's challenge and success at integrating students with the severest handicaps, identifies a curriculum that is "adapted to a level that best challenges the handicapped student" (p. 23) as one of 11 best practices drawn from research literature. A Wisconsin learning disabilities specialist and a program support specialist (Wiedmeyer and Lehman, 1991) advocate adaptation in both curriculum and materials citing the development of materials at a lower level and the adaptation of mainstream materials as appropriate for

both learning disabled students and regular education students who have additional needs. Schaffner and Buswell (1991), in a text used for a Tennessee State Department of Education (SDE) Summer Training Institute on inclusion, state that "in order for a student to learn, the teacher needs to use his/her talent and skill to develop curriculum for the particular subject being taught based on the students' needs and interests" (p. 27). Specific suggestions include developing skills at a student's individual ability level, recognizing academic skills as "merely one of several outcomes" (p. 26), and varying performance expectations for disabled and nondisabled students who are learning side by side.

Additional strategy recommendations include the need for explicit social-emotional curriculum goals and interdisciplinary teaching (Ayres and Mayer, 1992); the development of non-academic goals such as classroom participation and self-help skills (Nickels, 1993); a functional curriculum for skill development needs in recreation/leisure, community, and work environments (Wheeler, 1991); coordination of curriculum among disciplines and a focus on concrete objectives (Pettibone, 1990); the development of alternate educational objectives (Giangreco, Dennis, Cloninger, Edelman, and Schattman, 1993) and the use of alternative materials and establishing non-academic goals (Wright, Leonard, Robinson, Turner, and Thomas, 1993).

Adaptations of the Delivery System

A delivery system for education, as defined in this study, encompasses both teacher responsibilities and organizational structures and activities which have as their goal the delivery of instruction to all students, both disabled and nondisabled, in the regular classroom. Included in this system are such organizational practices as planning for instruction, team-teaching, consulting teacher models, and teacher assistant models. Delivery system activities include cooperative planning with specialists and parents, lesson plan adaptation, and adaptation of grading practices. Again, the central theme of individualization is evident.

Recent mainstreaming contest winners from New York, Pennsylvania, Washington, and North Dakota (Staff, 1992) identify the methods of delivery as important factors in their successful and award-winning inclusion programs. In New York, part-time aides, consulting specialists, and therapy services delivered within the regular classroom were described as "making inclusion work" (p. 20). In Pennsylvania, full-time aides and specialists working with the classroom teacher help to meet individual needs. A Mount Vernon, Washington, elementary school serving 11 moderate to severely disabled students identifies cooperative planning which includes parents, the use of paraprofessionals, and weekly meetings with a support services teacher as important components of their successful program. And in North Dakota, a

multidistrict's full inclusion program credits a team approach and coordination of specialists services within the regular classroom with getting students involved in both academic and extracurricular activities.

These contest winners, separated by both geographic location and regulatory differences, all draw attention to the need for cooperative relationships between staff and parents as well as the need for flexibility in the approach to organizing the school program for disabled learners. Other authors commonly advocate similar practices. Noting OSERS sources which reveal that more than half of all special education students receive special education for 21% or more each school day, a doctoral candidate and professor at Syracuse University (Ayres and Meyer, 1992) discuss the technology of individualization: "This technology can be a valuable contribution to the regular classroom, particularly if the resources of special education become more readily available to intervene on behalf of any child at risk regardless of labels" (p. 31). Ayres and Meyer cite common planning time for classroom and special education teachers to share information about successful adaptations as a difficult but necessary departure from traditional school practice and note the requirement of administrative support. Partnerships involving "a general education teacher and a special education teacher working together, an entire grade-level team, or a teacher and a teaching assistant" are also cited as important

aspects of successful inclusive programs. Team or collaborative planning and teaching practices and related delivery system strategies receive support in nearly every work dealing with strategies for organizing effective inclusion programs (Giangreco, Dennis, Cloninger, Edelman, and Schattman, 1993; Johnson & Johnson, 1988; Kober, 1992; Schattman and Benay, 1992; Tompkins, 1992; Wheeler, 1991; Wiedmeyer and Lehman, 1991; Wolak, York, and Corbin, 1992).

At the 1992 annual meeting of the American Educational Research Association (AERA), Rossman and Anthony (1992) presented a paper describing efforts to integrate all students in the classroom in Massachusetts. The authors described integration initiatives as taking one of four forms:

> a co-teaching model, where the specialist co-teaches alongside of the regular...teacher;
>
> parallel teaching, where the specialist works with a small group of students from a selected...population, in a section of the regular classroom;
>
> a co-teaching consultant model, where the specialist still operates a pull-out program, but also co-teaches within the regular classroom; and
>
> the specialist teams up with one or more regular teachers to form a team, who are then together responsible for all the children... (p. 19).

Along with an emphasis on the collaborative approach to instruction, the Massachusetts districts described in the paper also rely on the use of developmentally appropriate curriculum and cooperative learning strategies. The authors

state: "Emphasizing diversity and inclusion rather than excellence and standards holds promise for profound restructuring..." (p. 46).

Adaptations of Instructional Methodology

The final area for review focuses on methods of organizing pupils for instruction and on cooperative learning strategies in particular. In an extensive work on learning structure now ten years old, Johnson and Johnson (1984) build a strong case for a theory of cooperation in learning which positively affects not only achievement but peer and self-attitudes as well. Citing their earlier work, the authors identify three learning structures: "positive goal interdependence (i.e. cooperation), negative goal interdependence (i.e. competition), or no goal interdependence (i.e. individualistic efforts)" (p.125).

In a cooperative situation, students work to achieve mutual goals which are attainable only when all students in the group achieve individual learning goals; student achievement is positively correlated. In contrast to cooperative situations, competitive learning situations are described as structuring achievement such that students can reach their learning goals only if others fail to do so; that is, goal attainment is negatively correlated. In an individualistic situation the attainment of one student's

goals is unrelated to other students. Johnson and Johnson note the consequences of negative and no goal interdependence situations:

> When handicapped students are first placed in the classroom they carry a social stigma that dominates initial impressions and leads to the formation of static monopolistic stereotypes that overshadow much observed behavior. This initial tendency toward the rejection of handicapped students is perpetuated by instructing students to work alone so that they will either outperform their peers (competition) or meet set criteria (individualistic efforts) (p. 127).

In a review of 26 studies yielding more than 100 findings, Johnson and Johnson conducted three meta-analysis procedures which also identified significant positive correlations between cooperative learning structures and positive attitudes toward handicapped students by their nonhandicapped peers. The instructional process of positive goal interdependence is the foundation of cooperative learning strategies which have received great attention in the inclusion movement.

In a research article that characterized opinions regarding inclusion as "theoretical and speculative" (p. 359) the experiences of 19 general education teachers in grades kindergarten through nine were described in a recent Vermont study by Giangreco, Dennis, Cloninger, Edelman, and Schattman (1993). Seventeen of the 19 teachers in this study reported transforming experiences of a positive nature and identified favored approaches which included "students learning together

(e.g. cooperative learning, group problem-solving)...[and] approaches that were active, participatory, and typical..." (p. 366). Although these teachers did not have much, or any, advance training to prepare for this experience, most experienced success indicating that regular classroom teachers may already possess the skills required to implement inclusive programs in their classrooms; potentially using these skills on an every-day basis in providing educational services to the diverse nondisabled. Another aspect of the cooperative learning process is identified by Brandt (1988) in an interview with William Glasser dealing with learning-teams, achievement, and the satisfaction of student needs. Citing the successes of other team endeavors such as band, athletics, and drama, Glasser states that the way to satisfy individual student needs is to work in teams with people they respect and care for. Regarding cooperative learning specifically, Glasser states:

> "Except for tradition, I don't know why schools use so little cooperative learning. It hasn't changed that much since I was in school: students still sit and work alone and are continually told to keep quiet and keep their eyes on their work. But it can and should be done differently. Good researchers...have proven the effectiveness of cooperative learning or, as I call it, learning-teams" (p. 41).

Researchers and authors of professional articles on inclusion consistently refer to cooperative learning as a major strategy for success. On the subject of cooperative learning and mainstreaming, Slavin (1987) wrote:

> Perhaps the most important fact about cooperative learning methods in the mainstreamed classroom is that these techniques are not only good for the handicapped children, but they are among the few methods for helping these students that also have a clear benefit for all children in terms of academic achievement." (p. 24)

The fact that Slavin's 1987 2nd edition NEA professional library publication was in its eighth printing in 1990 suggests a professional acceptance of the work. Additional benefits to disabled students include greater positive self-esteem, the liking of school, and cooperativeness in the educational environment. Slavin concludes that the greatest benefit of cooperative learning strategies is "the wide range of positive outcomes that has been found for them in the research" (p. 26). Other positive outcomes listed include the inexpensiveness and ease of use, minimal training needs for teachers, teacher and student enjoyment, effectiveness, practicality, and attractiveness to teachers. Numerous additional works exist to substantiate the wide range of benefits of cooperative learning strategies and its broad acceptance as an effective tool for developing successful inclusion programs. (Barringer, 1992; Crosby and Owens, 1993; Davern and Schnorr, 1991; Ferguson and Jeanchild, 1992; Ford, Davern, and Schnorr, 1992; Stainback, Stainback & Jaben, 1981; Villa and Thousand, 1992).

Summary

The review of research and literature for this study focused on two major themes: professional attitudes and classroom/program adaptations. The review of attitude literature indicates that experience with disabled students in the mainstream may result in more positive, more negative, or no significant attitude change and that experience is not a good predictor of attitude toward inclusion. Other reviews indicate that training in special education tends to promote positive attitudes among teachers, that teacher attitude may become increasingly negative as student disability becomes more severe, and that principals tend to be more positive than teachers about the concept of inclusion.

Review of literature on adaptations for disabled students in regular classrooms indicates that individualization, adaptation, and modification of both the grade-level curriculum and traditional classroom materials and equipment are highly supported strategies for use in inclusive programs. Delivery system adaptations that are most highly supported include cooperative/team teaching, teacher consultant models, the use of teaching assistants, flexibility in grading practices, and cooperative planning. Instructional methods adaptations tended to focus on student interaction in general and on cooperative learning strategies in particular. The use

of learning teams, peer tutors and peer models, and social skill development opportunities were components of this focus. Chapter three will discuss the methods and procedures for the current study.

CHAPTER 3

Methods and Procedures

This study was designed to investigate two theoretical constructs (DeVellis, 1991), desirability and feasibility, as they relate to the adaptation of regular elementary school classrooms for students with disabilities. The administrative perspective on the desirability and feasibility of integrating disabled students into regular elementary school classrooms in this study is measured by means of applying statistical procedures to respondent scores on an attitude scale. Chapter three presents a discussion of specific procedures used in conducting the study including the study population and sample, the research design, instrumentation, procedures, and data analysis procedures.

Population

The participants for this study were selected from the population of public elementary school principals in the state of Tennessee. Grade spreads which were not identified as elementary included 7-9, 7-12, 8-12, 9-12, 10-12, and special schools. All other combinations of grades K-8 were included. The Tennessee State Department of Education (TSDE, 1993/94) has reported this population as 1195 for the 1993/94 school year.

Sampling Method

The sampling frame was provided in the Directory of Public Schools (TSDE, 1994). A proportional stratified random sample was selected from the sampling frame. School systems in the state of Tennessee, as in perhaps all states, vary greatly in size. Because challenges to the constitutionality of Tennessee's education funding practices have created additional interest in system size when educational research is being conducted in Tennessee, the sample was stratified into three subgroups. These subgroups represent systems with overall student enrollments of (1) <6,000, (2) 6,001-19,000, and (3) >19,000. Elementary principals in each strata were represented in the sample in proportion to their actual numbers in the population by determining the proportional representation of each strata, numbering each potential respondent, and selecting the sample numbers from a table of random numbers (Borg and Gall, 1989, p 910). Population subgroups are summarized in Table 1.

Table 1

Population Summarized by System Size Subgroup

Subgroup	# of Systems	Total Enrollment	# of Schools
0-6000	106	286,642	466
6001-19,000	23	198,784	284
19,000 or more	9	375,034	445

System size, rather than school size, was selected as the basis for population subgroups for two reasons. First, funding is directed to the school system level. Although some systems have only one school, funding is predominantly a system issue. Secondly, there is a lack of correlation between system size and school size. For example, the percent of system enrollment represented by an individual school ranged from more than 28% in one system to less than 0.8% in another.

The Sample

The sample for this study consisted of 500 elementary principals in Tennessee. Table 2 presents the composition of the random sample.

Table 2

Sample Composition by System Size Stratification

System Size	Percentage of Population	Number Drawn
0-6000	39.00	195
6001-19,000	23.80	119
19,000 or more	37.20	186
Total	100.00	500

Major issues considered in the determination of sample size included the presence or absence of uncontrolled variables, the desire to apply statistical procedures to

sample subdivisions, the rate of attrition expected, the homogeneity of the respondent group, and the desired level of statistical significance (Borg & Gall, 1989; Hinkle, Wiersma, & Jurs, 1988). Attrition was estimated as minimal given the professional nature of the population and the fact that the study was conducted within one school year.

Research Design

The current investigation of the perceptions of elementary principals in Tennessee may be described as a relationship study. These are often called correlational research designs (Borg & Gall, 1989; Long, Convey, & Chwalek, 1988) because research questions and hypotheses are addressed by investigating the relationships between variables of interest.

A correlational study is particularly well suited to address perceptions of desirability and feasibility and other variables such as system size, training, and experience. A Likert-type scaling system was selected because such scales allow for respondents to record varying degrees of agreement which may then be statistically analyzed to investigate the relationships among variables.

Establishment of internal and external validity is particularly difficult in behavioral science research (Borg & Gall, 1989) because of the extreme complexity of human relations in general. A random sample assignment process for

the study was used to reduce differences between the sample and population and assist in the establishment of internal validity. Other issues which could result in challenges to internal validity, including maturational changes in the sample, statistical regression, and sample mortality, were not viewed as complicating factors due to the relatively short span of the study and the stability of the population in their professional positions. An additional factor which may jeopardize internal validity is the extent to which principals holding one particular perception may be more or less likely to respond to the survey than principals holding a contrary perception. The concern in this instance was assumed to be slight since all principals share similar regulatory mandates with regard to the education of disabled students and would likely wish to register their perceptions in an effort to influence survey results.

The generalizability or representativeness (i.e. external validity) of the results is also strengthened through the process of randomization. Again, the regulatory mandates placed upon all principals with regard to educating disabled students along with administrative certification similarities allowed for an assumption of sample representativeness. An attempt was made to account for the representativeness of the setting by stratifying the sample into three system-size subgroups as previously described in the discussion of sampling method.

The general design of the study followed Krathwohl's Model of the Chain of Reasoning (cited in Borg & Gall, p. 325-331). These sequenced elements are: (1) a review of relevant literature; (2) explanation of theoretical frameworks, rationale, and points of view; (3) development and refinement of research questions and hypotheses; (4) selection of appropriate design; (5) collection of the data; (6) data summary; (7) statistical analysis; and (8) the development of conclusions and recommendations.

Instrumentation

Although instruments for collecting data on attitudes toward inclusion or "mainstreaming" were available (Schuum & Vaughn, 1991; Berryman & Neal, 1980), no instruments were found that focused directly on the perceptions of public school principals regarding the adaptation of regular classrooms for moderately and severely disabled students who typically receive all or most of their education in special classes. The Elementary Principal Inclusion Questionnaire (EPIQ) developed for this study consists of a series of adaptation statements to which respondents were asked to place themselves on two seven point Likert-type perception continuums of agreement ranging from "1" (low desirability and feasibility) to "7" (high desirability and feasibility). All statements are declarative and were presented in positive

form in order to avoid the necessity of reverse scoring for negative statements. For example:

	DESIRABILITY	*FEASIBILITY*
	LOW---------HIGH	*LOW---------HIGH*
Attend team meetings	*1 2 3 4 5 6 7*	*1 2 3 4 5 6 7*

Issues regarding the effect of construction style for the first survey item, length and perceived complexity of items, use of upper and lower case print, and page formulation principles for demographic data followed accepted mail survey procedures (Dillman, 1978).

Panel of Content Area Specialists

The literature review and professional experiences of the researcher provided the foundation for the initial development of the instrument. Based on the review of literature on relevant adaptation issues and informal interviews with school personnel, an item pool composed of descriptions of 85 adaptations was developed (see Appendix A). In order to substantiate the professional appropriateness of adaptation items for the survey, the item pool was sent to a panel of content area specialists that consisted of a professor of special education and former due process hearing officer in Tennessee; three public school special education supervisors; two elementary special education teachers with extensive experience in special class programs; a parent of a disabled

student who has received educational services in both special class and inclusive settings; and an elementary special education resource teacher. These eight individuals provided additional recommendations, editing suggestions, and overall reactions prior to the development of the instrument for pilot testing. A review of the panel responses resulted in the development of a pilot instrument of 86 items.

Pilot Study

A pilot study was conducted as a preliminary to the final survey. The pilot can appropriately be envisioned as a miniature or field test of the main study with the exception of sample size and selection procedures. The pilot sample was obtained from the population of practicing principals enrolled as doctoral candidates and post-masters students in administrative programs in the Department of Educational Leadership and Policy Analysis, East Tennessee State University for the Winter of 1994 and the assistant principals with whom they work.

The pilot survey consisted of 86 regular elementary classroom adaptation items from the initial item pool (see Appendix B). Item redundancy was present and purposeful. A total of 37 practicing public school principals and assistant principals were mailed pilot surveys. Twenty seven responses were received and constituted the pilot. Data were recorded and statistics applied in a manner identical to that used with

the main study. Benefits of the pilot procedure (Borg and Gall, 1989; DeVellis, 1991) include improved data collection and recording skills, a check of statistical procedures, and optimizing the content and length of the instrument.

Borg and Gall (1989) indicate that Alpha is an appropriate statistic to apply to an instrument having items with multiple weighted responses and, therefore, Alpha was applied to pilot study responses to assist with elimination of poor items and construction of the final instrument. Table 3 presents the reliability coefficients for the pilot survey.

Table 3

Pilot Survey Reliability Coefficients

Subscale	Survey Items	Desirability	Feasibility
Organization	1-10	.8924	.6990
Curriculum	11-20	.8370	.8178
Materials	21-30	.8565	.8672
Methods	31-40	.8942	.8889

Redundant items and items with the lowest reliability coefficients were removed to maximize reliability and obtain a manageable instrument length. The analysis of individual item correlation and item content resulted in the removal of 46 unreliable and redundant items leaving a total of 40 items for

the final instrument. The pilot survey was scored and reliability coefficients for internal consistency were derived using the SPSS-X computer software package.

Materials and Procedures

Procedures for the development of the survey packet followed those outlined by Dillman (1978). Special attention was paid to those factors which assisted in obtaining a high rate of return including a high quality cover sheet with graphic illustration; a precisely constructed letter of transmittal written on letterhead stationary with original signature (see Appendix C); high quality printing; demographic data request presented at the end of the instrument; and all materials folded together. A suggested response date was given. Assurances were given to respondents that individual responses would not be personally identifiable in the discussion and conclusions of the study and an offer to send respondents a copy of the results was also included. Follow-up procedures included a specially constructed follow-up letter (see Appendix C) and another survey form which were sent within two weeks of the response date recommended in the initial letter of transmittal. Three iterations were required to achieve the final sample.

Surveys were coded to identify respondents and the SPSS-X computer statistical package was prepared to receive the data. As responses were received, data was transferred to an SPSS-X

file for analysis. A master checklist of respondents was maintained for follow-up activity.

Data Analysis

Measures of central tendency (means, medians, and modes) and score variability for the sample were computed using the SPSS-X statistical package and t-test and Analysis of Variance (ANOVA) procedures were applied. These statistics indicated the magnitude of relationships but do not identify causality (Borg and Gall, 1989; Hinkle, Wiersma, and Jurs, 1988).

To investigate the relationship between desirability and feasibility a t-test for correlated means (also called a paired or related sample t-test) was performed for each of the 40 adaptation items. To examine the effect of demographic variables a t-test for independent means was performed. Additionally, a Chi-Square Test for Goodness-Of-Fit (Hinkle, Wiersma, and Jurs, 1988) was performed to determine if response bias was present among the stratified system-size subgroups and the standardized residual was computed for each subgroup to determine which categories were major contributors to the response fluctuation. Finally, a post-hoc t-test (Tukey-HSD) was performed to identify subgroup contributors where ANOVA results revealed significant mean differences. A discussion of survey results is presented in chapter four.

CHAPTER 4

Results

The topic of inclusion was selected for investigation on the basis of the researcher's experiences, both personal and professional, and its current significance in the public school arena. The focus on the elementary principalship was chosen for two reasons: (1) because the elementary level is commonly accepted as the most logistically workable level for inclusive programs as cited in the literature, and (2) because of the current movement toward an expanded leadership role for school administrators. A better understanding of how elementary administrators view the adaptation of traditional programs and services to meet the needs of moderately and severely disabled students should be an obvious advantage as public schools face increased demands for inclusive services by a variety of advocacy groups.

Respondents represented more than 100 Tennessee school systems from all geographic areas with the number of respondents per system varying from one to more than 20. The results of the study are presented in chapter four along with reliability data for the final survey, characteristics of responses and the respondents, the survey data as they relate to the research questions and hypotheses, and a summary of the survey results.

Reliability of the Final Instrument

Cronbach's Alpha Reliability Coefficients for internal consistency on the final survey were computed with the SPSS-X computer software package. These reliabilities are presented in Table 4. The full scale reliability coefficients were .9513 for the desirability scale and .9575 for the feasibility scale.

Table 4

Subscale Reliability Estimates Reported on the Desirability and Feasibility Scales*

	Reliability	
Subscale	Desirability	Feasibility
Organization	.8035 (.8924)	.8080 (.6990)
Curriculum	.7420 (.8370)	.8279 (.8178)
Materials	.9263 (.8565)	.8942 (.8672)
Methods	.9031 (.8942)	.8772 (.8889)

* Alpha reliabilities for the pilot study are shown in parenthesis

Response Rates

The sample selection process began during the Summer of 1994 with the first mailing (n=500) occurring in mid-August 1994. Specific response data for the study are presented in Table 5.

Table 5

Response Rates Reported by Iteration

		Responses		
Iteration	# Mailed	# Returned	# Usable	Cumulative Response Rate
1	500	117	108	21.60%
2	387	89	86	38.80%
3	299	69	69	52.60%
Total		275	263	

A total of 117 surveys were returned from the first mailing, of which 108 were usable. The second iteration of 387 surveys to sample subjects not responding to the first round occurred in mid-September with a total of 89 surveys returned of which 86 were usable. The third and final iteration of 299 surveys to sample subjects not responding to either the first or second round occurred in mid-October with a total of 69 surveys returned, all of which were usable.

A total of 12 surveys were not usable and included 5 returned with instrument printing errors, 4 returned as undeliverable, 2 returned blank, and 1 returned by a newly appointed principal who had completed a survey at her former school. A total of 263 surveys, or 52.6% of the sample, were used as the basis for the study. The sample size of 263,

based on population size and a confidence level of 95%, represented a degree of accuracy exceeding .06+/-.

Respondent Group Characteristics

A total of 263 elementary principals in Tennessee responded to the E.P.I.Q. with usable data. The demographic characteristics are presented in Tables 6 and 7.

Table 6

Gender, Age, and Years of Administrative Experience of the Respondents

Characteristic	n	%
Gender		
Male	157	60.20
Female	104	39.80
Total	261	100.00
Age		
<30	2	0.80
30-40	23	9.20
41-50	144	57.40
51-60	74	29.50
>60	8	3.10
Total	251	100.00
Years of Administrative Experience		
00-05	70	27.70
06-10	63	24.90
11-15	41	16.20
16-20	33	13.00
>21	46	18.20
Total	253	100.00

Table 7

SPED Coursework, SPED Teaching Experience, Regular Classroom Experience with Inclusion, Special (CDC) Class Supervision Experience, and System Size of the Respondents

Characteristic	n	%
College Coursework in Special Education		
None	85	33.70
Intro. Only	59	23.40
More Than Intro.	31	12.30
SPED Certified	77	30.60
Total	252	100.00
Experience Teaching in Special Education		
Yes	60	23.80
No	192	76.20
Total	252	100.00
Regular Classroom Experience with Inclusion		
Yes	95	37.40
No	159	62.60
Total	254	100.00
Experience Supervising Special (CDC) Classes		
Yes	164	64.80
No	89	35.20
Total	253	100.00
System Size		
Small (<6000)	102	38.80
Medium (6000-19000)	76	28.90
Large (>19000)	85	32.30
Total	263	100.00

More than 85% of responding principals were between the ages of 40 and 61 with about half having less than 11 years

administrative experience. Approximately 60% of respondents were male and 40% female. Some teaching experience in special education was reported by 24% of respondents with 30% holding certification in special education. About 60% reported having no experience teaching in an inclusive instructional setting and about 65% reported experience supervising special class (CDC) programs at the building level.

The responses by system size approximate that of the population with 38.8% being from small systems, 28.9% from medium systems, and 32.3% from large systems. The initial drawing consisted of 39% small systems, 24% medium systems, and 37% large systems. Because the drawn sample was stratified by system size, the Chi-Square Test for Goodness-Of-Fit (Hinkle, Wiersma, and Jurs, 1988) was performed to determine if response bias was present. With 2 degrees of freedom at the .05 level, the critical value of 5.99 was exceeded by the calculated value of 8.84. Since the calculated value exceeded the critical value, the difference between observed and expected response frequencies was too great to be attributed to chance sampling fluctuation.

To determine which categories were major contributors to the response fluctuation the standardized residual was computed for each category. Hinkle, Wiersma, and Jurs (1988) stated that a standardized residual greater than 2.00 (in absolute value) will identify a category as a major contributor to the significance of the computed Chi-Square

value. Standardized residuals did not exceed 2.00 for any category indicating that no one category was a major contributor to the significance. The expected response from small systems (102) was virtually identical to the observed response (102). Therefore, the response fluctuation can be attributed to the greater than expected responses from medium systems (76 vs 63, 28.9% vs 24%) and the fewer than expected responses from large systems (85 vs 97, 32.3% vs 37%).

Research Question 1

Research question 1 is stated as follows: To what extent do principals view the adaptation of traditional staff responsibilities and school organization as desirable and feasible?

H_0^1: There will be no difference between the perceived desirability and feasibility of adapting traditional staff organization in elementary schools as viewed by elementary principals in Tennessee.

Table 8 presents the results of correlated t-tests for each item. In order for responses to be included in this computation, respondents must have responded to both the desirability and feasibility scales. Survey items for the organizational subscale (items 1-10) covered a broad range of adaptations dealing with such factors as the planning team, shared responsibility among staff, the physical location where instruction takes place, attendance at staffing meetings, and duty-free planning time.

Table 8

Correlated t-test Results for Desirability (D) and Feasibility (F) of Organization Adaptations

Item	n	(D)Mean	(F)Mean	Mean Diff.	r	t
1	251	6.65	6.01	.65	.53	9.78*
2	248	6.04	4.87	1.18	.60	13.35*
3	250	5.49	3.73	1.76	.42	14.77*
4	251	6.28	4.94	1.34	.50	15.70*
5	233	5.15	3.71	1.44	.52	12.68*
6	240	5.75	3.99	1.75	.48	15.14*
7	252	6.51	5.01	1.50	.46	14.19*
8	248	6.47	5.66	.81	.41	10.32*
9	247	6.08	4.90	1.17	.52	12.80*
10	249	6.58	4.20	2.38	.23	17.81*
Total	214	61.03	47.09	13.93	.48	21.82*

*p>.05

Adaptations perceived as most desirable in the organization subscale were The Principal's Membership on the Planning Team (item 1) and Duty-Free Planning Time (item 10). Least desirable were Providing Instruction Outside the Regular Classroom (item 5) and Providing Instruction in the Summer (item 3). With the highest potential item mean being 7.00, the least desirable organizational adaptation had a mean of 5.15. The range between highest and lowest means for desirability was 1.50.

Adaptations perceived as most feasible were The Principal's Membership on the Planning Team (item 1) and Teacher's Making Recommendations to Other Staff (item 8). The least desirable adaptations were also viewed as the least feasible, i.e. Providing Instruction Outside the Regular Classroom (item 5) and Providing Instruction in the Summer (item 3). With the highest potential item mean being 7.00, the least feasible organizational adaptation had a mean of 3.71. The range between highest and lowest means for feasibility was 2.30.

As presented in Table 8, a significant difference between desirability and feasibility was identified for each of the ten subscale items as well as for the subscale as a whole. Elementary principals in Tennessee perceived the adaptation of traditional staff organization as significantly more desirable than feasible.

Research Question 2

Research question 2 is stated as follows: To what extent do principals view the adaptation of the regular grade level curriculum as desirable and feasible?

H_0^2: There will be no difference between the perceived desirability and feasibility of adapting the regular grade level curriculum in elementary schools as viewed by elementary principals in Tennessee.

Table 9 presents the results of correlated t-tests for each item. In order for responses to be included in this computation, respondents must have responded to both the desirability and feasibility scales.

Table 9

Correlated t-test Results for Desirability (D) and Feasibility (F) of Curriculum Adaptations

Item	n	(D)Mean	(F)Mean	Mean Diff.	r	t
11	229	4.00	4.04	-.04	.44	-.32
12	245	6.06	4.33	1.73	.33	14.46*
13	240	4.30	4.36	-.06	.54	-.55
14	246	6.02	4.32	1.70	.36	14.70*
15	246	5.10	4.44	.66	.40	5.36*
16	248	6.21	5.08	1.13	.42	11.37*
17	252	6.48	5.20	1.28	.31	12.96*
18	250	6.23	4.55	1.68	.21	15.06*
19	249	5.05	3.83	1.22	.49	11.51*
20	251	6.11	4.92	1.19	.37	12.93*
Total	220	51.51	40.84	10.67	.43	16.40*

*p>.05

Survey items for the curriculum subscale (items 11-20) addressed a wide range of curriculum adaptations including the development of an individualized curriculum, elimination of grade-level objectives for a disabled student, the presence of non-traditional curriculum items (e.g. daily-living skills),

lesson plans designed for multiple instructional levels within each lesson, parent assistance with curriculum design, and the use of an integrated curriculum.

Adaptations perceived as most desirable in the curriculum subscale were The Determination of Curriculum by a Planning Team (item 17) and The Design of Lesson Plans for Multiple Instructional Levels Within Each Lesson (item 18). Adaptations viewed as least desirable were Skipping Curriculum Detail (item 11) and The Elimination of Grade Level Objectives (item 13). Among the ten curriculum subscale items, the least desirable adaptation had a mean of 4.00. The range between highest and lowest means for desirability was 2.48. It is noted that the mean range for desirability among the eight curriculum subscale items with significant desirability/feasibility differences was only 1.43 with the least desirable having a mean of 5.05.

Adaptations viewed as most feasible were The Design of Non-Traditional Curriculum (item 16) and The Determination of Curriculum by a Planning Team (item 17). The least feasible adaptations were Parents Assisting With Curriculum Design (item 19) and Skipping Curriculum Details (item 11). The least feasible adaptation had a mean of 3.83. The mean range for feasibility was 1.37.

As presented in Table 9, there was a significant difference between desirability and feasibility on eight of the ten subscale items as well as for the subscale as a whole.

Elementary principals in Tennessee perceived the adaptation of the regular grade level curriculum as significantly more desirable than feasible.

Research Question 3

Research question 3 is stated as follows: To what extent do principals view the adaptation of regular instructional materials as desirable and feasible?

H_0^3: There will be no difference between the perceived desirability and feasibility of adapting regular instructional materials in elementary schools as viewed by elementary principals in Tennessee.

Table 10 presents the results of correlated t-tests for each item. In order for responses to be included in this computation, respondents must have responded to both the desirability and feasibility scales. Survey items for the materials subscale (items 21-30) represented commonly recommended adaptation practices including use of a variety of alternative materials, adapting materials used with non-disabled students, demonstrating the use of alternative materials to other teachers, storage and cataloging of alternative materials, adjustments to the physical arrangement of the classroom, and construction of alternative materials by the classroom teacher.

Adaptations perceived as most desirable in the materials subscale were Physical Adjustment of the Classroom (item 29) and The Use of Alternative Materials (item 25).

Table 10

Correlated t-test Results for Desirability (D) and Feasibility (F) of Materials Adaptations

Item	n	(D)Mean	(F)Mean	Mean Diff.	r	t
21	251	6.40	4.76	1.64	.32	16.09*
22	249	6.26	4.79	1.47	.37	15.85*
23	247	6.29	4.92	1.37	.34	14.42*
24	250	6.20	4.46	1.75	.27	15.58*
25	251	6.53	5.49	1.04	.37	12.97*
26	254	6.50	5.38	1.12	.36	12.06*
27	249	5.93	4.36	1.57	.29	14.51*
28	253	6.51	5.50	1.01	.37	11.28*
29	254	6.59	5.91	.68	.55	9.66*
30	253	6.30	4.87	1.42	.40	15.03*
Total	229	63.61	50.55	13.06	.39	18.81*

* p>.05

Least desirable were Teachers Designing Alternative Materials Which are Made by Specialists (item 27) and Cataloging and Storage of Alternative Materials by the School (item 24). The least desirable materials adaptation had a mean of 5.93. The range between highest and lowest means for desirability was .66.

Adaptations perceived as most feasible were Physical Adjustment of the Classroom (item 29) and Sharing Specialized Materials Among Staff (item 28). The least desirable

adaptations were also viewed as the least feasible, i.e. teachers designing alternative materials made by specialists and the cataloging and storage of alternative materials by the school. The least feasible materials adaptation had a mean of 4.36. The range between highest and lowest means for feasibility was 1.55.

As presented in Table 10, there was a significant difference between desirability and feasibility on each of the ten subscale items as well as for the entire subscale. Elementary principals perceived the adaptation of materials as significantly more desirable than feasible.

Research Question 4

Research question 4 is stated as follows: To what extent do principals view the adaptation of traditional teaching and assessment methods as desirable and feasible?

H_0^4: There will be no difference between the perceived desirability and feasibility of adapting traditional teaching and assessment methods in elementary schools as viewed by elementary principals in Tennessee.

Table 11 presents the results of correlated t-tests for each item. In order for responses to be included in this computation, respondents must have responded to both the desirability and feasibility scales. Survey items on the methods subscale (items 31-40) addressed commonly recommended instructional adaptations including providing instruction in a manner that promotes social interaction between disabled and

Table 11

Correlated t-test Results for Desirability (D) and Feasibility (F) of Methods Adaptations

Item	n	(D)Mean	(F)Mean	Mean Diff.	r	t
31	254	6.45	5.68	.78	.49	10.16*
32	255	6.56	5.26	1.31	.36	14.60*
33	254	6.46	5.60	.86	.50	11.89*
34	255	6.36	5.79	.57	.56	7.39*
35	254	6.28	5.11	1.16	.42	12.81*
36	253	6.21	4.98	1.24	.48	14.12*
37	251	6.27	5.06	1.21	.45	13.60*
38	253	5.96	4.70	1.27	.57	14.22*
39	249	6.04	5.57	.48	.63	6.12*
40	254	6.09	4.66	1.43	.45	13.26*
Total	239	62.78	52.50	10.28	.52	16.96*

* p>.05

non-disabled students, teaching to different learning styles within each lesson, the use of cooperative learning techniques, the pairing of disabled and non-disabled students for nonacademic activities, implementation of special classroom management strategies, use of individually tailored assessments, modification of grading standards, and student conferencing.

Adaptations perceived as most desirable in the methods subscale were Teaching to Different Learning Styles Within

Each Lesson (item 32) and The Use of Cooperative Learning Techniques where disabled students work cooperatively with team members (item 33). Least desirable were The Teacher Completing a Written Assessment of Social Skills (item 38) and The Assignment of an "A" Grade to a Disabled Student who has Mastered their Individual Curriculum even though he/she has not mastered the regular grade level objectives (item 39). The least desirable methods adaptation had a mean of 5.96. The range between highest and lowest means for desirability was .60.

Adaptations perceived as most feasible were Pairing Disabled and Nondisabled Students for Art, Music, PE, Lunch, and Recess (item 34) and Structuring Instruction to Promote Social Interaction (item 31). The least feasible methods adaptations were Holding Individual Student Conferences with Disabled Students Each Grading Period (item 40) and The Teacher Completing a Written Assessment of Social Skills (item 38). The least feasible methods adaptation had a mean of 4.66. The range between highest and lowest means for feasibility was 1.13.

As presented in Table 11, a significant difference between desirability and feasibility was identified for each of the ten subscale items as well as for the subscale as a whole. Elementary principals in Tennessee perceived the adaptation of traditional teaching and assessment methods as significantly more desirable than feasible.

Research Question 5

Research question 5 addressed overall respondent perceptions regarding the most/least desirable and feasible adaptations presented in the survey. Table 12 presents the top 5 desirability items in each category in rank order. Table 13 presents the top 5 feasibility items in each category in rank order. A complete rank ordering of all 40 adaptations is presented in Appendix D.

Table 12

Desirability of Adaptations Rank Ordered by Mean

Rank	Item	n	Mean	SD
Most Desirable				
1	1	261	6.64	.80
2	29	263	6.57	.85
3	32	262	6.55	.89
4	10	258	6.55	1.02
5	25	260	6.50	.82
Least Desirable				
40	11	245	3.98	1.90
39	13	257	4.25	1.99
38	19	256	5.05	1.69
37	15	256	5.05	1.86
36	5	244	5.14	1.78

Among the five most desirable adaptations were two items from the organizational subscale, The Principal As A Member of the Planning Team (item 1) and The Provision of Duty-Free Planning Time (item 10); two items from the materials subscale, The Use of Alterative Materials (item 25) and The Physical Adjustment of the Classroom (item 29); and one instructional methods item, Teaching to Different Learning Styles Within Each Lesson (item 32). For the desirability scale, only one curriculum item, Curriculum Determined by a Planning Team (item 17), appeared within the top 20 of the 40 total scale items.

Among the five least desirable adaptations were four curriculum items, Skipping Curriculum Details (item 11), The Elimination of Grade-Level Objectives (item 13), Parent Assistance With Curriculum Design (item 19), and The Curriculum for a Disabled Student Differs From the State Curriculum (item 15); and one organizational item; Providing Instruction Outside the Regular Classroom. Nine of the ten curriculum items were ranked among the least desirable 20 of the 40 total scale items.

Among the five most feasible adaptations were two organizational items, The Principal as a Member of the Planning Team (item 1) and The Teacher Making Recommendations to Other Staff (item 8); one materials item, Physical Adjustment of the Classroom (item 29), and two methods items,

Table 13

Feasibility of Adaptations Rank Ordered by Mean

Rank	Item	n	Mean	SD
Most Feasible-				
1	1	252	6.00	1.23
2	29	254	5.91	1.33
3	34	256	5.78	1.44
4	31	254	5.68	1.36
5	8	248	5.66	1.30
Least Feasible				
40	5	237	3.73	1.76
39	3	252	3.73	1.73
38	19	251	3.84	1.63
37	6	244	3.99	1.87
36	11	233	4.06	1.61

Arrangement of Instruction to Promote Social Interaction (item 31) and Pairing Disabled and Nondisabled Students for Nonacademic Activities (item 34). No curriculum adaptation items appeared within the top five most feasible and only three of the ten curriculum items appeared within the top 20 of the 40 total scale items.

Among the five least feasible adaptations were three organizational items, Providing Instruction Outside the

Regular Classroom (item 5) , Providing Instruction During the Summer (item 3), and Attending Meetings in Another Building (item 6); and two curriculum items, Parent Assistance With Curriculum Design (item 19) and Skipping Curriculum Details (item 11). No materials or methods items appeared within the top five least feasible adaptations.

Two adaptations, The Principal as a Member of the Planning Team (item 1) and Physical Adjustment of the Classroom (item 29) share top five ranking for both most desirable and most feasible. Three adaptations, Providing Instruction Outside the Regular Classroom (item 5), Skipping Curriculum Details (item 11), and Parent Assistance With Curriculum Design (item 19) share top ranking as least desirable and feasible.

Research Question 6

Respondents were asked to supply demographic data in seven categories to further aid in the analysis of the overall responses. Additionally, respondents were identified by the researcher as belonging to one of three subgroups based on system size as documented in the 1993-94 Directory of Public Schools published by the Tennessee State Department of Education. The results for each subgroup are presented in the following sections.

Regular Classroom Experience with Inclusion

Experience subgroups were established from responses to the following question: Do you have teaching experience in an inclusive regular elementary classroom program which included moderately and/or severely disabled students?

H_0^3: There will be no difference in the perceived desirability and feasibility of adapting traditional elementary school programs and services between elementary principals in Tennessee having current or prior regular, inclusive, classroom teaching experience and principals without such experience.

The results of t-tests which compared mean responses of principals with and without regular classroom experience with inclusive programming are presented in Table 14.

Respondents with no regular classroom teaching experience in settings which included students with moderate or severe disabilities outnumbered those with experience nearly 2 to 1 with an average of 64% having no such experience. As presented in Table 14, no significant difference between principals with and without regular, inclusive, classroom teaching experience was identified on either the desirability scale or the feasibility scale. The responses of elementary principals in Tennessee with regular, inclusive, classroom teaching experience were not significantly different from the responses of principals without such experience.

Table 14

Differences in Means for Principals With and Without Regular Classroom Teaching Experience in Inclusive Programs

	Experience			No Experience			
Subscale	n	M	SD	n	M	SD	t
Desirability							
Organization	76	61.07	7.48	139	60.76	8.07	.28
Curriculum	87	50.68	9.34	146	51.28	7.17	-.52
Materials	87	62.74	8.82	146	63.38	7.48	-.59
Methods	88	62.56	8.91	150	62.35	8.31	.18
Total	63	240.87	27.52	121	236.03	27.69	1.13
Feasibility							
Organization	73	47.68	12.13	137	46.39	9.32	.79
Curriculum	74	41.31	11.01	139	40.47	9.57	.58
Materials	84	51.95	11.09	140	49.56	10.80	1.59
Methods	85	53.53	10.96	146	51.95	10.39	1.10
Total	55	192.55	44.72	112	187.71	34.41	.71

College Training in Special Education

The extent to which formal college coursework/training in special education affected the views of principals regarding adaptations was investigated with the following question: Have you had formal/college coursework in special education?

H_0^6: There will be no difference in the perceived desirability and feasibility of adapting traditional elementary school programs and services between elementary principals in Tennessee based on the amount of formal/college coursework in special education.

Four options were available for selection: No, Yes - introductory only, Yes - more than introductory but not certified, and Yes - with professional certification. In order to determine if significant differences existed in the responses for these subgroups an Analysis Of Variance was performed. ANOVA results for the desirability scale are presented in Table 15 and ANOVA results for the feasibility scale are presented in Table 16.

Data revealed that approximately 30% of respondents hold professional certification in special education with 34% having no formal special education coursework at the college level. No significant subgroup differences in perceived desirability were observed for the Organization, Curriculum, and Materials subscales. ANOVA results for the Methods subscale, however, did reveal the existence of differences among subgroups.

To determine which of the four subgroup means differed significantly among themselves a post-hoc t-test (Tukey-HSD) was performed. Although the widest subgroup difference is between respondents having no coursework and those with professional certification, the data revealed that response differences were attributable to principals with no formal college coursework and principals with introductory coursework only. Principals having no coursework viewed adaptations of instructional methods as more desirable than principals having introductory college coursework only.

Table 15

ANOVA Results for Desirability Subscales by Amount of SPED Coursework

Subscale	Coursework	n	M	SD	F
Organization	None	67	61.03	7.85	1.75
	Intro.Only	72	59.24	8.86	
	> Intro.	51	62.25	6.59	
	Certified	24	61.96	6.51	
Curriculum	None	73	52.34	6.25	1.22
	Intro.Only	78	50.69	8.97	
	> Intro.	52	49.69	8.85	
	Certified	28	51.61	7.65	
Materials	None	73	64.14	6.30	1.11
	Intro.Only	78	62.35	9.22	
	> Intro.	54	63.81	7.86	
	Certified	26	61.54	8.44	
Methods	None	75	64.59	5.42	3.16*
	Intro.Only	79	60.43	10.41	
	> Intro.	55	62.55	8.80	
	Certified	27	62.15	7.61	
Total Scale	None	62	242.26	21.27	2.44
	Intro.Only	59	229.73	36.37	
	> Intro.	44	240.00	21.90	
	Certified	18	241.11	22.97	

* p >.05

Table 16

ANOVA Results for Feasibility Subscales by Amount of SPED Coursework

Scale	Coursework	n	M	SD	F
Organization	None	66	47.65	9.25	.50
	Intro.Only	69	45.58	10.96	
	> Intro.	48	47.21	10.12	
	Certified	26	47.15	12.18	
Curriculum	None	70	42.03	9.69	.74
	Intro.Only	72	40.38	11.10	
	> Intro.	45	39.24	10.10	
	Certified	24	40.92	8.11	
Materials	None	70	51.01	10.57	1.48
	Intro.Only	75	48.47	11.77	
	> Intro.	50	52.52	11.28	
	Certified	27	50.59	8.45	
Methods	None	74	54.05	9.98	2.09
	Intro.Only	76	50.12	11.59	
	> Intro.	53	53.43	10.62	
	Certified	26	53.69	7.93	
Total Scale	None	57	195.61	35.08	1.17
	Intro.Only	53	182.17	42.17	
	> Intro.	38	188.11	37.56	
	Certified	18	190.94	34.68	

As presented in Table 15, no significant difference based on amount of formal college coursework in special education were identified for the entire desirability scale. As indicated in Table 16, no significant differences based on amount of formal college coursework in special education were identified for the feasibility scale. The responses of elementary principals in Tennessee indicated that formal college coursework in special education was not a significant factor affecting their views on the desirability and feasibility of adapting regular classrooms for inclusive programming.

Experience Supervising A Special (CDC) Class Program

Respondents were also asked to indicate whether or not they have supervised a special (CDC) class as a building principal and if such a special class exists in their current assignment.

H_0^7: There will be no difference in the perceived desirability and feasibility of adapting traditional elementary school programs and services between elementary principals in Tennessee based on the amount presence/absence of a special class (CDC) program in the current or a previous administrative assignment.

For the purposes of statistical analysis, a response of Yes to either a current or previous assignment was viewed as having experience. The results of t-tests which compared mean responses of principals with and without experience supervising special (CDC) classes are presented in Table 17.

Table 17

Differences in Means For Principals With and Without Special (CDC) Class Supervision Experience

Subscale	Experience			No Experience			t
	n	M	SD	n	M	SD	
Desirability							
Organization	116	60.65	8.00	96	61.07	7.77	-.39
Curriculum	127	50.94	8.10	103	51.03	8.04	-.09
Materials	124	62.77	7.86	106	63.51	8.22	-.70
Methods	127	62.17	8.00	108	62.64	9.17	-.42
Total	103	237.39	25.49	78	237.59	30.67	-.05
Feasibility							
Organization	114	47.58	9.75	93	45.91	11.21	1.14
Curriculum	117	41.97	9.87	93	39.22	10.30	1.97
Materials	119	51.15	10.60	102	49.63	11.43	1.03
Methods	124	52.94	9.84	104	51.96	11.52	.69
Total	93	192.85	35.66	71	184.41	41.24	1.40

More respondents reported having experience in the supervision of special (CDC) classes than reported having no such experience. An average of 55% reported either current or prior experience. As indicated in Table 17, no significant difference between principals with and without experience supervising special (CDC) classes has been identified in either the desirability scale or the feasibility scale. The responses of elementary principals in Tennessee with experience

supervising special classes were not significantly different from the responses of principals without such experience.

Experience Teaching Special Education

Respondents were also asked to indicate if they had special education teaching experience with moderately and/or severely disabled students.

H_0^8: There will be no difference in the perceived desirability and feasibility of adapting traditional elementary school programs and services between elementary principals in Tennessee based on the existence/absence of teaching experience in special education with moderately or severely disabled students.

Table 18 presents the results of t-tests which compared mean responses of principals with and without experience teaching special education.

Twenty four percent (24%) of respondents reported having special education experience teaching students with moderate or severe disabilities. As indicated in Table 18, no significant difference between principals with and without special education teaching experience was identified on either the desirability scale or the feasibility scale. The responses of elementary principals in Tennessee with special education teaching experience were not significantly different from the responses of principals without such experience.

Table 18

Differences in Means for Principals With and Without Special Education Teaching Experience

Subscale	Experience			No Experience			t
	n	M	SD	n	M	SD	
Desirability							
Organization	52	61.19	8.94	162	60.73	7.51	.37
Curriculum	56	51.30	9.01	175	51.03	7.71	.22
Materials	54	63.00	8.25	177	63.23	7.94	-.18
Methods	57	62.49	9.02	179	62.43	8.36	.05
Total	45	239.09	31.43	138	237.11	26.48	.42
Feasibility							
Organization	51	46.49	11.78	158	46.96	9.95	-.28
Curriculum	50	39.82	10.80	161	41.08	9.91	-.77
Materials	54	50.07	11.21	168	50.64	10.94	-.33
Methods	56	54.04	11.33	173	52.15	10.33	1.16
Total	41	190.12	42.89	125	189.10	36.66	.15

Respondent Gender

The effect of respondent gender was also investigated.

H_0': There will be no difference in the perceived desirability and feasibility of adapting traditional elementary school programs and services between elementary principals in Tennessee based on respondent gender.

In order to test the significance of the differences between means based on respondent gender, t-tests for differences between means were performed. The results of t-tests which compared mean responses are presented in Table 19.

Table 19

Differences in Means By Gender

Subscale	Male n	Male M	Male SD	Female n	Female M	Female SD	t
Desirability							
Organization	132	60.54	8.39	90	61.69	6.76	-1.13
Curriculum	147	51.23	8.20	92	51.07	7.72	.16
Materials	143	62.94	8.49	96	63.76	7.06	-.78
Methods	148	62.09	8.73	97	63.28	7.99	-1.07
Total	116	237.70	29.01	73	238.82	24.99	-.27
Feasibility							
Organization	129	46.19	10.38	86	48.28	10.21	-1.46
Curriculum	136	40.86	10.05	82	40.99	10.08	-.09
Materials	136	50.35	11.33	93	51.08	10.37	-.50
Methods	143	51.71	11.13	94	53.83	9.42	-1.52
Total	109	188.23	39.86	61	192.08	34.20	-.64

Slightly more than 60% of respondents were male. As indicated in Table 19, no significant difference based on principal gender were identified on either the desirability scale or the feasibility scale. The responses of male elementary principals in Tennessee were not significantly different from the responses of female principals.

Respondent Age

The extent to which age may affect the views of principals regarding the adaptations presented in the survey was also investigated.

H_0^{10}: There will be no difference in the perceived desirability and feasibility of adapting traditional elementary school programs and services between elementary principals in Tennessee based on respondent age.

Five options were available for selection: Under 30, 30-40, 41-50, 51-60, 61 and over. In order to determine if significant differences existed in the mean responses for these subgroups an Analysis Of Variance was performed. Because only two respondents (accounting for 0.8%) were under age 30 and only eight respondents (accounting for 3.2%) were over age 60, ANOVA procedures were applied to only three groups by including the two respondents under age 30 in the 30-40 year old subgroup and the eight respondents over age 60 in the 51-60 year old subgroup. Approximately 10% of respondents were under age 40, 60% were ages 41-50, and 30% over age 50. ANOVA results for the desirability scale are presented in Table 20 and ANOVA results for the feasibility scale are presented in Table 21.

No significant subgroup differences in perceived desirability were observed for the Organization, Curriculum, and Methods subscales. ANOVA results for the Materials subscale, however, did reveal the existence of differences among subgroups.

Table 20

ANOVA Results for Desirability by Age

Subscale	Age	n	M	SD	F
Organization	< 41	20	57.80	8.50	2.72
	41-50	129	61.77	6.99	
	> 50	64	60.08	9.08	
Curriculum	< 41	22	47.77	10.39	2.57
	41-50	135	51.84	6.58	
	> 50	73	50.74	9.39	
Materials	< 41	24	58.63	13.01	4.95*
	41-50	136	64.07	5.98	
	> 50	70	63.10	8.66	
Methods	< 41	23	58.57	13.44	2.80
	41-50	135	62.85	7.35	
	> 50	77	63.05	8.27	
Total	< 41	15	220.40	46.77	3.70*
	41-50	114	240.56	23.29	
	> 50	53	236.68	27.94	

* p >.05

To determine which of the three subgroup means on the Materials subscale differed significantly among themselves a post-hoc t-test (Tukey-HSD) was performed. The results of the Tukey-HSD procedure revealed that the differences were attributable to the responses by principals under age 41 whose

responses varied significantly from both the 41-50 year old subgroup and the over 50 age subgroup. Principals under age 41 viewed adaptations to regular instructional materials as significantly less desirable than older principals.

Table 21

ANOVA Results For Feasibility by Age

Subscale	Age	n	M	SD	F
Organization	< 41	19	46.47	7.26	.40
	41-50	126	47.29	10.53	
	> 50	63	45.89	10.83	
Curriculum	< 41	18	40.00	9.13	1.02
	41-50	125	40.12	10.07	
	> 50	68	42.24	10.44	
Materials	< 41	23	49.13	9.82	.29
	41-50	133	50.32	10.78	
	> 50	65	51.09	11.69	
Methods	< 41	23	52.65	9.37	.27
	41-50	131	52.14	10.89	
	> 50	74	53.27	10.33	
Total	< 41	12	181.75	33.77	.26
	41-50	106	190.08	38.64	
	> 50	48	189.92	38.52	

As presented in Table 20, a significant difference based on respondent age was identified for the entire desirability scale. To determine which of the three subgroup means on the desirability scale as a whole differed significantly among themselves a post-hoc t-test (Tukey-HSD) was again performed.

The results of the Tukey-HSD procedure revealed that the differences were attributable to the responses by principals under age 41 whose responses varied significantly from principals in the 41-50 year old subgroup. Principals under age 41 viewed adaptations as significantly less desirable than principals ages 41-50. As presented in Table 21, no significant differences for feasibility based on respondent age were identified.

Administrative Experience

The extent to which years of administrative experience affected the views of principals regarding the adaptations presented in the survey was also investigated.

H_0^{11}: There will be no difference in the perceived desirability and feasibility of adapting traditional elementary school programs and services between elementary principals in Tennessee based on years of respondent administrative experience.

Five experience options were available for respondent selection: 0-5 years, 6-10 years, 11-15 years, 16-20 years, and 21 or more years. In order to determine if significant differences existed in the mean responses for these subgroups

an Analysis Of Variance was performed. ANOVA results for the desirability scale are presented in Table 22 and ANOVA results for the feasibility scale are presented in Table 23.

Subgroup data based on administrative experience for the desirability scale revealed that approximately 27% of responding principals had 0-5 years experience, 28% had 6-10 years experience, 17% had 11-15 years experience, 14% had 16-20 years experience, and 14% had more than 20 years experience. As presented in Table 22, no significant differences for desirability based on amount of administrative experience were identified.

Subgroup data based on administrative experience for the feasibility scale was identical to that of the desirability scale with 27% of responding principals having 0-5 years experience, 28% having 6-10 years experience, 17% having 11-15 years experience, 14% having 16-20 years experience, and 14% having more than 20 years experience. As presented in Table 23, the data indicated no significant differences for feasibility based on amount of administrative experience.

Table 22

ANOVA Results for Desirability by Years of Admin. Experience

Scale	Experience	n	M	SD	F
Organization	0-5	63	60.14	8.36	.30
	6-10	57	61.07	7.30	
	11-15	37	61.86	6.81	
	16-20	27	60.56	8.24	
	> 20	31	61.03	8.87	
Curriculum	0-5	62	50.42	7.91	.34
	6-10	60	51.47	7.65	
	11-15	37	51.35	6.25	
	16-20	32	50.38	10.75	
	> 20	41	51.98	7.89	
Materials	0-5	63	61.78	9.70	.80
	6-10	62	63.63	5.77	
	11-15	39	64.33	6.18	
	16-20	32	63.00	9.77	
	> 20	36	63.81	7.97	
Methods	0-5	64	61.22	9.83	.85
	6-10	59	63.34	6.97	
	11-15	38	63.32	6.57	
	16-20	33	61.30	10.90	
	> 20	43	63.30	7.71	
Total	0-5	49	233.76	33.94	.34
	6-10	51	239.16	22.19	
	11-15	32	239.34	20.54	
	16-20	26	238.73	27.19	
	> 20	26	239.15	33.12	

Table 23

ANOVA Results for Feasibility by Years of Admin. Experience

Scale	Experience	n	M	SD	F
Organization	0-5	61	46.10	9.97	.66
	6-10	53	47.77	9.65	
	11-15	37	48.41	10.61	
	16-20	28	44.82	11.79	
	> 20	31	46.68	10.96	
Curriculum	0-5	55	39.05	9.69	1.11
	6-10	55	40.04	10.44	
	11-15	35	43.20	8.23	
	16-20	29	41.00	12.07	
	> 20	38	41.92	10.02	
Materials	0-5	64	48.73	10.46	1.66
	6-10	59	50.17	10.44	
	11-15	38	54.34	8.41	
	16-20	30	49.70	13.59	
	> 20	32	50.72	12.33	
Methods	0-5	64	50.78	11.22	2.05
	6-10	57	53.98	8.95	
	11-15	38	55.58	8.06	
	16-20	31	49.84	13.14	
	> 20	40	52.88	10.93	
Total	0-5	42	181.71	38.45	1.29
	6-10	45	193.00	34.49	
	11-15	29	200.31	28.86	
	16-20	25	183.48	47.62	
	> 20	26	188.50	41.06	

System Size

Because numerous small school systems in Tennessee have charged that the allocation of financial resources, based mainly on sales tax revenue, is inequitable, the sample was stratified to ensure proportional representation by system size.

H_0^{12}: There will be no difference in the perceived desirability and feasibility of adapting traditional elementary school programs and services between elementary principals in Tennessee based on system size.

For the purposes of this study, systems with a student population under 6000 were considered small systems. Systems with 6001 to 19000 were considered medium systems, and those systems with more than 19000 students were considered large.

Although the return rate by system size approximated that of the system size subgroups in the population, the Chi-Square Test for Goodness-Of-Fit (Hinkle, Wiersma, and Jurs, 1988) revealed differences between observed and expected response frequencies in the stratified sample too great to be attributed to chance sampling fluctuation alone. Responses from small systems were precisely as expected but medium size systems were slightly overrepresented and large systems were slightly underrepresented.

In order to determine if significant differences existed in responses for these subgroups, an Analysis Of Variance was performed. ANOVA results for desirability and feasibility are presented in Tables 24 and 25.

Table 24

ANOVA Results for Desirability by System Size

Scale	Size	*n*	M	SD	F
Organization	Small	86	60.60	8.35	1.03
	Medium	66	60.33	7.76	
	Large	71	62.07	6.93	
Curriculum	Small	98	51.46	8.77	.12
	Medium	67	50.84	6.73	
	Large	75	51.19	8.07	
Materials	Small	94	62.72	9.64	1.78
	Medium	70	62.41	6.43	
	Large	76	64.64	6.66	
Methods	Small	97	61.59	10.07	1.79
	Medium	70	62.19	7.42	
	Large	79	63.95	6.85	
Total	Small	77	237.14	30.46	.22
	Medium	54	237.22	24.33	
	Large	59	240.03	26.14	

Among the 1195 schools identified as the population for this study, 466 (39%) were from systems having 1993-1994 student enrollments under 6000, 284 (24%) from systems having enrollments from 6001 to 19000, and 445 (37%) from systems having enrollments greater than 19000. Over 100 school systems were represented in the small system subgroup (with

Table 25

ANOVA Results for Feasibility by System Size

Scale	Size	n	M	SD	F
Organization	Small	84	47.25	11.42	.17
	Medium	64	47.33	9.12	
	Large	68	46.41	10.05	
Curriculum	Small	91	41.68	10.03	.57
	Medium	60	40.75	9.84	
	Large	68	39.96	10.45	
Materials	Small	91	50.15	11.44	.52
	Medium	67	50.19	10.84	
	Large	72	51.75	10.21	
Methods	Small	95	52.40	10.72	.56
	Medium	68	51.71	10.65	
	Large	75	53.53	10.14	
Total	Small	72	190.19	40.31	.18
	Medium	46	186.83	36.82	
	Large	53	191.28	35.53	

466 schools) while only 9 large systems were represented but contained approximately the same number of schools (445). The selection of stratification criteria by the researcher was based on a review of all system enrollments and the appearance of logical enrollment cutoffs.

As presented in Table 24, no significant differences for

desirability based on system size were identified. Also, as presented in Table 25, no significant differences for feasibility based on system size were identified.

Summary

As presented in Table 26, a significant difference between desirability and feasibility was identified for each of the four subscales as well as for the entire desirability scale and entire feasibility scale.

Table 26

Correlated t-test Results for Desirability (D) and Feasibility (F) of Adaptations

Scale	n	(D)Mean	(F)Mean	Mean Diff.	r	t
Organization	214	61.03	47.09	13.93	.48	21.82*
Curriculum	220	51.51	40.84	10.67	.43	16.40*
Materials	229	63.61	50.55	13.06	.39	18.81*
Methods	239	62.78	52.50	10.28	.52	16.96*
Full Scale	170	238.88	189.35	49.53	.45	18.38*

* p >.05

Elementary principals in Tennessee perceived the adaptation of traditional practices in each category as significantly more desirable than feasible. These differences in perception cannot be attributed to random fluctuation in

the sample. While data analysis was conducted to identify items, subscales, and full scales which differed significantly at the $p > .05$ level, it is noted that 38 of the 40 survey items, all four of the subscales, and the full scales were found to be significantly different at the $p > .001$ level as well.

Among all statistical procedures applied to respondent subgroups, only the analysis of responses based on age for the desirability scale were shown to be significant. Because no significant subscale differences were identified for the Organization, Curriculum, and Methods subscales based on age, the significant differences based on age in the desirability scale as a whole can be attributed to differences in the Materials subscale. It is noted that the results of the Tukey-HSD procedure attributed the differences to the responses of the youngest and middle age groups rather than to the age subgroups having the greatest age range. These factors combine to suggest that differences in the perceived desirability of adaptations as a whole based on principal age should be considered tenuous at best.

Chapter four has presented an analysis of respondent data. The final chapter will present the researcher's overall impressions, conclusions, and recommendations from the study.

CHAPTER 5

Summary, Conclusions, and Recommendations

In the first four chapters, historical information regarding integration and inclusion, relevant literature, methods and procedures for conducting the study, and survey data were presented and discussed. In chapter five, the significant findings of the study, suggested viable conclusions based on the findings, and recommendations for future research are presented. The first section will present an overview of the study and its significant findings.

Synopsis

The purpose of the study was to investigate the perceptions of Tennessee elementary school principals concerning the desirability and feasibility of adapting typical elementary classrooms and programs for the inclusion of children with moderate and severe disabilities. It is hoped that the findings will add a useful administrative dimension to current research on inclusive educational programming for students with disabilities typically educated in special (CDC) class settings in Tennessee.

The most predominant feature of the data analyzed in this study was the strength and clarity of differences between the desirability and feasibility of adaptations as perceived by elementary principals. Among the 40 adaptation items

presented in the survey, responding principals indicated that 38 were significantly more desirable than feasible. Analysis of data on each of the four subscales revealed that respondents also perceived the overall adaptation categories of Organization, Curriculum, Materials, and Instructional Methods as significantly more desirable than feasible. Analysis of data on the entire desirability and feasibility scales identified a similar significant difference in respondent perception. Given the definitions of desirability and feasibility presented to respondents on the survey instrument, it is clear that responding principals thought it very desirable to implement the adaptations presented but had a significantly different view of how practical it would be for the adaptations to be implemented.

The comparison of responses based on demographic variables failed to identify patterns of significant differences. The only comparison revealing a significant difference among subgroups was based on the age of responding principals on the desirability scale where younger principals perceived adaptations as less desirable than middle aged principals. The interpretation of this finding is difficult, however, because the difference is attributed to the youngest and the middle aged subgroups rather than to the youngest and oldest subgroups with the greatest age difference.

An additional noteworthy feature is the strength of overall responses in both scales. The overall average

response of 5.97 on the desirability scale clearly indicates that responding principals accept the adaptations presented as desirable for use in inclusive programs. However, although the statistically significant difference between desirability and feasibility may, superficially, seem to indicate that principals did not view the adaptations as practical to implement, the strength of feasibility responses (overall average response above 4.00) indicated that principals did not reject adaptations as impractical. One interpretation is that the statistically different feasibility scores are the result of concerns beyond classroom or program adaptations. Principals providing written comments focused on funding, training, time, and the need for additional support services as barriers to the successful implementation of inclusive programs and indicated that these were factors beyond their control.

Conclusions

No research pertaining to administrative perceptions of classroom or program adaptations for children with moderate and severe disabilities was found with which to compare study results. The desirability scale findings in the present study, however, indicated a considerable degree of agreement with the panel of content specialists who initially reviewed the adaptation items for this study, best practices recommended in the literature, and related research.

Similarly, feasibility scale data also revealed consistencies with the literature regarding the practicality of implementing adaptations.

The first ten survey items comprised the Organization subscale. These items addressed the adaptation of traditional staff responsibilities and school organization. Ayres and Meyer (1992) present "partnerships" as an appropriate organizational term for a variety of collaborative or cooperative efforts needed for inclusive programs to succeed. Many of the adaptations suggested in the literature involve school staff working in partnerships to enhance student achievement and success. Although adaptations involving staff partnerships (e.g. staff working together) were not ranked in the top quartile of those most desired, they were nevertheless highly desired by responding principals in this study.

Responding elementary principals in Tennessee did view cooperative planning and teaching relationships among staff as desirable when implementing inclusive programs at the elementary level. This is consistent with numerous professional works which also advocate such collaborative activity as necessary or, at least, desirable (Kober, 1992; Nickels, 1993; Partin, 1994; Tompkins, 1992; Wolak, York, and Corbin, 1992).

Three organization adaptations deal with where or when instructional or other activities take place. These are (1) Providing Instruction Outside the Regular Classroom, (2)

Providing Instruction During the Summer, and (3) Teachers Attending Meetings in Other Buildings. Although the means for desirability were still quite high (5.14 to 5.72), they fell into the bottom quartile in both scales (desirability and feasibility). Requiring or allowing teachers to leave their classrooms and the provision of summer instruction appear to be among the least desirable and practical adaptations presented in the survey.

The two adaptations ranking lowest on either scale were Providing Instruction Outside the Regular Classroom and Providing Instruction During the Summer. Although a statistically significant difference between desirability and feasibility was shown for these two items, the feasibility mean of 3.73 (lowest of all response means for this study) is still very near the Likert scale mid-point suggesting that principals did not view even the least feasible adaptations as impossible to implement. Organizational adaptations were among the most desirable of all adaptations. One in ten responding principals making additional comments on the survey form called for additional planning time for teachers.

It would appear, however, that simply having a planning and partnership opportunity is not enough to generate large-scale support for inclusion. Difficulties in implementing inclusion programs on the secondary level for example, where planning time is common and more partnership opportunity exists, have led authors and researchers to commonly recommend

elementary level programs as having the greatest likelihood of 'success'. Among the most frequently noted advantages is the perceived ability of elementary teachers to adapt the curriculum. The development of curriculum goals such as classroom participation and self-help skills (Nickels, 1993); a functional curriculum (Wheeler, 1991); coordination of curriculum among disciplines (Pettibone, 1990); and the development of alternate educational objectives (Giangreco, Dennis, Cloninger, Edelman, and Schattman, 1993) are curriculum adaptations which appear frequently in the literature.

The curriculum subscale, however, was viewed as the least desirable and least feasible among the four subscales. Six items were ranked 29th or lower for desirability and seven items were ranked 27th or lower for feasibility. On the desirability scale, only one curriculum adaptation appeared in the top 20.

Individualization of the curriculum (product) was the basis for seven of the ten subscale items. The other three items addressed curriculum development (process). A ranking among curriculum adaptations by means did not clearly separate product from process in terms of either desirability or feasibility. Even with a statistically significant difference between desirability and feasibility, an average mean feasibility response of 4.08 seems to indicate that responding principals do exhibit a degree of confidence regarding the

practicality of adapting the curriculum; both process and product. As noted previously, respondent comments focused on difficulties that are or may be encountered in inclusion classrooms, most of which centered on organizational and administrative concerns. Only one of the 82 principals commenting alluded to the curriculum by questioning the potential for total individualization. A possible explanation is that principals feel that curriculum adaptations, as well as other adaptations, may be practical to implement only if organizational and administrative issues such as funding and pupil/teacher ratios are addressed first.

It was suggested earlier that professional authors and researchers, by recommending the elementary level as most appropriate for inclusion, may be assuming a degree of flexibility, particularly in the area of curriculum adaptation, which is questioned by the responding elementary principals in this study. Concerns surrounding a state mandated curriculum and standardized proficiency testing (Childs, 1981; Conn, 1992; Giangreco, 1992; Schaffner and Buswell, 1991; Staff, 1993; Stainback and Stainback, 1992) and concerns about a 'value added' professional evaluation system in Tennessee are potential contributors to the significant difference in perceived desirability and feasibility.

Wright, Leonard, Robinson, Turner, and Thomas (1993) among other authors indicate a clear need to adapt instructional materials for students with disabilities in

regular classrooms. Responses in the current study indicate agreement. The average mean response of 6.36 for desirability and 5.06 for feasibility indicates that responding principals in this study viewed the adaptation of instructional materials as both a desirable practice and practical to implement. There is evidence in related research, however, that this view may not be shared by teachers.

Schuum and Vaughn (1991), even when not differentiating between mildly and moderately and severely disabled students on their questionnaire, stated that "teachers identif(ied) adaptations in materials...as neither desirable nor feasible when teaching special learners" (p. 22). Identified as the least desirable and least feasible in the Schuum and Vaughn study were adaptations of regular materials and the use of alternative materials. Childs (1981) found that, in practice, only 39.5% of teachers used textbooks for disabled learners different from that used with average students. The strong responses of responding principals in this study, in contrast to the concerns of teachers in the Schuum and Vaughn study, suggests that principals may exhibit a more positive outlook toward these adaptations than teachers. Sherwood (1991) noted that principals overestimated teachers' confidence in their instructional and management skills and in the availability of time for implementing an inclusive program. This potential difference between principal and teacher views finds other support in the literature (Center and Ward, 1987; Farley,

1992; Riedel, 1991; Ruf, 1990) and the results of the current study may be a further indication that principals have a greater confidence in teachers' abilities to adapt to changes than do the teachers themselves.

The views of responding principals regarding the adaptation of instructional methodology are consistent with their views of other categories of adaptations. The strong overall response indicates that principals view the adaptation of instructional methods as desirable and, at least, somewhat practical to implement.

The responses to adaptation items such as the use of heterogeneous learning teams and cooperative learning strategies finds considerable support in the literature (Brandt, 1988; Crosby & Owens, 1993; Ferguson and Jeanchild, 1992; Giangreco, Dennis, Cloninger, Edelman, & Schattman, 1993; Slavin, 1987). Again, even the least desirable and feasible adaptations in this study showed strong positive responses indicating that responding principals view them as both desirable and practical even though the extent of practicality was significantly less than desirability.

Although the range of responses for the feasibility of methods adaptations was narrow, there is a noteworthy difference in the types of adaptations at each end of the continuum. Most feasible were the pairing of students for non-academic activities and structuring instruction to promote social interaction. Both of these adaptations may be

perceived as passive. That is, they require very little teacher time beyond that needed to assign a student to a particular group. The adaptations viewed as least feasible included holding individual student conferences each grading period and completing a written assessment of social skills. These adaptations may be perceived as active and as requiring additional teacher time and effort. Comments by responding principals on survey forms identify the lack of "time" available to meet additional responsibilities as a strong concern which may account for the identification of the more time consuming adaptations as less feasible. These findings are consistent with similar findings (Schumm and Vaughn, 1991) which revealed that teachers perceived adaptations as less feasible when the individualization of planning, instruction, and instructional environment is required.

Analysis of data by subgroups produced little evidence that demographic differences affected respondent perceptions. Although two of the eight subgroupings did display statistically significant differences in portions of the data, interpretation is difficult. Responses for desirability by amount of formal college coursework in special education indicated that responding principals having no formal coursework view the adaptation of instructional methods as more desirable than do principals with introductory coursework only. Since the variance in training is widest between respondents having no coursework and those with professional

certification, it is difficult to explain why principals with only introductory special education coursework would view instructional methods adaptations as significantly less desirable than principals with no such training. Even though the responses of these two subgroups differed for the methods subscale, no significant difference was detected for the entire desirability scale based on amount of formal coursework.

The second demographic category revealing subgroup differences (also on the desirability scale) was age. Like the formal coursework category, subgroups having the greatest trait variance were not those found to be significantly different. While younger respondents (<41) viewed the adaptation of instructional materials as less desirable than both older groups, the significant differences for the desirability scale as a whole are attributed to differences between the youngest subgroup (<41) and the middle subgroup (41-50). Younger principals viewed adaptations as less desirable. Since the inclusion movement has produced a considerable amount of dialogue about implementation, younger principals (with, perhaps, more recent training) might have been expected to view adaptations in a more positive light than older principals and further investigation is certainly indicated. No significant differences were revealed for any demographic categories for the feasibility scale.

As with each subscale, the comparison of responses for

desirability and feasibility of adaptations as a whole revealed a significant difference in responses. Also, as with each subscale, the strength of responses indicates that although there is a difference in perceived desirability and feasibility, adaptations are not actually viewed as impractical to implement. With more than half of responding principals having special (CDC) classes in their current assignment it is clear that wide spread implementation of inclusion on the elementary level is not a current reality. If adaptations are viewed as, at least, somewhat practical as well as desirable, why are special (CDC) classes so common in Tennessee public schools? As indicated previously, the written comments of respondents may indicate possible answers.

Based on respondent written comments, the most frequently identified needs for successful inclusion programs were additional instructional time, more and better training, additional funding, additional support services, and a lower pupil:teacher ratio. These comments, along with the strong responses for both desirability and feasibility on the current study, suggest that principals may view a lack of resources (rather than the adaptations themselves) as major barriers to the successful implementation of inclusive programs which they feel powerless to overcome at the building level. The results of this study indicate that elementary principals in Tennessee believe it is desirable to adapt regular classrooms and that they do not believe it impractical to do so. It is obvious,

however, that principals are not as comfortable with the practicality of implementation as they are with its level of appropriateness. Written comments by responding principals indicated that the reason for their discomfort was a lack of funding which is then tied to the level of support services, lower pupil:teacher ratios, and a host of other revenue related concerns.

If advocacy groups continue to successfully lobby state and local government and exercise their judicial rights, public education should realistically expect further movement toward inclusive educational environments. The Governors cabinet, state legislative bodies, and state agencies responsible for much of the policy development work, should be aware of the implications. The responding principals in this study were indicating that the additional student individualization and teacher cooperation needed to successfully implement inclusive programs can be practical only if additional funds are made available with which to implement the desired adaptations.

Recommendations

The questions investigated in this study focused on the perceptions of elementary principals at a time when the call for greater decision making autonomy at the building level is gaining increased support (Giangreco, 1992; Sage & Burrello, 1994; Tranter, 1992). Assuming that principals with authority

and resources at their command would proceed with desirable adaptations, the results of this study indicate that principals do not believe they have the authority to restructure for inclusion without outside help. The study was intended to produce evidence about the desirability and feasibility of adaptations to regular classrooms and programs from the perspective of those who are most responsible for implementing and supervising the operations of such programs (i.e. elementary school principals). Since attitudes appear to be so critical (McDonnell, 1987; Sage and Burrello, 1994;), the perceptions of elementary principals revealed in this study should provide assistance to officials in both policy and program development for inclusion.

Among the 82 responding principals providing additional written comments, six reported current and successful inclusion programs in their schools. Additional research is recommended regarding the identification of inclusion programs currently in operation and their financial, administrative, and instructional characteristics. By investigating the similarities and differences among active inclusion programs it may be possible to further isolate those factors which contribute to their success or failure. One such factor which may provide insight into why some schools are proceeding with inclusive programs while others are not is the leadership style of the principal. Principal perception of professional autonomy within current funding, administrative, or regulatory

structures may also be a complicating factor in the interpretation of responses in this study. Investigation into the views of principals as to their level of comfort in disbanding a special education (CDC) class and creating an inclusive school with no additional resources is recommended.

Based on the premise that there is a movement within public education toward greater inclusion, this study sought to identify the extent to which adaptations were perceived as desirable and feasible for use in inclusive programs. It did not, however, address questions of educational or social appropriateness. Such questions are part of broader cultural debate. Additional research is recommended regarding administrative attitudes toward both the educational and social appropriateness of inclusive programming since philosophical differences are likely to produce barriers as great as professional differences.

A final and related issue concerns the sources of public revenue to support education. To what extent do principals and other local stakeholders look to state government, as opposed to local funding bodies, to provide the resources perceived as necessary? An extension of this question addresses the extent to which principals may be using the resources issue to avoid assuming a leadership role in producing educational change. Investigation into the perceptions of all stakeholder groups is recommended.

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APPENDIX A

The Dollywood Foundation

Board of Directors

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Jerry R. Herman
Executive Director

September 20, 1993

Dear Colleague,

I am in the process of preparing a survey questionnaire for an upcoming research project. The research will deal with adapting regular elementary classrooms for disabled students who have typically been receiving the majority of their public education in separate special education (CDC) classrooms.

I will be investigating the "Desirability and feasibility" of a variety of adaptations. In order to accurately depict the full range of adaptations which might reasonably be called for in an "inclusive" program I am respectfully asking that you review the adaptations listed below and indicate:

"C" = The adaptation would "CERTAINLY" be recommended

"P" = The adaptation would "PROBABLY" be recommended

"U" = "UNSURE" if the adaptation would ever be recommended

"R" = The adaptation would probably "NEVER OR RARELY" be recommended

Redundancy is beneficial during this phase of instrument development and you can expect to find several overlapping items. I have provided additional space so that you can write in adaptations you feel appropriate. Please edit or rewrite any items you feel necessary.

As someone interested in education, your input is very important to the design of this survey instrument and I am personally very grateful for your help.

Thank You,

Jerry R. Herman
ETSU, ELPA COHORT II

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ADAPTATIONS TO REGULAR ELEMENTARY CLASSROOMS
FOR INCLUSION OF DISABLED STUDENTS
TYPICALLY SERVED IN SPECIAL CLASSROOMS

NOTE: "A teacher" = a regular elementary classroom teacher
"Specialist" = a special education teacher, or other professional with specialized certification.
"Disabled Student" = a student who might typically be assigned to a special (CDC) class program due to the seriousness of learning problems they exhibit.
"Nondisabled Student" = a student placed randomly in a grade/classroom who is not identified as eligible for special education services.

DELIVERY SYSTEM ITEMS

C P U R A teacher and specialist(s) plan together on at least a weekly basis.

C P U R Parents/family are included in the planning process.

C P U R Building schedules provide duty-free planning time for all staff who serve disabled students in regular classrooms.

C P U R The principal establishes department or grade-level planning teams.

C P U R The building principal is a member of the planning team.

C P U R Planning is individualized according to assessed student needs.

C P U R Teachers share responsibilities for a disabled student.

C P U R A teacher is provided release-time to visit the home of a disabled student.

C P U R Instruction is provided for a disabled student during the summer.

C P U R Parents are asked to evaluate the overall performance of the staff.

C P U R A teacher attends a workshop to learn how to design alternative instructional materials.

C P U R A teacher provides instruction for a disabled student in a variety of alternative settings (e.g. Wal-Mart).

C P U R A teacher team-teaches with specialists.

C P U R The building principal regularly attends team meetings.

C P U R A teacher supervises an instructional assistant.

C P U R A teacher provides instruction outside the regular classroom.

C P U R A teacher attends a meeting in another building when a disabled student is transferring in or out of the classroom.

C P U R The parents of a disabled student assist in the formal evaluation of student performance for their child.

C P U R A teacher telephones the parents of a disabled student at least three times each school year.

C P U R Classroom teachers attend all M-team meetings on disabled students.

C P U R An instructional assistant carries out teacher planned activities in the classroom while the teacher is providing instruction for a disabled student in another location.

C P U R A teacher uses a parent of a disabled student as a classroom volunteer.

C P U R A teacher makes specific recommendations to other staff regarding curriculum or instructional changes which may be helpful for a disabled student.

C P U R Members of the community assist with instruction for a disabled student on a volunteer basis in school.

C P U R A teacher shares responsibility for all students with specialists.

C P U R Members of the community assist with instruction for a disabled student on a volunteer basis off school grounds.

C P U R A teacher assistant takes a disabled students off school grounds for community based instruction.

C P U R All special class students are reassigned to regular classrooms and special class staff become a part of regular classroom teams.

C P U R

C P U R A teacher modifies the standard curriculum.

C P U R The curriculum is designed to focus only on major concepts and skips the details.

C P U R An M-Team designs the entire curriculum for a disabled student.

C P U R A teacher develops an individualized curriculum.

C P U R Grade-level objectives are eliminated for a disabled student.

C P U R Curriculum is determined on a student-by-student basis.

C P U R The curriculum is designed to promote greater socialization between disabled and nondisabled students.

C P U R The curriculum for disabled students is different than the State required curriculum for other students.

C P U R A disabled student participates in all the same curriculum areas as nondisabled students.

C P U R Non-traditional curriculum items (e.g. daily-living skills) are designed for disabled students.

C P U R Individual long and short-term goals and strategies are developed for disabled students.

C P U R Curriculum is determined by a planning team.

C P U R Lesson plans are designed for multiple instructional levels within each lesson.

C P U R A parent assists the teacher with curriculum design.

C P U R

C P U R

C P U R

C P U R

C P U R A teacher trains a teacher assistant on the proper use of a specific alternative instructional material.

C P U R A teacher tape records instructional material for a disabled student

C P U R A teacher adapts a specific instructional material for a disabled student.

C P U R A teacher provides a tape recorded text for a disabled student who does not read.

C P U R A teacher recommends and demonstrates the use of an alternative instructional material to another teacher.

C P U R The school catalogs and stores alternative instructional materials for use by the staff.

C P U R A teacher adjusts the physical arrangement of the classroom.

C P U R A teacher uses alternative materials with both disabled and nondisabled students.

C P U R A specialist conducts a workshop for the school faculty on how to design and use alternative instructional materials.

C P U R A teacher assigns nondisabled peers to tape record instructional materials for a disabled students who cannot read.

C P U R A teacher designs alternative instructional materials which are made by specialists.

C P U R A teacher shares specialized materials with other staff.

C P U R A teacher uses alternative materials with a disabled student during whole-class activities.

C P U R A teacher constructs alternative instructional materials for use with a disabled student.

C P U R A teacher catalogs and stores alternative instructional materials in the classroom.

C P U R

C P U R

C P U R A teacher uses a variety of different grading methods within the same classroom.

C P U R A teacher includes the parents of a disabled student in the evaluation process.

C P U R A teacher uses a different grading system for a disabled student.

C P U R A teacher arranges instruction to promote social interaction between disabled and regular students.

C P U R A teacher reinforces age appropriate behaviors for a disabled student.

C P U R A teacher teaches to different learning styles within each lesson.

C P U R An integrated curriculum approach is used for a disabled student.

C P U R A teacher uses cooperative learning strategies where disabled and nondisabled students are grouped together.

C P U R A disabled student works on behavioral skills while the class does a content area lesson.

C P U R A teacher uses group learning techniques where disabled students work cooperatively with team members.

C P U R A teacher addresses multiple instructional levels within each lesson.

C P U R A teacher provides individual instruction for a disabled student.

C P U R A disabled student is paired with nondisabled classmates for art, music, PE, lunch, and recess periods.

C P U R A teacher adapts classroom management strategies for a disabled student.

C P U R A teacher provides instruction in a community setting outside the school building.

C P U R A teacher uses peer tutors in social situations (e.g. pep rallies).

C P U R A teacher designs and implements special classroom management strategies for a disabled student.

C P U R A teacher implements peer tutoring/mentoring in the classroom.

C P U R A teacher provides specific structure to teach socialization and language skills to a disabled student.

C P U R A teacher uses non-standardized means of assessing the performance of a disabled student.

C P U R A teacher keeps an anecdotal log of performance and behaviors of a disabled students to share with other staff and family.

C P U R A teacher tailors performance assessment for a disabled student to the individual student's curriculum.

C P U R A teacher completes a written assessment of social skills.

C P U R A teacher omits paper and pencil testing for a disabled student.

C P U R A teacher gives an "A" grade to a disabled student who masters their individual curriculum even though they have not mastered the regular classroom curriculum/objectives.

C P U R A teacher holds an individual student conference with a disabled student each grading period.

C P U R A teacher provides information to the class about a disabled student before the student enters the classroom.

C P U R A teacher gets to know disabled students on a personal basis.

C P U R Individualized instruction for a disabled student is provided by an instructional assistant.

C P U R

C P U R

C P U R

C P U R

APPENDIX B

The Dollywood Foundation

May 11, 1994

Dear Principal,

I am a member of the ETSU/ELPA COHORT II group and I am respectfully requesting your help with the enclosed pilot survey on the inclusion of disabled students in regular classrooms. I am a former Special Education Supervisor in Sevier County and am currently working with Dolly Parton to further the success of children in public schools in Sevier County and Tennessee. The purpose of the study is to identify the perceptions of ELEMENTARY principals in Tennessee regarding "inclusion". Individual responses will not be reported in any way.

This pilot survey will take only a few minutes to complete. Naturally, your participation is voluntary and all responses will be strictly confidential. By completing the survey, you will be expressing your willingness to participate in the pilot and a report of findings will be available to you upon request.

Because of your involvement with COHORT III I know you appreciate my concern regarding a speedy and high return rate and I truly appreciate your help. I am also available to assist with your research if needed. I have included a second survey form and am asking that you pass it along to an assistant principal with whom you work.

With Gratitude,

Jerry R. Herman
COHORT II
ETSU Doctoral Candidate

cc: Dr Russell West, Doctoral Committee Chairman

1020 Dollywood Lane • Pigeon Forge, TN • 37863-4101 • (615)428-9606 • FAX (615)428-9612

ELEMENTARY PRINCIPAL INCLUSION QUESTIONNAIRE (EPIQ)

DIRECTIONS: Please rate each of the adaptations listed below (1=low; 7=high) on the basis of how desirable and how feasible you feel it would be to adapt regular elementary classrooms for the inclusion of moderately or severely disabled students.

DESIRABILITY: is the extent to which it would be desirable to implement such an adaptation in regular elementary classrooms.

FEASIBILITY: is the extent to which you feel it would be practical to implement the adaptation in regular elementary classrooms.

SCENARIO: Assume that students from a self-contained elementary special education (CDC) classroom ARE BEING CONSIDERED FOR placement in regular classrooms in your school.

	ADAPTATION	DESIRABILITY Low---------High	FEASIBILITY Low---------High
1.	A teacher and specialist(s) plan together on a weekly basis.	1 2 3 4 5 6 7	1 2 3 4 5 6 7
2.	Parents/family are included in the planning process.	1 2 3 4 5 6 7	1 2 3 4 5 6 7
3.	Building schedules provide duty-free planning time for all staff who serve disabled students in regular classrooms.	1 2 3 4 5 6 7	1 2 3 4 5 6 7
4.	The principal establishes department or grade-level planning teams.	1 2 3 4 5 6 7	1 2 3 4 5 6 7
5.	The building principal is a member of the planning team.	1 2 3 4 5 6 7	1 2 3 4 5 6 7
6.	Planning is individualized according to assessed student needs.	1 2 3 4 5 6 7	1 2 3 4 5 6 7
7.	Teachers share responsibilities for a disabled student.	1 2 3 4 5 6 7	1 2 3 4 5 6 7
8.	A teacher is provided release-time to visit the home of a disabled student.	1 2 3 4 5 6 7	1 2 3 4 5 6 7
9.	Instruction is provided for a disabled student during the summer.	1 2 3 4 5 6 7	1 2 3 4 5 6 7
10.	Parents are asked to evaluate the overall performance of the staff.	1 2 3 4 5 6 7	1 2 3 4 5 6 7
11.	A teacher attends a workshop to learn how to design alternative instructional materials.	1 2 3 4 5 6 7	1 2 3 4 5 6 7
12.	A teacher provides instruction for a disabled student in a variety of alternative instructional materials.	1 2 3 4 5 6 7	1 2 3 4 5 6 7

ADAPTATION	DESIRABILITY Low---------High	FEASIBILITY Low---------High
13. A teacher team-teaches with specialists.	1 2 3 4 5 6 7	1 2 3 4 5 6 7
14. The building principal regularly attends team meetings.	1 2 3 4 5 6 7	1 2 3 4 5 6 7
15. A teacher supervises an instructional assistant.	1 2 3 4 5 6 7	1 2 3 4 5 6 7
16. A teacher provides instruction outside the regular classroom.	1 2 3 4 5 6 7	1 2 3 4 5 6 7
17. A teacher attends a meeting in another building when a disabled student is transferring in or out of the classroom.	1 2 3 4 5 6 7	1 2 3 4 5 6 7
18. The parents of a disabled student assist in the formal evaluation of student performance for their child.	1 2 3 4 5 6 7	1 2 3 4 5 6 7
19. A teacher telephones the parents of a disabled student at least three times each school year.	1 2 3 4 5 6 7	1 2 3 4 5 6 7
20. Classroom teachers attend all M-team meetings on disabled students.	1 2 3 4 5 6 7	1 2 3 4 5 6 7
21. An instructional assistant carries out teacher planned activities in the classroom while the teacher is providing instruction for a disabled student in another location.	1 2 3 4 5 6 7	1 2 3 4 5 6 7
22. A teacher uses a parent of a disabled student as a volunteer.	1 2 3 4 5 6 7	1 2 3 4 5 6 7
23. A teacher makes specific recommendations to other staff regarding curriculum or instructional changes which may be helpful for a disabled student.	1 2 3 4 5 6 7	1 2 3 4 5 6 7
24. Members of the community assist with instruction for a disabled student on a volunteer basis in school.	1 2 3 4 5 6 7	1 2 3 4 5 6 7
25. A teacher shares responsibility for all students with specialists.	1 2 3 4 5 6 7	1 2 3 4 5 6 7
26. Members of the community assist with instruction for a disabled student on a volunteer basis off school grounds.	1 2 3 4 5 6 7	1 2 3 4 5 6 7
27. A teacher assistant takes a disabled student off school grounds for community based instruction.	1 2 3 4 5 6 7	1 2 3 4 5 6 7
28. All special class students are reassigned to regular classrooms and special class staff become a part of regular classroom teams.	1 2 3 4 5 6 7	1 2 3 4 5 6 7

ADAPTATION	DESIRABILITY Low---------High	FEASIBILITY Low--------High
29. A teacher modifies the standard curriculum.	1 2 3 4 5 6 7	1 2 3 4 5 6 7
30. The curriculum is designed to focus only on major concepts and skips the details for a disabled student.	1 2 3 4 5 6 7	1 2 3 4 5 6 7
31. An M-Team designs the entire curriculum for a disabled student.	1 2 3 4 5 6 7	1 2 3 4 5 6 7
32. A teacher develops an individualized curriculum.	1 2 3 4 5 6 7	1 2 3 4 5 6 7
33. Grade-level objectives are eliminated for a disabled student.	1 2 3 4 5 6 7	1 2 3 4 5 6 7
34. Curriculum is determined on a student-by-student basis.	1 2 3 4 5 6 7	1 2 3 4 5 6 7
35. The curriculum is designed to promote greater socialization between disabled and nondisabled students.	1 2 3 4 5 6 7	1 2 3 4 5 6 7
36. The curriculum for disabled students is different than the State required curriculum for other students.	1 2 3 4 5 6 7	1 2 3 4 5 6 7
37. A disabled student participates in all the same curriculum areas as nondisabled students.	1 2 3 4 5 6 7	1 2 3 4 5 6 7
38. Non-traditional curriculum items (e.g. daily-living skills) are designed for disabled students.	1 2 3 4 5 6 7	1 2 3 4 5 6 7
39. Individual long and short-term goals and strategies are developed for disabled students.	1 2 3 4 5 6 7	1 2 3 4 5 6 7
40. Curriculum is determined by a planning team.	1 2 3 4 5 6 7	1 2 3 4 5 6 7
41. Lesson plans are designed for multiple instructional levels within each lesson.	1 2 3 4 5 6 7	1 2 3 4 5 6 7
42. A parent assists the teacher with curriculum design.	1 2 3 4 5 6 7	1 2 3 4 5 6 7
43. A teacher trains a teacher assistant on the proper use of a specific alternative instructional material.	1 2 3 4 5 6 7	1 2 3 4 5 6 7
44. A teacher tape records instructional material for a disabled student.	1 2 3 4 5 6 7	1 2 3 4 5 6 7
45. A teacher adapts a specific instructional material for a disabled student.	1 2 3 4 5 6 7	1 2 3 4 5 6 7

ADAPTATION	DESIRABILITY Low---------High	FEASIBILITY Low--------High
46. A teacher provides a tape recorded text for a disabled student who does not read.	1 2 3 4 5 6 7	1 2 3 4 5 6 7
47. A teacher recommends and demonstrates the use of an alternative instructional material to another teacher.	1 2 3 4 5 6 7	1 2 3 4 5 6 7
48. The school catalogs and stores alternative instructional materials for use by the staff.	1 2 3 4 5 6 7	1 2 3 4 5 6 7
49. A teacher adjusts the physical arrangement of the classroom.	1 2 3 4 5 6 7	1 2 3 4 5 6 7
50. A teacher uses alternative materials with both disabled and nondisabled students.	1 2 3 4 5 6 7	1 2 3 4 5 6 7
51. A specialist conducts a workshop for the school faculty on how to design and use alternative instructional materials.	1 2 3 4 5 6 7	1 2 3 4 5 6 7
52. A teacher assigns nondisabled peers to tape record instructional materials for a disabled student who cannot read.	1 2 3 4 5 6 7	1 2 3 4 5 6 7
53. A teacher designs alternative instructional materials which are made by specialists.	1 2 3 4 5 6 7	1 2 3 4 5 6 7
54. A teacher shares specialized materials with other staff.	1 2 3 4 5 6 7	1 2 3 4 5 6 7
55. A teacher uses alternative materials with a disabled student during whole-class activities.	1 2 3 4 5 6 7	1 2 3 4 5 6 7
56. A teacher constructs alternative instructional materials for use with a disabled student.	1 2 3 4 5 6 7	1 2 3 4 5 6 7
57. A teacher catalogs and stores alternative instructional materials in the classroom.	1 2 3 4 5 6 7	1 2 3 4 5 6 7
58. A teacher uses a variety of different grading methods within the same classroom.	1 2 3 4 5 6 7	1 2 3 4 5 6 7
59. A teacher includes the parent of a disabled student in the evaluation process.	1 2 3 4 5 6 7	1 2 3 4 5 6 7
60. A teacher uses a different grading system for a disabled student.	1 2 3 4 5 6 7	1 2 3 4 5 6 7
61. A teacher arranges instruction to promote social interaction between disabled and regular students.	1 2 3 4 5 6 7	1 2 3 4 5 6 7

ADAPTATION	DESIRABILITY Low---------High	FEASIBILITY Low---------High
62. A teacher reinforces age appropriate behaviors for a disabled student.	1 2 3 4 5 6 7	1 2 3 4 5 6 7
63. A teacher teaches to different learning styles within each lesson.	1 2 3 4 5 6 7	1 2 3 4 5 6 7
64. An integrated curriculum approach is used for a disabled student.	1 2 3 4 5 6 7	1 2 3 4 5 6 7
65. A teacher uses cooperative learning strategies where disabled and nondisabled students are grouped together.	1 2 3 4 5 6 7	1 2 3 4 5 6 7
66. A disabled student works on behavioral skills while the class does a content area lesson.	1 2 3 4 5 6 7	1 2 3 4 5 6 7
67. A teacher uses group learning techniques where disabled students work cooperatively with team members.	1 2 3 4 5 6 7	1 2 3 4 5 6 7
68. A teacher addresses multiple instructional levels within each lesson.	1 2 3 4 5 6 7	1 2 3 4 5 6 7
69. A teacher provides individual instruction for a disabled student.	1 2 3 4 5 6 7	1 2 3 4 5 6 7
70. A disabled student is paired with nondisabled classmates for art, music, PE, lunch, and recess periods.	1 2 3 4 5 6 7	1 2 3 4 5 6 7
71. A teacher adapts classroom management strategies for a disabled student.	1 2 3 4 5 6 7	1 2 3 4 5 6 7
72. A teacher provides instruction in a community setting outside the school building.	1 2 3 4 5 6 7	1 2 3 4 5 6 7
73. A teacher uses peer tutors in social situations (e.g. pep rallies).	1 2 3 4 5 6 7	1 2 3 4 5 6 7
74. A teacher designs and implements special classroom management strategies for a disabled student.	1 2 3 4 5 6 7	1 2 3 4 5 6 7
75. A teacher implements peer tutoring/ mentoring in the classroom.	1 2 3 4 5 6 7	1 2 3 4 5 6 7
76. A teacher provides specific structure to teach socialization and language skills to a disabled student.	1 2 3 4 5 6 7	1 2 3 4 5 6 7
77. A teacher uses non-standardized means of assessing the performance of a disabled student.	1 2 3 4 5 6 7	1 2 3 4 5 6 7
78. A teacher keeps an anecdotal log of performance and behaviors of a disabled student to share with other staff and family.	1 2 3 4 5 6 7	1 2 3 4 5 6 7

ADAPTATION	DESIRABILITY Low---------High	FEASIBILITY Low---------High
79. A teacher tailors performance assessment for a disabled student to the individual student's curriculum.	1 2 3 4 5 6 7	1 2 3 4 5 6 7
80. A teacher completes a written assessment of social skills.	1 2 3 4 5 6 7	1 2 3 4 5 6 7
81. A teacher omits paper and pencil testing for a disabled student.	1 2 3 4 5 6 7	1 2 3 4 5 6 7
82. A teacher gives an "A" grade to a disabled student who masters their individual curriculum even though they have not mastered the regular classroom curriculum/objectives.	1 2 3 4 5 6 7	1 2 3 4 5 6 7
83. A teacher holds an individual student conference with a disabled student each grading period.	1 2 3 4 5 6 7	1 2 3 4 5 6 7
84. A teacher provides information to the class about a disabled student before the student enters the classroom.	1 2 3 4 5 6 7	1 2 3 4 5 6 7
85. A teacher gets to know disabled students on a personal basis.	1 2 3 4 5 6 7	1 2 3 4 5 6 7
86. Individualized instruction for a disabled student is provided by an instructional assistant.	1 2 3 4 5 6 7	1 2 3 4 5 6 7

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Please provide any comments or suggestions which you would like to become a part of the study:

COMMENTS:_____

Providing the following information will greatly assist in the interpretation of your responses:

(Please CIRCLE THE NUMBER of your answer)

87 Your sex:
1 Male
2 Female

88 Your present age:
1 Under 30
2 30-40
3 41-50
4 51-60
5 61 or over

89 Your years of experience as an elementary principal:
1 0-5
2 6-10
3 11-15
4 16-20
5 21 or more

90 Have you had formal/college coursework in special education?
1 Yes - introductory only
2 Yes - more than introductory coursework but not certified
3 Yes - with professional certification
4 No

91 Do you have special education teaching experience with moderately and/or severely disabled students?
1 Yes
2 No

92 Do you have teaching experience in an inclusive regular elementary classroom program which included moderately and/or severely disabled students?
1 Yes
2 No

93 Have you ever supervised a "special (CDC) class" as a building principal?
1 Yes
2 No

94 Do you currently have a "special (CDC) class" program in your building?
1 Yes
2 No

APPENDIX C

The Dollywood Foundation

August 15, 1994

To The Elementary Principal:

In recent years, two developments have placed you, the elementary principal, in the center of a continuing national and state controversy: the increased responsibilities of the principalship and the introduction of moderately and severely disabled learners into regular classrooms. Given recent legislative and judicial actions, if the issue of the "inclusion" of disabled learners into regular programs has not directly affected you in your current position it will likely do so within your professional career.

You are one of a small number of elementary principals who are being asked to give their opinion about the adaptation of regular classroom practices in Tennessee to support inclusive programs for moderately and severely disabled students. You have been identified in a random sampling of the entire state. In order to establish a reliable picture of how today's elementary principals view these adaptations, it is important that each questionnaire be completed and returned by **SEPTEMBER 1, 1994.**

You may be assured of complete confidentiality in your response. Each questionnaire has been numbered for mailing purposes so that I may check the master list when it is returned. Your name will never be used in connection with your responses.

As a doctoral student at East Tennessee State University and as Executive Director of The Dollywood Foundation I am asking for your help. Survey results will be provided to the State Department of Education and to all others interested in the issues surrounding the educational inclusion of disabled students. You may receive a summary of results by writing "copy of results requested" on the return envelope along with your name and address. Please do not put this information on the questionnaire itself.

I would be happy to answer any questions you may have. Please write or call at your convenience.

I am personally very grateful for your assistance.

Sincerely,

Jerry R. Herman
Executive Director

1020 Dollywood Lane • Pigeon Forge, TN • 37863-4101 • (615)428-9606 • FAX (615)428-9612

The Dollywood Foundation

September 14, 1994

Mr _____, Principal
White House Elementary
200 Elementary Drive
_____, TN 37188

Dear Mr _____;

The enclosed second round survey is being sent along with my personal request for your help. Having worked for fifteen years in public schools, ten in administration, I understand the pressure of time you face each day. I am respectfully asking that you grant me just ten minutes to share your views on the topic of inclusion. The success of my dissertation research depends on your willingness to help and, as you might imagine, I am very anxious to complete my program.

You may be assured of complete confidentiality in your response. Each questionnaire has been numbered for mailing purposes so that I may check the master list when it is returned. Your name will never be used in connection with your responses.

You may receive a summary of results by writing "copy of results requested" on the return envelope along with your name and address. Please do not put this information on the questionnaire itself.

I would be happy to answer any questions you may have. Please write or call at your convenience.

I am personally very grateful for your help.

Sincerely,

Jerry R. Herman
Executive Director

1020 Dollywood Lane • Pigeon Forge, TN • 37863-4101 • (615)428-9606 • FAX (615)428-9612

The Dollywood Foundation

October 26, 1994

Ms _____, Principal
(or current Principal)
Whites Elementary
Route 5
_____, TN 38372

Dear Ms _____:

This third and final round survey questionnaire is being sent to you in hopes that you can assist me with my doctoral dissertation research at East Tennessee State University. Your opinions are very important to the success of my study and if you can spare a few minutes to respond I would personally be very greatful.

Sincerely,

Jerry R. Herman
COHORT II
ETSU Doctoral Candidate

1020 Dollywood Lane • Pigeon Forge, TN • 37863-4101 • (615)428-9606 • FAX (615)428-9612

Elementary Principal Inclusion Questionnaire (EPIQ)

DIRECTIONS:

Please rate each of the adaptations listed (1 = low; 7 = high)
on the basis of how desirable and how feasible you feel it would be to adapt regular elementary classrooms for the inclusion of moderately or severely disabled students.
"Teacher" unless otherwise specified means a regular classroom teacher.

DESIRABILITY:

is the extent to which it would be desirable to implement such an adaptation in regular elementary classrooms.

FEASIBILITY:

is the extent to which you feel it would be practical to implement the adaptation in regular elementary classrooms.

SCENARIO:

Assume that students from a self-contained elementary special education (CDC) classroom are being considered for placement in regular classrooms in your school.

ADAPTATION	DESIRABILITY Low —— High	FEASIBILITY Low —— High
1. The building principal is a member of the planning team.	1 2 3 4 5 6 7	1 2 3 4 5 6 7
2. Teachers share responsibilities for a disabled student.	1 2 3 4 5 6 7	1 2 3 4 5 6 7
3. Instruction is provided for a disabled student during the summer.	1 2 3 4 5 6 7	1 2 3 4 5 6 7
4. The building principal regularly attends team meetings.	1 2 3 4 5 6 7	1 2 3 4 5 6 7
5. A teacher provides instruction outside the regular classroom.	1 2 3 4 5 6 7	1 2 3 4 5 6 7
6. A teacher attends a meeting in another building when a disabled student is transferring in or out of the classroom.	1 2 3 4 5 6 7	1 2 3 4 5 6 7
7. Classroom teachers attend all M-team meetings on disabled students.	1 2 3 4 5 6 7	1 2 3 4 5 6 7
8. A teacher makes specific recommendations to other staff regarding curriculum or instructional changes which may be helpful for a disabled student.	1 2 3 4 5 6 7	1 2 3 4 5 6 7
9. A teacher shares responsibility for all students with specialists.	1 2 3 4 5 6 7	1 2 3 4 5 6 7
10. Building schedules provide duty-free planning time for all staff who serve disabled students in regular classrooms.	1 2 3 4 5 6 7	1 2 3 4 5 6 7
11. The curriculum is designed to focus only on major concepts and skips the details for a disabled student.	1 2 3 4 5 6 7	1 2 3 4 5 6 7
12. A teacher develops an individualized curriculum.	1 2 3 4 5 6 7	1 2 3 4 5 6 7
13. Grade-level objectives are eliminated for a disabled student.	1 2 3 4 5 6 7	1 2 3 4 5 6 7
14. Curriculum is determined on a student-by-student basis.	1 2 3 4 5 6 7	1 2 3 4 5 6 7
15. The curriculum for disabled students is different than the State required curriculum for other students.	1 2 3 4 5 6 7	1 2 3 4 5 6 7
16. Non-traditional curriculum items (e.g. daily-living skills) are designed for disabled students.	1 2 3 4 5 6 7	1 2 3 4 5 6 7
17. Curriculum is determined by a planning team.	1 2 3 4 5 6 7	1 2 3 4 5 6 7
18. Lesson plans are designed for multiple instructional levels within each lesson.	1 2 3 4 5 6 7	1 2 3 4 5 6 7
19. A parent assists the teacher with curriculum design.	1 2 3 4 5 6 7	1 2 3 4 5 6 7
20. An integrated curriculum approach is used for a disabled student.	1 2 3 4 5 6 7	1 2 3 4 5 6 7
21. A teacher provides instruction for a disabled student in a variety of alternative instructional materials.	1 2 3 4 5 6 7	1 2 3 4 5 6 7
22. A teacher adapts a specific instructional material for a disabled student.	1 2 3 4 5 6 7	1 2 3 4 5 6 7
23. A teacher recommends and demonstrates the use of an alternative instructional material to another teacher.	1 2 3 4 5 6 7	1 2 3 4 5 6 7
24. The school catalogs and stores alternative instructional materials for use by the staff.	1 2 3 4 5 6 7	1 2 3 4 5 6 7
25. A teacher uses alternative materials with both disabled and non-disabled students.	1 2 3 4 5 6 7	1 2 3 4 5 6 7

ADAPTATION	DESIRABILITY Low —— High	FEASIBILITY Low —— High
26. A specialist conducts a workshop for the school faculty on how to design and use alternative instructional materials.	1 2 3 4 5 6 7	1 2 3 4 5 6 7
27. A teacher designs alternative instructional materials which are made by specialists.	1 2 3 4 5 6 7	1 2 3 4 5 6 7
28. A teacher shares specialized materials with other staff.	1 2 3 4 5 6 7	1 2 3 4 5 6 7
29. A teacher adjusts the physical arrangement of the classroom.	1 2 3 4 5 6 7	1 2 3 4 5 6 7
30. A teacher constructs alternative instructional materials for use with a disabled student.	1 2 3 4 5 6 7	1 2 3 4 5 6 7
31. A teacher arranges instruction to promote social interaction between disabled and regular students.	1 2 3 4 5 6 7	1 2 3 4 5 6 7
32. A teacher teaches to different learning styles within each lesson.	1 2 3 4 5 6 7	1 2 3 4 5 6 7
33. A teacher uses group learning techniques where disabled students work cooperatively with team members.	1 2 3 4 5 6 7	1 2 3 4 5 6 7
34. A disabled student is paired with non-disabled classmates for art, music, PE, lunch, and recess periods.	1 2 3 4 5 6 7	1 2 3 4 5 6 7
35. A teacher designs and implements special classroom management strategies for a disabled student.	1 2 3 4 5 6 7	1 2 3 4 5 6 7
36. A teacher provides specific structure to teach socialization and language skills to a disabled student.	1 2 3 4 5 6 7	1 2 3 4 5 6 7

ADAPTATION	DESIRABILITY Low —— High	FEASIBILITY Low —— High
37. A teacher tailors performance assessment for a disabled student to the individual student's curriculum.	1 2 3 4 5 6 7	1 2 3 4 5 6 7
38. A teacher completes a written assessment of social skills.	1 2 3 4 5 6 7	1 2 3 4 5 6 7
39. A teacher gives an 'A' grade to a disabled student who masters their individual curriculum even though they have not mastered the regular classroom curriculum/objectives.	1 2 3 4 5 6 7	1 2 3 4 5 6 7
40. A teacher holds an individual student conference with a disabled student each grading period.	1 2 3 4 5 6 7	1 2 3 4 5 6 7

Please provide any comments or suggestions which you would like to become a part of the study:

Comments: _____

Providing the following information will greatly assist in the interpretation of your responses:
(Please CIRCLE THE NUMBER of your answer)

41. Your sex:
    1. Male
    2. Female

42. Your present age:
    1. Under 30
    2. 30 - 40
    3. 41 - 50
    4. 51 - 60
    5. 61 or over

43. Your years of experience as an elementary principal:
    1. 0 -5
    2. 6 - 10
    3. 11 - 15
    4. 16 - 20
    5. 21 or more

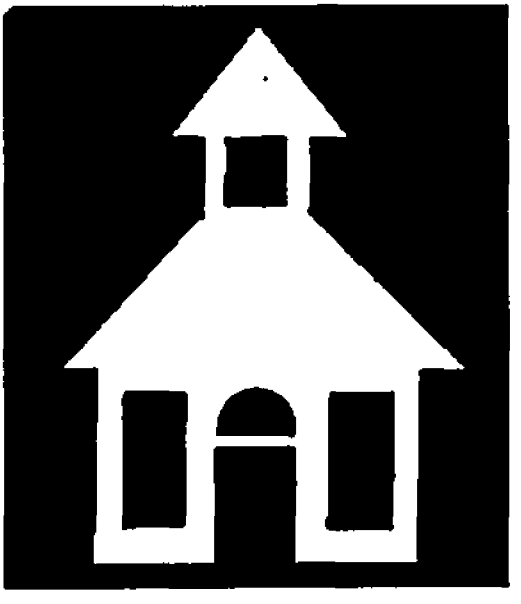
44. Have you had formal/college coursework in special education?
    1. Yes - introductory only
    2. Yes - more than introductory coursework but not certified
    3. Yes - with professional certification
    4. No

45. Do you have special education teaching experience with moderately and/or severely disabled students?
    1. Yes
    2. No

46. Do you have teaching experience in an inclusive regular elementary classroom program which included moderately and/or severely disabled students?
    1. Yes
    2. No

47. Have you ever supervised a "special (CDC) class" as a building principal?
    1. Yes
    2. No

48. Do you currently have a "special (CDC) class" program in your building?
    1. Yes
    2. No



APPENDIX D

APPENDIX D

Adaptation Desirability Rank Ordered by Means

Adaptation	N	Mean	Std Dev	Minimum	Maximum
D1	261	6.64	.80	2	7
D29	263	6.57	.85	1	7
D32	262	6.55	.89	1	7
D10	258	6.55	1.02	1	7
D25	260	6.50	.82	2	7
D26	260	6.48	1.03	1	7
D7	261	6.48	.94	1	7
D28	262	6.47	.87	1	7
D33	261	6.45	.88	1	7
D17	261	6.44	.87	1	7
D31	261	6.43	1.00	1	7
D8	259	6.42	.95	1	7
D21	259	6.37	1.05	1	7
D34	262	6.36	1.10	1	7
D4	258	6.28	1.00	2	7
D30	262	6.27	1.09	1	7
D23	255	6.25	.97	2	7
D37	262	6.24	1.09	1	7
D35	262	6.23	1.18	1	7
D22	257	6.23	1.00	1	7
D18	259	6.19	1.13	1	7
D16	257	6.18	1.24	1	7
D24	257	6.18	1.18	1	7
D36	261	6.18	1.12	1	7
D20	258	6.10	1.12	1	7
D40	262	6.07	1.37	1	7
D9	258	6.07	1.24	1	7
D2	259	6.02	1.45	1	7
D39	258	6.02	1.31	1	7
D12	261	6.01	1.39	1	7
D14	258	6.01	1.37	1	7
D38	261	5.93	1.38	1	7
D27	259	5.91	1.21	1	7
D6	247	5.72	1.67	1	7
D3	257	5.47	1.78	1	7
D5	244	5.14	1.78	1	7
D15	256	5.05	1.86	1	7
D19	256	5.05	1.69	1	7
D13	257	4.25	1.99	1	7
D11	245	3.98	1.90	1	7

APPENDIX D

Adaptation Feasibility Rank Ordered by Means

Adaptation	N	Mean	Std Dev	Minimum	Maximum
F1	252	6.00	1.23	2	7
F29	254	5.91	1.33	1	7
F34	256	5.78	1.44	1	7
F31	254	5.68	1.36	2	7
F8	248	5.66	1.30	1	7
F33	255	5.60	1.30	1	7
F39	249	5.57	1.53	1	7
F28	253	5.50	1.51	1	7
F25	251	5.49	1.32	1	7
F26	255	5.38	1.51	1	7
F32	256	5.26	1.49	1	7
F17	252	5.20	1.63	1	7
F35	254	5.11	1.51	1	7
F16	249	5.08	1.64	1	7
F37	251	5.06	1.53	1	7
F7	253	5.00	1.90	1	7
F36	253	4.98	1.53	1	7
F4	253	4.94	1.54	1	7
F20	252	4.92	1.45	1	7
F23	247	4.92	1.52	1	7
F9	248	4.90	1.62	1	7
F2	249	4.88	1.64	1	7
F30	253	4.87	1.58	1	7
F22	250	4.78	1.51	1	7
F21	252	4.77	1.62	1	7
F38	254	4.70	1.66	1	7
F40	254	4.66	1.83	1	7
F18	250	4.55	1.65	1	7
F24	251	4.45	1.69	1	7
F15	248	4.45	1.68	1	7
F13	241	4.37	1.69	1	7
F27	249	4.36	1.61	1	7
F12	245	4.33	1.80	1	7
F14	247	4.33	1.79	1	7
F10	252	4.19	2.10	1	7
F11	233	4.06	1.61	1	7
F6	244	3.99	1.87	1	7
F19	251	3.84	1.63	1	7
F3	252	3.73	1.73	1	7
F5	237	3.73	1.76	1	7

VITA

VITA

JERRY R. HERMAN

Personal Data:	Date of Birth: August 25, 1947 Place of Birth: Chicago, Illinois
Education:	Public Schools, St. Louis, Missouri Public Schools, Sesser, Illinois Southern Illinois University, Carbondale, Illinois University of Tennessee, Knoxville, Tennessee; education, B.S., 1976 University of Tennessee, Knoxville, Tennessee; educational administration, M.S., 1982
Professional Experience:	Teacher, Rock Hill Elementary; Hawkins County,Tennessee, 1976-1977 Teacher, New Center Elementary; Sevier County, Tennessee, 1977-1979 Teacher, Special Learning Center; Sevier County; Tennessee, 1979-1981 System-wide Special Education Supervisor; Sevier County, Tennessee, 1981-1992 Executive Director, The Dollywood Foundation; Pigeon Forge, Tennessee, 1992-1995
Publications:	Herman, Jerry R., "Post-Secondary Educational Opportunities for Learning Disabled Students," The Next Step. Cullowhee, North Carolina: Western Carolina University, 1991, p. 2.
Honors and Awards:	Who's Who in Tennessee Education Member, Tennessee State Commission on National and Community Service