

A DESCRIPTION OF
INSTRUCTIONAL PRACTICES
IN INCLUSIVE CLASSROOM SETTINGS

by

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(ABSTRACT)

This study was designed to describe the experiences of general education students in elementary settings where the inclusion of students with disabilities was responsibly implemented. The research question investigated was: Do general education students have a meaningful opportunity to learn when sharing classrooms with students with disabilities?

The participants in this study were assigned to two inclusion classrooms in an elementary school in northeastern North Carolina. The classrooms were observed during the months of January and February, 1999. Effective educational practices in inclusion classrooms were researched. Data were also collected and analyzed in four areas: (1) principal and teachers' definitions of inclusion, (2) principal and teachers' perceptions of how inclusion is implemented in the school, (3) effects of inclusion on teachers' instructional practices, and (4) effects of inclusion on the learning opportunities for general education students.

There were no observable effects of inclusion on the learning opportunities for general education students.

DEDICATION

To my greatest supporters throughout this endeavor

Pearlie, my wife

Guana, Derrick, and Greg, my children

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CHAPTER 1

INTRODUCTION

Inclusion is expanding rapidly in many areas. According to many sources, it has picked up dramatically. In less than a decade, most school systems have implemented some form of inclusion. It is becoming increasingly common in schools across North America. This increase is spurred by changing attitudes, court cases, and the work of inclusionists. Many experts differ on whether inclusion is the panacea that will best meet the needs of all children (Thousand & Villa, 1995; Willis, 1995). Many agree, however, that there has been an increase in the number of children with physical and mental disabilities such as autism, Down syndrome, mental retardation, blindness, and learning disabilities who are being educated with their nondisabled peers in the regular classroom. The literature that is available on the subject of inclusion suggests that the trend to place students with disabilities in the regular classrooms is a national trend and that it will not disappear anytime soon (Willis, 1995).

Despite the continuous debate, inclusion is increasingly accepted and widely practiced. Based on annual data reported by the states to the U.S. Department of Education, 44.5% of all students with disabilities (aged 6 to 21) received educational services in regular classrooms during the 1994-95 school year; the comparable figure stood at only 28.88% during the 1987-88 school year. These figures reflect the general trend toward educating students with disabilities in the regular classroom and school (Office of Special Education Programs, 1997)

Statement of the Problem

The inclusion of special needs students in the regular classroom is currently one of the most controversial topics in education. The literature suggests that advocates and critics have strong feelings for and against full inclusion for all students with disabilities. The debate on how to best deliver effective educational services to students with disabilities continues without substantial research on model efficacy (Marston, 1996). Many advocates for full inclusion are using an empirical basis of information that is limited to mildly handicapped students in an elementary environment (Patzkowsky, 1995).

Inclusion is being recognized as a term that incorporates many concepts and definitions. There are two approaches to full inclusion. The first approach argues for a full dismantling of special education and returning all students with disabilities to the regular classroom. The second

approach argues that special educators should provide services to students with disabilities, but only in the regular classrooms if they could receive classroom benefits. Advocates of inclusion believe that schools have two essential and related goals for children with disabilities: (a) to improve their social competence and acceptance, and (b) to change the attitude of teachers and students without disabilities, who someday will become parents, taxpayers, and service providers (Fuchs & Fuchs, 1994). There are many unanswered questions about the impact that special students' placement may have on the achievement outcomes of general education students in the inclusion classroom (Denning, 1995). One of these questions is whether inclusion affects the achievement of students without disabilities (Staub & Peck, 1995). Staub and Peck stated that there are three common fears associated with inclusion and its effects on nondisabled students:

1. Will inclusion reduce the academic progress of nondisabled children?
2. Will nondisabled children lose teacher time and attention?
3. Will nondisabled students learn undesirable behavior from students with disabilities?

The research that explores the impact of inclusion on children who do not have disabilities is limited in several ways. First, most studies have been carried out at the early childhood level. Relatively few studies of elementary and secondary age children have been reported. Second, the existing research has been primarily descriptive or quasi-experimental in nature (Staub & Peck, 1995). Of the many issues related to the inclusion or integration of children with disabilities into regular classrooms, few are more important than the effects of inclusion on the achievement of nondisabled students' learning (Baker, Wang, & Walberg, 1995).

Many advocates believe that inclusion is morally and ethically right for students with disabilities. This belief of what is morally right continues to fuel the inclusion movement and the controversy surrounding it. Supporters of inclusion cite the advantages for growth in social cognition and improvements in self-concept for students with disabilities (Dugger, 1994; Roach, 1993). Those who are more cautious, express concern about the impact of inclusion on academic learning (Fuchs & Fuchs, 1994; Kauffman, 1989). In short, what may seem morally right by some, may not be what all students need. Teachers are accountable to all the students, those with and without disabilities, and should afford all students a meaningful opportunity to learn.

Purpose of the Study

The purpose of this study is to investigate the relationship between inclusion and the provision of a learning environment designed to provide all students with a meaningful opportunity to learn. The primary research question to be investigated is this:

Do general education students have a meaningful opportunity to learn when sharing classrooms with students with disabilities?

Overall Design

An exploratory case study design based on grounded theory will be used to answer these questions: (1) How does this school define inclusion? (2) How are decisions about inclusion implemented in this school? (3) How has inclusion affected the teachers in the two selected classrooms? and (4) How does this school determine if regular education students have a meaningful opportunity to learn? Data triangulation from multiple sources will be used to increase the credibility of the inquiry as recommended by Patton (1990). Triangulation will include nonparticipant classroom observations, interviews with teachers and administrators, and samples of students' work that demonstrate their progress in learning.

Definitions and Terminology

Children with disabilities: Children with disabilities include those students who are receiving special education services under the Individual with Disabilities Education Act (IDEA) and have an Individualized Education Program (IEP) written for the 1998-1999 school year.

Inclusion: In this study, inclusion refers to a process whereby students with disabilities receive instruction in regular classrooms along with their nondisabled peers with supplementary aids and supports when needed. Stainback and Stainback (1992) defined inclusion as providing mainstream education to all students, with special education teachers providing support for those with mild to severe disabilities.

Inclusive Classroom: Classrooms where students who have IEPs receive instruction from regular education teachers. In this study, inclusive classrooms are the two classes selected for this study.

Individualized Education Program (IEP): An IEP refers to a written plan that includes a student's present level of educational performance, measurable annual goals, short-term objectives, and related services as deemed appropriate.

Meaningful opportunity to learn: In this study, a meaningful opportunity to learn refers to students actively engaged in teacher directed lessons that are curriculum based, utilize multi-modality teaching strategies, and allow for the monitoring of student progress.

Teaching practices: In this study, teaching practices will refer to the methods and strategies supported by research that teachers use to instruct students in an inclusive educational setting.

Significance of the Study

This is an investigation of effective teaching practices used in inclusive instructional settings. Research has frequently indicated the social benefits of inclusion for students with disabilities; however, it has not sufficiently addressed the advantages for students who are not disabled and are assigned to inclusive classrooms. Despite the lack of research and the controversy surrounding the practice of inclusion, it is widely practiced and accepted (Roach, 1995).

CHAPTER 2

REVIEW OF LITERATURE

Within the past 15 years, educators have initiated considerable discussion regarding the most appropriate setting within which to provide education for students with disabilities. Recently, many have advocated the integration of all students with disabilities into regular classrooms. Many have labeled this movement “inclusion.” Inclusion for all students with disabilities is rapidly becoming the panacea for many school systems. There is an increasing body of literature that proclaims the benefits of inclusion for some students. In spite of the ongoing controversy, research is primarily focused on the social benefits of inclusion for those with disabilities and has not adequately addressed the possible effects on nondisabled students. The practice of inclusion has been discussed at length in the special education literature, however, it has not received intensive scrutiny in the general education literature. Many educators, parents, and policy makers remain insufficiently informed about the theory and practice of inclusion and its potential ramifications for all students.

Inclusive Practices

The debate on how to best deliver effective educational services to students with disabilities continues “without substantial research on model efficacy” (Marston, 1996, p. 7). Many advocates for full inclusion are using an empirical basis of information that is limited to mildly handicapped students in an elementary environment (Patzkowsky, 1995).

Since the passage of P. L. 94-142 (1975), re-authorized as the Individuals with Disabilities Education Act (IDEA), students with disabilities have participated in various school programs with their nondisabled peers. This participation was limited to the mildly disabled population except in certain rare cases. The current controversy among parents, teachers, and advocates of inclusion focuses on the concept of least restrictive environment (LRE) and how it should be interpreted. The LRE for a student with disabilities is believed to be the most appropriate educational setting closest to the regular education setting in which a particular student can receive a free appropriate public education (FAPE). The IDEA (1997) states that, to the maximum extent appropriate, children with disabilities should be educated with children who are not disabled and that only when the nature or severity of the disability of a child is such that education in the regular classes cannot be achieved satisfactorily should that child be removed

from the regular class. Lewis and Doorlag (1999) stress that the concept of LRE does not imply that students should be placed in less intensive settings simply to bring them into a mainstreamed setting. Their placement must be feasible and provided with the most appropriate instructional services. The Education of All Handicapped Children Act (P.L. 94-142) did not mention the term inclusion. It did, however, imply mainstreaming. P. L. 94-142 did not define mainstream classrooms as the LRE for all students with disabilities (Wigle & Wilcox, 1996). However, many advocates for inclusion have interpreted mainstreaming to mean that all children with disabilities should be educated with their peers in the regular classroom. Many have taken the position that mainstreaming is synonymous with the term least restrictive environment (Murphy, 1996; & Reynolds, Wang, & Walberg, 1987). Mainstreaming has been used to refer to the limited and selected placement of students with disabilities in one or more regular education classes. Those who advocated “mainstreaming” expected only those students with disabilities who mastered the skills in the special classrooms to move to into a more challenging setting. However, advocates for full inclusion envisioned the regular classrooms as the most appropriate setting for all students regardless of the disability or the severity of the disability.

Of the articles found in a computerized ERIC search using the data base of Infoseek, only Staub and Peck (1995) addressed the issue of the effects of inclusion on the academic achievement of nondisabled students directly. Denning (1995) also investigated the effects of inclusion on the academic achievement of nondisabled students. This review of the literature will examine Staub and Peck and Denning’s studies along with data on variables that may affect the academic achievement of nondisabled students in inclusive classrooms.

The Effects of Inclusion on the Academic Achievement of Nondisabled Students

Staub and Peck (1995) summarize three earlier studies that relate to the effects of inclusion on regular education students. The age of the participants in the studies centered around the early childhood level. According to Staub and Peck, few studies like these address elementary and secondary age children in academic settings. From their review of available literature, Staub and Peck conclude that there is no significant difference in developmental outcomes for regular education students in inclusive and noninclusive settings. They address three common concerns associated with inclusion: (a) Will inclusion reduce the academic progress of nondisabled children? (b) Will nondisabled children lose teacher time and attention? and (c) Will nondisabled

students learn undesirable behavior from students with disabilities?

Only a limited research base exists that documents the impact of inclusion on the developmental process of nondisabled children (Staub & Peck, 1995). They further state that studies have consistently found no deceleration of academic progress for nondisabled children enrolled in inclusive classrooms. It should be noted, however, that Staub and Peck had very little data on which to base their decision. Their conclusions rest on the results of only three studies including: Odom, Deklyen, & Jenkins; Cooke, Ruskus, Apolloni, & Peck; and Bricker, Bruder, & Baily (cf. Staub & Peck). These studies were very limited in scope and compared similar groups of nondisabled children in inclusive and noninclusive classrooms on standardized measures of cognitive, language, and social development.

The second concern investigated by Staub and Peck (1995) dealt with teacher time and attention in inclusive classrooms. Again, their data source was limited to only one study that involved less than 20 students. They concluded after analyzing survey responses from teachers, parents, and students that nondisabled students in inclusive classrooms were not harmed as a result of having disabled students in their classes.

Denning (1995) notes that there remains a paucity of research as it relates to the effects of inclusion on the academic achievement of nondisabled general education students. Denning investigated the effects of inclusion on the achievement of general education students, but unlike Staub and Peck (1995), he compared the academic achievement of 577 general education elementary students assigned to inclusive classrooms and the academic achievement of 577 similar general education elementary students assigned to noninclusive classrooms.

Denning's (1995) study appears to be the most extensive study to date that addresses the issue of achievement and inclusion for students at various levels of performance. The achievement scores of the six subtests of the Iowa Test of Basic Skills (ITBS) were used to compare the inclusive and noninclusive groups. Denning's results suggest that low-achieving general education students in inclusive classrooms do meet the same achievement levels on most subtests when compared to low achieving general education students in noninclusive classrooms. It should be noted here that achievement mean scores across all subtests were higher for students in noninclusive classrooms. As Denning's study suggested, the regular education teacher and the special education teacher provided assistance to all students in a low-achieving setting.

In his conclusion, Denning suggested that average-achieving general education students in inclusion classes do meet the same achievement levels on most subtests when compared to general education students in noninclusive classrooms. His study also suggested that some questions still remained concerning the differences in achievement at the fifth grade level.

As to the question, “Do high-achieving general education students in inclusive settings do as well as high-achieving general education students in noninclusive settings?”, Denning concluded that the results of the study suggest that high-achieving general education students in inclusive classrooms do meet the same achievement levels on most subtests of the ITBS when compared to the general education students in noninclusive classrooms. However, it should be noted that the study findings also indicated that high-achieving general education students in inclusive settings did not achieve the same levels as similar students in noninclusive settings on all subtests of the ITBS.

There are numerous reasons for the scarcity of information on the topic. The many variables associated with best practices in inclusive settings are difficult to pinpoint and define. An examination of some of those variables will assist parents, teachers, administrators, and support staff in designing appropriate inclusive settings.

Effective Teaching Practices

Effective teaching research investigates characteristics of schools, various instructional settings, behaviors of students, teachers, and administrators of highly effective schools. Studies show that effective teaching is characterized by strong school leadership, an orderly school climate, clear instructional objectives, maximized student learning time, high expectations for all students, patience, and a commitment to treat each student fairly (Brophy & Good, 1986; Lerner, 1997; Smith, 1998).

Smith (1998) states that good teaching cuts across subjects or grade levels. The principles of good teaching are basically the same regardless of the content being taught. Good teachers think of themselves as teachers of students, not as mere specialists focusing on a subject or a particular grade level. According to Smith, many people who have investigated the question of inclusive schools feel that what children with disabilities need most for success in regular classroom is simply good teaching.

Wong, Kauffman, and Lloyd (1991) characterized the behaviors and attitudes of effective

teachers of students with disabilities in the regular classrooms. Some of the attributes include the following: (a) the expectation that all children will learn; (b) frequent monitoring of student work; (c) clarity of standards, directions, and expectations; (d) a commitment to treat each student fairly; (e) a highly structural approach to teaching; (f) firmness and consistency in behavior expectation; and (g) an open and positive attitude toward diversity.

Larrivee (1985) also identified teacher characteristics and classroom conditions that lead to the effective inclusion of students with disabilities: (a) The teacher and students make efficient use of time; (b) the teacher provides frequent positive feedback to students for appropriate behavior and achievement; (c) the teacher assigns tasks of an appropriate level of difficulty for each student; and (d) the teacher uses supportive rather than judgmental interventions.

Hocutt (1996) suggests that effective teaching behaviors include the following strategies: (a) reviewing and checking the previous day's work, and reteaching if necessary; (b) promoting initial student practices of new content and skills, and checking for understanding; (c) providing corrective feedback; (d) giving students an opportunity for independent practice; and (e) conducting weekly and monthly reviews of progress.

Rating Scales for Responsible Inclusion Practices and Effective Teaching

Research indicates that there are common practices found in effective inclusion programs. In an effort to assist teachers and administrators in designing, implementing, and evaluating inclusive instructional programs, the Rating Scale of Components of a Responsible Inclusion Program for Students with High-Incidence Disabilities (Vaughn, Schumm, & Brick, 1998) (Appendix A) and A Classroom Checkup: Best Teaching Practices in Special Education (Sikorski, Niemiec, & Walberg, 1996) (Appendix B) were developed.

“The Rating Scale of Components of a Responsible Inclusion Program for Students with High-Incidence Disabilities” (RSCRIP) developed by Vaughn et al. (1998) is based on data gathered from three sources. The first source was a case study conducted with three school sites over a four year period. The second source is a compilation of program evaluations of more than 50 Florida schools. The final source of data comes from a focus-group interview which consisted of four general education teachers, three special education teachers, one special education director, and one school principal, all of whom had recently participated in the development of an inclusion program for students with high-incidence disabilities.

The RSCRIP scale has 12 major components. There are three to six items which correspond to each component, a total of 47 items overall (see Appendix A). The 12 major components are: (1) Each student's educational needs are considered first; (2) Teachers' skills, knowledge, and attitudes toward inclusion classrooms; (3) Adequate resources are provided; (4) Inclusion models are developed and implemented at the school-based level; (5) Parents are involved in the development and implementation of the inclusion model; (6) A continuum of services is maintained; (7) The services delivery model is continually evaluated and altered; (8) Ongoing professional development; (9) Philosophy on inclusion is developed at the school level; (10) Curriculum approaches that meet the needs of all students are developed and refined; (11) Roles and responsibilities of the special education teacher and other specialists; and (12) Roles and responsibilities of the general education teacher. The rating scale can be used in several ways according to the developers for program development, program monitoring and program evaluation (Vaughn et al., 1998).

Teachers and administrators who become familiar with the RSCRIP Scale will become cognizant of the most recommended practices for responsible inclusion programs. It will also provide a means of evaluating an inclusion instructional program. Additionally, students will benefit from a service delivery model that is continually evaluated and altered to meet individual needs.

"A Classroom Checkup" developed by Sikorski, Niemiec, and Walberg (1996) is an observation checklist focusing on concrete, specific low-inference behaviors that have been identified from reviews of best teacher practices. The checklist may be used in a variety of ways: (1) Copies may be distributed to teachers as a reminder of practices that can be incorporated into lesson planning; (2) Principals, department heads, and supervisors may use the checklist to observe teaching and provide evaluative feedback; and (3) Teachers might observe each other and provide feedback. The checklist has four components with many subcomponents under each (see Appendix A). The four components are: (1) Introducing the lesson; (2) Presenting the lesson; (3) Student participation; and (4) Corrective feedback (Sikorski et al., 1996).

Teacher Interactions in Inclusive Classrooms

Educational researchers have investigated numerous factors considered to affect student learning. Recently, new processes for estimating the effects of teachers and schools on student

academic outcomes have been developed. One such model used to investigate the effects of teachers and schools on student academic outcome is the Tennessee Value-Added Assessment System (TVAAS). According to Wright, Horn, and Sanders (1997), the TVAAS uses statistical mixed-model methodology to enable a multivariate, longitudinal analysis of student achievement data which has been demonstrated to produce estimates of school and teacher effects that are free of socioeconomic confounding.

The teacher is instrumental in the achievement outcome of nondisabled students in inclusive settings. Regular education teachers who perceive students with disabilities in a negative manner may view inclusion as another obstacle to their already demanding schedule. This attitude could negatively affect the amount of instructional time given to the nondisabled student, and thereby impede their learning and achievement (Hines & Johnston, 1996; Marston, 1996).

Research clearly acknowledges the relationship between teacher interaction and student achievement. Students' opportunity to learn is clearly optimal when students directly interact with teachers through questioning techniques, class discussions, responding to teacher monitoring during learning activities, and receive teacher feedback (Brophy & Good, 1986).

Instructional Time in Inclusive Classrooms

The correlation between instructional time and learning is modest. Research findings, however, suggest that there is a strong relationship between learning and academic engaged time in which students are actually involved in learning activities. Research also found that high-achieving students were engaged in learning activities 85% of the time, but low achievers had only a 40% involvement rate. In a related study of secondary classrooms, high achievers were engaged 75% of the time, but low achievers were on task only 51% of the time (Christenson, Ysseldyke, & Thurlow, 1989).

Parental Involvement in Inclusive Classrooms

One of the most important factors to consider in any situation involving the student and the teacher is the relationship of the parent to the educational provider. It is well known that when parents involve themselves in the education of their children that the end result is an increase in academic achievement. Students who have the support of parents or caregivers tend to take academics more seriously than their peers who do not have such support. Teachers who have

the support of parents are less distracted with negative and non-productive confrontations with both parents and student.

The parent variable is well documented in literature dealing with students with disabilities also. Individuals with Disabilities Education Act (IDEA) clearly stated the need for parental involvement in the education of students with disabilities. Parent participation is encouraged and mandated throughout the diagnostic process (IDEA, 1997).

Number of Disabled Students in Inclusive Classrooms

Teachers who feel overworked, underpaid, and under respected are unable to find the time or resources to deal with a large number of students with disabilities in a regular class setting. When class sizes are greatly increased because an excessive number of students with disabilities are placed in one class, the purpose of providing support is defeated (Hines & Johnston, 1996).

Several major studies in the 1980's showed that it is difficult to classify children accurately and that the classification systems for placing students in special programs are seriously flawed (Baker, Wang, & Walberg, 1995). However, if we are to rely on the regular education system to educate such a diverse population, we must ensure the different publics and consumers that this is the most appropriate setting for each student with a disability. It is imperative that we have the necessary data on each student and best practices on inclusive instruction as referenced in the review of literature. This informational need is critical, particularly in light of current legislation such as the Improving America's Schools Act of 1993, which calls for an inclusive approach to achieving higher educational outcomes for all students, including those with special needs (Baker et al., 1995).

Parents of general education children are increasingly asking questions concerning the impact of inclusion on their children's learning. Only a few researchers have questioned the impact of inclusion on general education students. The few studies that have been conducted show no slowdown in nondisabled children's learning in inclusive classrooms (Staub & Peck 1995). The effects of inclusion on students in regular education classes who are not involved in special programming are still uncertain, however, supportive testimony from educators and parents can be found in the literature (Murphy, 1996). The results of this study will be of importance to those who are in the position to affect change and design instructional programs.

Summary

The integration of students with disabilities into the regular education setting is a trend that many are now supporting. Most refer to this new trend of integrating students with disabilities with students without disabilities in the regular education setting as inclusion. According to numerous sources most school systems are implementing some form of inclusion. Because inclusion is defined in various ways by different people, there remains much confusion as to the practices associated with implementing inclusive instructional programs.

There exist only a few studies that investigate the effects of inclusion on regular general education students. Most studies have centered the investigation around general education preschool or elementary students. The findings indicate that the practice of inclusion has many questions yet to be answered (Denning, 1995).

Effective teaching research indicates characteristics of schools, instructional settings, behavior of students, teachers, and administrators of highly effective schools (Lerner, 1997; Smith, 1998). Effective teaching research also argues the point that good teaching is good teaching and cuts across subjects or grade levels (Smith, 1998).

Researchers have found that effective teaching behaviors and attitudes of effective teachers include: (a) reviewing and checking the previous day's work; (b) promoting initial students practices of new content and skills; (c) checking for understanding; (d) providing corrective feedback; (e) giving students an opportunity for independent practice; (f) expectations that all children will learn; (g) frequent monitoring of student work; (h) clarity of standards; and (i) an open and positive attitude toward diversity.

CHAPTER 3

METHODOLOGY

This study examines how inclusion for students with disabilities was implemented in an elementary school in northeastern North Carolina and whether the non-disabled students in two inclusive classes are being provided with a meaningful opportunity to learn along side their peers with disabilities. Specifically, this study will address these questions: (1) How does this school define inclusion? (2) How are decisions about inclusion implemented in this school? (3) How has inclusion affected the teachers in the two selected classrooms? and (4) How does this school determine if regular education students have a meaningful opportunity to learn?

This investigation draws on information from interviews with the school's principal and with two teachers selected by the principal. Each teacher's class was visited on four occasions to observe the elements in the classroom environment that affect teaching and learning. Information collected from these interviews and observations, along with documents of student progress, was analyzed and interpreted to determine whether the school's implementation of inclusion supports classes in which regular education students have a meaningful opportunity to learn.

Research Design

Qualitative Methodology

Qualitative methodology was used in this study. Through an exploratory case study design based on grounded theory, the question of whether these general education students have a meaningful opportunity to learn when sharing classrooms with students with disabilities will be addressed. Data triangulation techniques were used to increase the credibility of the inquiry as recommended by Patton (1990). Multiple sources of data collection were utilized through structured and unstructured interviews with teachers and administrators, the collection of non-participant classroom observations, and documentation of student progress.

Exploratory Case Study.

The exploratory case study design was selected because it offers flexibility that is appropriate for interpreting the meaning that individuals place on events, processes, and structures. The emphasis of this approach is on understanding why the individual behaves in a particular manner and how behavior changes as the individual responds to the environment (Ary, Jacobs, & Razavieh, 1996). According to Yin (1994), case studies are the preferred design when

the investigator has little control over events and when the focus is on contemporary phenomenon within some real-life context.

Researcher as Instrument.

As the investigator in this study, I served as the primary data collection instrument. My credibility to serve in this capacity is supported by my professional experience in education. I have served in the following roles: (a) public school teacher (grades 6th through 12th); (b) testing coordinator; (c) school based chairperson; (d) assistant principal (elementary and middle school); (e) principal (elementary school, K-6); (f) educational consultant; (g) university supervisor; and (h) university program coordinator for teacher education. I have evaluated learning environments professionally for 12 of my 24 years in the teaching profession. From this perspective, I engaged the population in the setting with conversations, asking free flowing, opened-ended questions as well as structured questions, and to knowledgeably conduct nonparticipant observations, recordings, and field notes.

Setting of the Study

The research site was two elementary inclusive classrooms within a school system that lies in the heart of northeastern North Carolina. With a population of nearly 35,000, the county is the largest of the counties that form the northeast corner of North Carolina. The city has a population of nearly 20,000, and is situated one hour from the southeastern Virginia metro area and one hour from the outer banks beaches of North Carolina. It offers a harbor along the intercoastal waterway and serves as the site for the world's championship in moth boat class sailing as well as other boating, fishing, and water sports. It is bounded on the north by the state of Virginia and to the east by the Atlantic Ocean. Area industries and economies are as diverse as the land and its inhabitants.

Industries are limited to a few non-agricultural ventures. There are five major hotel chains based in the area, a host of fast food restaurants, a blimp base, a state university, a bible college, a regional community college, and the largest U. S. Coast Guard Station in the United States. Many of the residents are employed in Virginia by employers such as Ford Motor Company, Newport News Shipbuilding, Chesapeake and Portsmouth School Systems, and agencies of the federal government.

The school system serves approximately 6,260 students (per 1996-1997 figures). Students are served through a pre-K through 12th grade alignment. With a budget of \$32 million, an instructional staff of 400 is employed to serve the nearly 7000 students. There are eight elementary schools, two middle schools, one alternative school and one comprehensive high school. The school system is fully accredited by the Southern Association of Colleges and Schools and the North Carolina Department of Public Schools.

The city has a racial balance of 51% black and 49% white. The cost of living is high in the community with a concomitant high incidence of poverty. The utility rates are considered by many to be the highest in the country.

Selection of the School Site

One of the seven elementary schools in the system was selected for the study. The testing coordinator, the special education program director, and the researcher selected an elementary school typical for this school system. The chosen site was not extreme in its population or achievement variables, and students in the setting were not overly representative of either poverty or privilege. The district administrators provided the researcher with the number of students in each grade at the selected site (see Appendix C).

Data Collection

Gaining Access to the School

A meeting was arranged with the principal of the selected school to ask for permission to conduct the study in the school. The purpose and nature of the study were explained. The principal was given the opportunity to ask questions related to the study and the role he would play. The principal was asked permission to proceed with the study at this meeting. Permission was given and the principal was given a copy of the following professional journal articles: (1) "Using a Rating Scale to Design and Evaluate Inclusion Programs" (Vaughn, Schumn, & Brick, 1998), which rates effective inclusive programs (Appendix B); and (2) the "Observation Form for Productive Teaching Practices" (Sikorski, Niemiec & Walberg, 1996), featuring a checklist focusing on teaching practices in inclusive settings (Appendix A). The principal was asked to fill out a copy of the rating scale and to schedule a time to meet to discuss the scale and the observation form with the researcher. This was done to ensure that the principal was aware of exactly what the research entailed and was able to understand the nature of questions posed to the

teachers participating in the study.

Formal Conference With Principal

During the second conference, the principal was asked to respond to any questions or concerns as a result of reading the two articles, and in using the rating scale by Vaughn et al. (1998). Each component of the rating scale was thoroughly discussed. The principal was asked questions concerning the school system's policies and procedures for implementing inclusion guided by the checklist. The principal was asked about his perception of whether general education students are being given a meaningful opportunity to learn in inclusive classrooms at the school and how they make this determination. The principal was asked to recommend two teachers from the faculty whom he had seen demonstrate many of the practices identified by Sikorski et al. (1996) and to provide a time for the two teachers to meet with the researcher. The principal was also asked to provide the researcher with information for a school profile for general education and special education by grade level (see Appendix C).

Gaining Teacher Participation

The investigator conferenced with the two teachers to discuss the interview and observation process. At the initial meeting, the purpose and nature of the study was explained to both prospective teacher-participants. Confidentiality of their responses was assured. Questions and concerns were addressed, and the teachers were asked to participate. The teachers agreed to participate, each was given the Vaughn et al. (1998) article and asked to read it prior to the individual interview in order that they might fully understand the nature of the questions that would be asked. Each teacher was asked to schedule a time with the researcher after reading the article to discuss the implementation of inclusion in their school and classroom.

Formal Interviews With Individual Teachers

The researcher reviewed with the teachers their responses to the 12 components of the Vaughn et al. (1996) rating scale. This allowed for a comparison of teacher perceptions with those of the principal about school wide implementation of inclusion. In addition, each teacher was given an opportunity to discuss and respond to questions about the following: (a) composition of his/her classroom; (b) personal beliefs and expectations of inclusion; (c) human and material resources; (d) the learning environment; and (e) the benefits and disadvantages of their inclusive classroom. The investigator elicited responses from three major areas: (a) student

characteristics; (b) impact of inclusion on teaching; and (c) impact of inclusion on student learning. Interview questions will address the following points:

Student Characteristics

1. What is the range of functional abilities among your students this year?
2. What are your expectations for your general education students this year?
3. What are your expectations for your students with disabilities this year?

Impact of Inclusion on Teaching

1. What is your previous experience teaching students with disabilities?
2. How has inclusion affected your teaching?
3. Did you have to modify your teaching plans for this year?
4. How do you feel about your teaching effectiveness this year?

Impact on Learning

1. How has inclusion affected the academic learning of the general education students in your class?
2. How do you monitor student learning?
3. Can you share any documents that show how students have made academic progress? (The investigator will review available documents.)

Each teacher was asked to provide a schedule for four classroom visits of 40 minutes each for the researcher to observe students in their natural environment. Each teacher was also asked to provide demographic information about their class (see Table 2)

Interviews and Observations in the Natural Setting

The investigator observed in the two selected classrooms during class sessions. The natural environment allowed the investigator to obtain an in-depth holistic view of the practices described in the literature designed to provide a meaningful opportunity for all students to learn. The observations included critical details of person, place, activity, date, time, and class periods. The investigator looked for student behaviors that might be conducive or disruptive to teaching and learning. Student behavior was recorded via investigator's checklist, narrative comments, diagrams, and sketches. These student behaviors reflected direct interactions with the teacher, participation in discussions, responses to monitoring, and corrective feedback.

Post-Observation Conference

A post-observation conference was held with each teacher after each of the four observation sessions. Each teacher was afforded an opportunity to clarify any decision made during the observation period to assist the researcher in understanding how each teacher interpreted the students' interactions and instructional responses during the observed session. The teacher was asked to describe or demonstrate how he/she evaluated student learning after each session. This information assisted the researcher in interpreting actions that transpired in the classroom.

Data Analyses

Data analyses occurred over a period of four visits to each of the two classrooms. Transcripts and field notes were studied and organized until regularities and patterns emerged and converted into systematic categories of analyses. Data collected from the principal's interview, teachers' interviews, and nonparticipant classroom observations were organized and structured to address the question of whether or not the elementary general education students in these two inclusive classes are being given a meaningful opportunity to learn.

CHAPTER 4

RESULTS

The results are organized around the questions explored in this study. The first section contains data on the site of the study. It includes the selection of the site, gaining access to the school and classrooms, and a description of the district, school, and classrooms. The second section contains data on how the principal and teachers defined inclusion. The next section contains district and school policies on inclusion and data on how decisions about inclusion were implemented by the school. The fourth has data on how inclusion affected the teachers in the two selected classrooms. And, the fifth is focused on the learning opportunities for general education students.

The Site of the Study

During the month of December 1998, the researcher submitted a request to conduct a study to the Superintendent of the selected district. The request was acted upon and approval was granted the second week of January, 1999.

Selection of the School Site

After gaining approval to conduct the study, the researcher called the district's Special Education Director and the Testing Coordinator by telephone. The Testing Coordinator was called first to request demographic information about the district. She was asked to provide data on average daily membership and percentages of free and reduced-price lunches for the district as a whole and by school. The coordinator informed the researcher that her secretary would get the requested information to him by the end of the week. The Coordinator also stated that if additional assistance was needed to contact her secretary. The Coordinator's secretary contacted the researcher on Friday, January 8, 1999 with data on the average daily membership and percentages of children receiving free or reduced lunches for the district as a whole and by school.

The Special Education Director was contacted on January 6, 1999 by telephone. The nature and purpose of the study were shared with the director. The researcher asked the director to provide information on the number of 504 Plans and the number of IEP's by school and district and to provide information on how inclusion was implemented in the district. The director stated that she would have her office provide all the necessary information requested.

The director's secretary called the researcher over the phone and provided information on the number of 504 Plans, the number of IEP's by school and district, and information on how inclusion was implemented in the district. This information was requested to aid the researcher in selecting a school that had a comparable number of 504 Plans and IEPs and that did not deviate excessively from the average of the district. None of this information was useful in selecting a school research site. The final selection of the site was based on the following elements: (1) convenience of travel by the researcher; and (2) the willingness of the principal to participate. The information was used in the description of the district and school.

There were 11 possible sites in the school district. The district has seven elementary schools, one alternative school, two middle schools, and one comprehensive high school. Because the focus of the study was on elementary general education students, the two middle schools, the one alternative school, and the high school were eliminated from consideration. Three of the elementary schools were eliminated because they had first year principals who were learning their new roles. Two other schools were eliminated because of their geographical locations; they were located at the far end of the county, and the traveling time would have been prohibitive. There remained only two schools to visit. Each school principal was called and asked to return the call as soon as possible. Each secretary was informed of the nature of the call and the need for a timely response from the principal. The principal of School A returned the call the following day and set a time to discuss the study in greater detail. After contacting the secretary of School B a second time, she informed the researcher that the principal of School B was away from the office due to the flu.

Gaining Access to the School and Classrooms

The researcher met with the principal of School A the next day and explained the nature and purpose of the study. It was at this initial meeting that the principal agreed to participate in the study. The principal informed the researcher of times that he would be available during the week. The researcher and the principal agreed to meet the following morning to further discuss the study.

The Second and Third Meetings with the Principal

During the second meeting with the principal, the purpose of the study was discussed and the principal was encouraged to ask questions concerning the study and the roles the principal

and teachers would play. The principal asked three questions: The first was, “ How often would the teachers be observed? The researcher responded that the teachers would be observed at least four class periods and that follow-up visits could be necessary. When asked, “Is there a particular grade level needed for the study?,” the researcher informed the principal that the study was not confined to a particular grade but to inclusion classrooms. The principal’s final question was, “ Do you plan to begin your study right away?” The principal was informed that the researcher would like to begin the study as soon as possible.

During this meeting, the principal was given a copy of an article by Vaughn, Schumn, & Brick (1998) to read and was asked to complete a rating scale on the components of a responsible inclusion program found in the article. The rating scale focuses on 12 key issues with four to five items per issues. The 12 issues are: (1) Each student’s educational needs are considered first; (2) Teachers’ skills, knowledge, and attitudes toward inclusion classrooms; (3) Resources; (4) Inclusion models are developed and implemented at the school-based level; (5) Parental involvement; (6) A continuum of services is maintained; (7) Service delivery model is continually evaluated and altered; (8) On going professional development; (9) Philosophy of inclusion is developed at the school level; (10) Curriculum approaches are developed and refined; (11) Roles and responsibilities of the special education teacher and other specialists; and (12) Roles and responsibilities of the general education teacher. The authors stated that teachers and administrator who become familiar with the rating scale become cognizant of the most common practices found in effective inclusion classrooms. The scale may be used to evaluate inclusion instructional programs. The principal was asked to read the article and complete the rating scale to assess his level of knowledge and to have confidence in his nomination of classrooms for the study. At the end of this meeting, the principal was asked to schedule a time to meet and discuss the scale. The principal was also asked to identify two teachers from the faculty who used many of the “best” practices identified in the article by Sikorski et al. (1996).

During the third meeting with the principal, the principal was encouraged to ask any questions or to raise any concerns as a result of reading the article and completing the rating scale. The principal asked two questions: (1) Do you know of schools that implement all of the suggestions found in the rating scale? The researcher informed the principal that he was not aware of any schools in the region that would rate a perfect three, but that there were schools he

had visited while observing student teachers that were moving in that direction; and (2) Do you find that the general education teacher's role is changing as it relate to inclusion? The researcher informed the principal that, as the article stated, teachers must change their instructional delivery to focus on all the students including those with special needs.

Meetings with the Teachers

On Tuesday, January 19, 1999, the researcher placed notes in mailboxes of the teachers who had been identified by the principal. The notes indicated that they had been selected by their principal to participate in the study and that the researcher would contact them by telephone during their planning periods to schedule a time to meet with them. The principal in an earlier conference that day indicated that Teacher A's planning period was from 1:40-2:20 PM., and that Teacher 2's planning period was from 9:30-10:10 AM. On Wednesday, January 20, 1999 at 1:50 PM, Teacher A was phoned and asked for a time to meet and discuss the study. Teacher A stated that he could meet on Thursday at 7:20 AM. or if that was not possible, he would arrange for a colleague to supervise his class at the time Teacher 2 would be available. The researcher informed Teacher A that after talking to Teacher 2 he would leave a message with the secretary with the time of the meeting and that if he was unable to meet call the researcher's secretary before 5:00 PM. Teacher 2 was phoned the same day during her planning period and asked if she could meet with the researcher and Teacher 1 prior to the beginning of class on Thursday at approximately 7:20 AM. in Teacher 1's classroom to discuss the study. Teacher 2 stated that the principal had informed her that he had submitted her name to me. She further stated that she is usually at school preparing for the day's activities at that time and that she would arrive early to get it all done before the meeting.

The researcher met with Teachers 1 and 2 at the appointed time in Teacher 1's classroom. At this initial meeting, the purpose and nature of the study was explained and questions were addressed. Several questions were asked by the teacher and answered by the researcher: (1) How much time outside of the teaching day would be involved? The researcher informed Teacher 1 and Teacher 2 that no additional time would be needed except for time to clarify activities observed in their classes. This time would be set by the teachers after being informed by the researcher of a need for clarification. They would be expected to instruct their classes in their usual manner. (2) Were there other schools participating in the study? The researcher informed

Teacher 1 and Teacher 2 that no other school was participating in the study. (3) Who would see the results of the observations? The researcher informed the teachers that the results would be in his dissertation, but no names would be included.

After answering the questions posed by the teachers, the researcher asked the teachers to participate in the study. Both teachers agreed to participate. Each teacher was then given a consent form to read and sign. Both teachers signed the form. Each teacher was then asked to read the article by Vaughn, Schumn, & Brick (1998) and to complete the same rating scale that had been completed by the principal. Each teacher was asked to schedule a time to discuss the article and rating scale and the implementation of inclusion in their school and classroom. This was done to ensure that the teachers were cognizant of the purpose of the research and were able to understand the nature of the questions posed by the researcher. Both teachers stated that I could see them on Monday, January 25, 1999. Teacher 1 stated that he would be in his room around 7:15 AM and that I could conference with him at that time. Teacher 2 stated that I could see her during her planning period.

At the second meeting with the teachers, the researcher reviewed their responses to the 12 components of the Vaughn, Schumn, & Brick (1998) rating scale. Teacher 1 stated that he understood each item and that he only had one question as a result of reading the article and completing the scale. That question was, "Do you find that resources are adequate in inclusion classrooms?" The researcher informed Teacher 1 that as far as material resources were concerned, most classrooms could use more; and as far as human resources were concerned, there is a shortage of teachers who are qualified to teach students with disabilities. Teacher 2 stated that the article was easy to read and that she did not have any questions. She did state that staff development activities that are well planned could be used to inform all teachers and staff members of the benefits of inclusion for students with disabilities. Each teacher was given an opportunity to discuss and respond to questions about the following: (1) composition of the classroom; (2) personal beliefs and expectations of inclusion; (3) human and material resources; (4) the learning environment; and (5) the benefits and disadvantages of their inclusion classroom. The responses are reported later in the chapter.

Characteristics of the District, School, and Classrooms

The school system serves approximately 6,260 students (per 1996-1997 figures). Students

are served through a pre-K through 12th grade alignment. With a budget of \$32 million, an instructional staff of 400 is employed to serve the nearly 7000 students. There are eight elementary schools, two middle schools, one alternative school and one comprehensive high school. The school system is fully accredited by the Southern Association of Colleges and Schools and the North Carolina Department of Public Schools.

School A, according to the principal, had an enrollment of 475 students with 46 students with IEPs. The grade alignment was K-5 with approximately 70 students in each grade. There were also approximately three-to-five students with special needs per classroom. Approximately 46% or 218 students received free or reduced-priced lunch. There was only one student with a 504 plan, and four students were retained from the 1997-98 school year (see Table 1).

Table 1

Comparison of School A With Other Elementary Schools in the District on Selected Variables

Variable	School A	Other elementary schools <u>N</u>	
Grade alignment	K-5	6	K-5
Average daily membership	475	6	450
Percentages of children with free or reduced- price lunch	46%	6	49%
Number of students with IEPs	46	6	52 ^a
Number of 504 plans	1	6	6 ^b

^a = Median for the other six schools. ^b Total for the school district.

The classroom demographics were similar for both classrooms. Enrollment for Classroom 1 and Classroom 2 was 26 and 25 respectively. Students with special needs or IEPs were four and five, respectively. The classes were also closely balanced as far as gender was concerned (see Table 2).

Table 2

Classroom Demographics

	Classroom 1	Classroom 2
Enrollment ^a	26	25
Students with IEPs	4	5
Students without IEPs	22	20
Number of females	12	13
Number of males	14	12

Enrollment^a Enrollment is the number of students assigned to Teacher 1 and Teacher 2.

Teacher 1 reported that she had a wide range of functional abilities among her students this year. Reading levels ranged from grade three to grade five, and math abilities ranged from grade 2.7 to grade 5.7 with ages ranging from nine to 11. Teacher 2 stated that functional abilities in reading ranged from grade 3.5 to 5.5, and math abilities ranged from grade two to grade five. Both teachers held high expectations for their general education students and expected each student to reach stated goals for grade five. A high level of expectations for students with disabilities was also expressed by both teachers. Teacher 2 stated she did not reduce her standards, but provided additional strategies which afforded all students an opportunity to understand the lesson. She also stated that with cooperative grouping, additional time can be spent with those who need extra time to understand a concept. Teacher 1 stated that he expected all students to master the day’s activities. However, he remarked that with some students he had to be a bit more creative and provide additional examples. Both teachers stated that teachers must first believe that all students can learn.

The students with disabilities in both classrooms, with the exception of a student with emotional and behavioral disorders in the classroom of Teacher 2, were identified as having learning disabilities. Both teachers acknowledged the fact that their students with disabilities had mild cognitive disabilities and that with slight instructional modifications they could do most of the work their peers did. However, Teacher 1 and Teacher 2 both stated that the acquisition of some new concepts required more time for the students with disabilities in their classroom.

Socially, most of the students interacted with each other except for the rare occasion when the student with emotional and behavioral difficulties would become disruptive.

Principal's and Teachers' Definitions of Inclusion

The researcher asked the principal and teachers to define inclusion to ensure that the teachers and the principal fully understood the nature of the study and the concept that was being investigated. It was important to this study that all participants understood the term inclusion and the need to gather data on inclusion practices. The principal was asked during the second meeting at the school to define inclusion and the teachers were asked during their first meeting to define inclusion.

The principal's definition of inclusion centered on the provision of learning opportunities for all students through collaboration and joint planning of curricula by teachers. He emphasized the concept of ownership of all students by special and regular education service providers. The underlying premise of his definition was the concept of students with disabilities being a part of the regular classroom (see Table 3).

Similar to the principal's vision of inclusion, the teachers also embraced the concept of joint planning to provide services and learning opportunities for all students (see Table 3). Both teachers, however, viewed collaboration and services from the perspective of managing the inclusion of students with disabilities in the regular classroom. Teacher 1 said, "Inclusion is working with other teachers to provide services to students with disabilities." Similarly, Teacher 2 said, "Inclusion is collaborating with others who come into contact with students who have disabilities." It was apparent from the on-site interviews and classroom observations that both teachers believed that inclusion should provide the same educational opportunities and services to all students. This belief was observed in the behavior of the teachers who monitored the progress of all students (Teacher 1) and involved all students in a reading lesson (Teacher 2).

Table 3

Raw Data Matrix on How the Principal and Teachers Define Inclusion

Participants	How do you define inclusion?
Principal	<p>“Inclusion requires the teacher to alter the curriculum to address the needs of all students.”</p> <p>“ Inclusion enhances existing programs that are in place.”</p> <p>“ It can also mean ownership of all students.”</p> <p>“With inclusion, I see teachers planning jointly more.”</p> <p>“I guess I can sum it up simply by saying inclusion is being part of the regular classroom.”</p>
Teacher 1	<p>“Inclusion is receiving the same educational opportunities”</p> <p>“Inclusion is providing educational services to all students”</p> <p>“Inclusion is working with other teachers to provide services to students with disabilities.”</p> <p>“Inclusion is allowing special students the same opportunity all students have. That is to be served in the least restrictive environment.”</p>
Teacher 2	<p>“Inclusion is more than one teacher servicing the needs of the students with disabilities”</p> <p>“Inclusion is having the regular Teacher and exceptional teacher work together.”</p> <p>“Inclusion is collaborating with others who come into contact with students who have disabilities.”</p> <p>“Inclusion is working as a team and including every student.”</p> <p>“It certainly fosters the idea of being part of the regular classroom.”</p>
Observation of Teacher 1 February, 1999 Reading	Teacher 1 was observed monitoring the progress of all students. This was done in a variety of ways including randomly calling on students to check for level of understanding, circulating to each table and posing thought provoking questions.
Observation of Teacher 2 February, 1999	Teacher 2 was observed involving all students in a reading activity. Each student was given an opportunity to respond to questions related to the story being read.

Implementation of Inclusion

The selected school district did not have a written policy on inclusive service delivery for students; therefore, implementation of inclusion was the responsibility of each school. The principal recognized that the IEP Committee is ultimately responsible for looking at the individual needs of students. The principal stated that varying degrees of inclusion were found in the school district. Within each school, a school-based committee or an Individual Educational Program (IEP) Committee assessed the strengths and needs of students and developed appropriate instructional programs. Once the IEP was developed, the classroom Teacher and resource teacher made decisions about how that IEP could be implemented in the classroom. The principal believed that if teachers were well-trained, well prepared, and knew how to plan and implement instructional strategies, then inclusion was welcomed by them (see Table 4).

Effects of Inclusion on Teachers' Instructional Practices

The principal and the teachers were interviewed to determine their perceptions of how inclusion affected instructional practices and other aspects of school and classroom operations. The principal indicated that inclusion increased opportunities for teachers to compare their curricular and instructional strategies to those used by general educators and to models of inclusion that are research based. Specifically, the principal indicated his perception that both regular and special education teachers found that cooperative grouping and peer tutoring benefited all students in the classroom setting. Furthermore, the principal stated his perception that instructional practices such as providing relevant examples of concepts, consistently monitoring the students' work, and providing opportunities for students to ask questions increased all students' understanding and success. He further indicated that teachers assisted each other. The principal also stated that inclusion changed teachers' attitudes toward exceptional children. He said, "teachers don't place as much negative emphasis on exceptional students." He felt that teachers were more concerned about being accountable for the legal rights and the academic growth of all students. The principal stated that although teachers were initially reluctant to embrace the inclusion concept, the resistance of teachers to the idea lessened with each passing year. However, the principal did recognize the need for additional personnel to fully meet the needs of students with disabilities in the regular classroom.

Table 4

Raw Data Matrix on How the Principal and the Teachers Believe Inclusion is Implemented

Participants	How is inclusion implemented?	How are issues decided?
Principal	<p>“John, varying degrees of inclusion are found in the district. Actually, each school determines the method of how inclusion is implemented.”</p> <p>“If teachers are well prepared, well trained, and able to implement instructional strategies, the inclusion is welcomed.”</p> <p>“ The role of the IEP Committee is to determine the strengths and needs of each student and develop an instructional program that will meet the needs of each student.”</p>	<p>“The School-based Committee looks at individual needs of each student.”</p>
Teacher 1	<p>“The students are assigned by IEP Team.”</p> <p>“The IEP Team looks at the total student and determines the level of inclusion.”</p>	<p>“Decision are made by the committee”</p>
Teacher 2	<p>“The method of implementation depends on the student’s needs”</p> <p>“The School-Based Committee examines the strengths and weaknesses of each student before determining the delivery model to use.”</p>	<p>“Decision are made between the Teacher and the resources person”</p>

Teacher 1 acknowledged that inclusion required more monitoring; however, all students appeared to benefit from plans designed to be more specific during the guided and independent practice phases of the lesson. Teacher 2 reiterated that planning time was essential to the success of the inclusion for all students. Teacher 2 further indicated that inclusion was preferred over the traditional method of pull-out instruction from two standpoints. First, inclusion provided special needs students an opportunity to learn skills within the context of regular education setting along

with same age peers. Secondly, the regular education setting fostered meaningful social interactions and allowed special needs students to emulate effective learning practices. Teacher 2 remarked that all students benefited from instructional strategies such as cooperative grouping, peer tutoring, and consistent teacher monitoring of each student's work. She elaborated by stating that students don't have to leave the classroom to get additional assistance; therefore, students are not stigmatized as much by other students when instruction is delivered in the same setting.

When asked about the impact of inclusion on their teaching, both teachers expressed initial concerns about the additional responsibility of an inclusion classroom. Neither teacher had experience in an inclusion setting, but accepted the challenge from the principal to participate in the inclusion service delivery model. Teacher 1 and Teacher 2 indicated that their teaching styles had not changed as a result of the new assignment. Both teachers reported that they utilized an array of instructional strategies that allowed all students to maximize their academic potential. Teacher 1 stated that exposure to different learning situations along with awareness of individual needs allowed all students to succeed. Both teachers also reported that planning for inclusion did require some additional time. Each teacher expressed the need to continuously monitor the progress of each student.

The principal and the teachers believed that the inclusion model improved the overall achievement of all students and maximized opportunities for students to engage in the total school program with age-appropriate peers. The researcher observed that teachers involved in the inclusion model actively monitored student participation during instructional presentations and incorporated cooperative work groups (see Table 5).

Table 5

Raw Data Matrix on How the Principal and Teachers Believe Inclusion Has Affected Them

Participants	Effects of Inclusion	Other
Principal	<p>“It has increased opportunities for teachers to benchmark curriculum and instructional strategies utilized by general educators and models of inclusion that are research based.”</p> <p>“Both the regular teachers and the special teachers have expressed to me that cooperative grouping, peer tutoring, monitoring of student activities, and providing opportunities for students to ask questions increased all students’ level of understanding.”</p> <p>“The child has the support of two teachers, a regular classroom Teacher and a special education teacher. They assist each other to provide the best experience for each child.”</p> <p>“It certainly fosters the idea of being a part of the regular classroom.”</p>	<p>“I think its getting better. In the beginning there was hesitation on the part of the regular educator. I have seen that each year there is less resistance.”</p> <p>“We are still in need of additional resources, both human and material, to assist these students.”</p> <p>“Some teachers are assisting each other more.”</p>

(table continues)

Table 5 (continued)

Participants	Effects of Inclusion	Other
Principal (continued)	<p>“Teachers don’t place as much negative emphasis on exceptional students. Teachers are more professional and are concerned about the legal implications. Teachers must show academic growth in all students.”</p> <p>“ I think it has made things better.”</p>	
Teacher 1	<p>“It requires a bit more monitoring during the guided and independent phases of the lesson, but not much more.”</p> <p>“Inclusion requires plans to be more specific during the guided and independent practice phases of the lesson.”</p> <p>“I utilize an array of instructional strategies to maximize their academic potentials and to provide opportunities for all students to participate.”</p>	<p>“I found it frustrating at first because of the limited resources, but later rewarding.”</p> <p>“At times, additional assistance is needed.”</p> <p>“IEPs must be read and implemented.”</p>
Teacher 2	<p>“Actually, I like inclusion as opposed to pull-outs”</p> <p>“I am a supporter of inclusion, but I am fully aware of the additional time required to read IEPs, to plan, and to attend school-based committee meetings. Yes, it is a lot to do.”</p>	<p>“My schedule does not give me a lot of planning time”</p> <p>“I have noticed that teachers work together more”</p> <p>“As far as the student is concerned, it does eliminate isolation.”</p>

(table continues)

Table 5 (continued)

Participants	Effects of Inclusion	Other
Teacher 2 (continued)	<p>“Inclusion allows special needs students an opportunity to learn within the context of regular education setting along with their same age peers”</p> <p>“It also fosters meaningful social interactions which allow special education students to emulate effective learning practices.”</p> <p>“I use lots of manipulatives to reinforce concepts. I provide many illustrations and examples when introducing the lesson. I also modify my instructions so that I can reach all of my students.”</p> <p>“Continuous monitoring of all of my students’ work is something I do. It allows me to know exactly where I am and where I need to go. That’s important to me.”</p>	
Observation of Teacher 1 February , 1999 Reading and Math	<p>It was evident that Teacher 1's lessons were well prepared as he utilized relevant examples and illustrations to introduce and explain concepts. He also continuously monitored the work of all of his students. It was also noticeable that his activities were well planned and they challenged all of the students.</p>	

(table continues)

Table 5 (continued)

Participants	Effects of Inclusion	Other
<p>Observation of Teacher 2 February , 1999 Reading and Math</p>	<p>Teacher 2 utilized an array of instructional strategies as she introduced her lessons and reinforced concepts. On this particular day she had her students arranged in small groups. Students were allowed to assist each other in completing the task. However, the teacher constantly circulated to each group to offer guidance to some and challenges to others. It was obvious that she designed her lesson to challenge all of her students. Teacher 2 was observed also conferring with the teacher responsible for assisting her in providing services to the students with disabilities.</p>	

Effects of Inclusion on the Learning Opportunities for General Education Students

Teacher 1 and Teacher 2 were both observed four times during the month of February, 1999. Teacher 1 was observed during the morning hours and Teacher 2 was observed equally during the morning and afternoon hours. Each teacher was observed once a day during his or her reading or math period. The focus of the researcher during each of the eight visits was to document the teachers' instructional practices and the students' behavior in an inclusive setting. The researcher during each of the eight visits observed classroom arrangements, students' seating, behaviors of students, and teachers' instructional styles.

There were no observable negative effects of inclusion on the learning opportunities for the general education students in this classroom during the four observations. The two reading lessons and the two math lessons observed were very well planned and implemented. Both

teachers were consistent in illustrating concepts and involving all students. This is a description of what the researcher observed during the visits. A data matrix follows (see Table 6).

Teacher 1's classroom was arranged in cooperative learning groups composed of four to six students. Some groups worked in the classroom, while another group worked in a designated area outside of the classroom. The designated area outside of the classroom was an area near the door where three students worked to complete a mapping activity. This area outside of the classroom was utilized only once during the four visits. Objectives were written on the chalk board and were visible on each of the four visits. Each group was given a specific task to complete that involved reading a passage and answering questions from the passage. Teacher 1 circulated throughout the groups and monitored the performance of each student. It was evident that students who needed assistance from the teacher received assistance in a prompt manner. Students raised hands and the teacher promptly responded. Teacher 1 utilized verbal praise. Examples include statements like "You're doing a great job with your writing," and saying "I like the way you are taking your time to write that neatly." Teacher 1 also modeled and reinforced skills by orally sequencing the events in a passage that had been read in class.

A special needs' teacher was assigned to this classroom to assist in facilitating instruction; however, during the periods of observation, the special needs teacher was implementing modifications for the North Carolina Writing Test. Teacher 1 reinforced desirable student behavior and corrected inappropriate behavior without prolonged disruption of instruction. Most students were on task for the duration of the lesson. The noise level was appropriate and conducive to learning. Teacher 1 had an excellent rapport with all students.

Table 6

Raw Data Matrix: Observation in the Classroom- Teacher 1

<p>Teacher 1 Monday 2/1/99 Reading 8:00 - 9:45</p>	<p>“Your objective is on the board.”</p> <p>“Please read each passage carefully to determine the main idea. Remember you will have to do this on the end-of-grade test.”</p> <p>“Teacher circulated to each group and asked questions to determine level of understanding.” OC</p> <p>“I like the way you all are working.”</p> <p>“Teacher utilized verbal praise to reinforce positive behaviors.” OC</p> <p>“ I will come to your group to check your work.”</p> <p>“Teacher was observed monitoring all students’ work.” OC</p> <p>“Please listen as I explain the directions”</p> <p>“Teacher stated directions clearly and precisely. ” OC</p> <p>“Do you need to read everything in the passage to find the main idea.”</p> <p>“You may continue to passage 3 if you have completed passage 2.”</p> <p>“Teacher allowed students to move to more challenging work once they demonstrated that they understood the concept. ” OC</p> <p>“If you need assistance before I come to your group, please raise your hand.”</p> <p>“It was evident that rules governing verbal participation and movement were firmly established as students raised hands and waited to be assisted before asking questions.” OC</p>
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(table continues)

Table 6 (continued)

<p>Observation</p> <p>Teacher 1 Tuesday 2/2/99 Reading 9:45-11:20</p>	<p>Effects of inclusion on learning opportunities for general education students</p> <p>“Your objective for today is on the board.”</p> <p>“Objective was on board where all could see. Terminology was on level with students. Teacher took sufficient time to explain directions.” OC</p> <p>“Yesterday we looked at finding the main idea. What steps did we take to find the main idea?”</p> <p>“Teacher reviewed yesterday’s lesson before introducing the lesson.” OC</p> <p>“Please check for the clue words. They will help you in finding the main idea”</p> <p>“Teacher unutilized a variety of instructional strategies to present concept.” OC</p> <p>“You guys are doing a great job at this table. Who can tell me the steps they took to arrive at the answer?”</p>
<p>Teacher 1 Thursday, 2/11/99 Math 12:20-1:30</p>	<p>“The objective is on the board. Please read it for me Jessica.”</p> <p>“Today we will talk about tables and charts.”</p> <p>“Teacher explained in detail the day’s task.” OC</p> <p>“Look at the examples of a pie chart on page 210 in your text”</p> <p>“Teacher utilized examples in text to explain concept. Students were called upon to explain why their answers were correct.”</p> <p>“I like the way you are taking your time to write that neatly.”</p> <p>“I want you to work in your groups to solve the problems I have written on the board.”</p> <p>“I can tell you are taking your time.”</p>

(table continues)

Table 6 (continued)

<p>Teacher 1 Tuesday 2/16/99 Math</p>	<p>“I want you to work in your groups to solve the problems I have written on the board”</p> <p>“Teacher utilized cooperative grouping as a mean for students to reinforce each others’ learning and to reinforce concepts.” OC</p> <p>“Let’s read the objective in the board together”</p> <p>“Teacher read objective in a clear and precise manner.” OC</p> <p>“Let’s look at the example on the board. What fraction is represented by the shaded area?”</p> <p>“Teacher presented concepts with illustrations and examples which were relevant to the students. The teacher instructed the student to draw a pie and divide it into four equal parts.” OC</p> <p>“Shawn, I like the way you are working and not talking.” OC</p> <p>“Now I want each group to write the fraction $\frac{3}{4}$. If you remember the charts and graphs we studied last week, draw a graph that represents $\frac{3}{4}$.”</p> <p>“Teacher utilized students’ previous learning to introduce new concepts.” OC</p>
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There were no observable effects of inclusion on the learning opportunities for the general education students in this classroom during the four observations. The two reading lessons and the two math lessons observed were well organized and implemented. Both teachers did an outstanding job illustrating concepts, monitoring all students’ work, and involving all students in the activities. This is a description of what the researcher observed in Teacher 2's classroom during the visits. A data matrix follows (see Table 7).

Teacher 2's classroom was arranged in some cooperative learning groups, however, some students received individual instruction. Teacher 2 displayed objectives and written assignments on the board during each of the four observations and posted examples of students' work throughout the classroom. Two of the four visits, Teacher 2 utilized an overhead projector to

project her objectives and assignments on the screen. She incorporated a multiplicity of resources during reading and math lessons to include related newspaper articles, magazines, brochures, overhead transparencies, and computer-assisted instruction. Teacher 2 gave precise oral directions that were easily understood and executed by all students. Teacher 2 provided ongoing instructional monitoring and assisted students who had difficulty with assignments. Teacher 2 provided immediate feedback for correct answers and maintained sustaining feedback strategies when students gave incorrect answers. Inappropriate behavior was promptly addressed and students redirected with minimal disruption in the lesson. Furthermore, Teacher 2 handled routine interruptions, i.e., morning announcements, students entering/exiting class as scheduled, with efficiency. Throughout the observations, it was evident that Teacher 2 involved all students in all activities. Mutual respect between the Teacher and students was readily observed. Teacher 2 utilized verbal praise to reinforce skills and to encourage student participation. It was clear to the researcher that Teacher 2 modified instructional presentations to ensure the success of all students.

Table 7

Raw Data Matrix: Observation in the Classrooms-Teacher 2

Observation	Effect of inclusion on learning opportunity for general education students
<p>Teacher 2 Monday 2/1/99 10:30am-12:00pm Math</p>	<p>“Today and for the rest of this week, we are going to spend a lot of time adding and subtracting fractions.”</p> <p>“Teacher stated objective in a clear and precise manner. All students appeared to understand objective." OC</p> <p>“ I do want you to understand the basic concept before moving into anything too difficult.”</p> <p>“Teacher stated the rationale for understanding fractions.” OC</p> <p>“Alright, turn to page 333. Read the discussion page for me Demetris. Read it nice and loud so everyone can hear you.”</p> <p>“Who can tell me how to do it on the chart?”</p> <p>“Johnathan, you are doing a good job.”</p> <p>“Wait a minute. We have a question.”</p> <p>“Of course, those of you who can go further, will be able to move beyond that point.”</p> <p>“Teacher constantly challenged all students to work to their maximum capacity.” OC</p> <p>“Alright, this particular example uses script we had last week. Lets look at the fraction chart and see if we can do the same thing Kenya did using the fraction chart.”</p> <p>“Come to the overhead Jonathan and show me how you came up with 3/4.”</p> <p>“Class, you all are doing a great job.”</p>

(table continues)

Table 7 (continued)

Observation	Effect of inclusion on learning opportunity for general education students
<p>Teacher 2 Tuesday, 2/2/99 12:45p.m.-2:00p.m. Reading</p>	<p>“Today we are going to read a story. The name of the story is “Down Under, Down Under”.</p> <p>“When you hear that title, what comes to mind Hanna?”</p> <p>“What makes you think it is about Australia?”</p> <p>“Yes, whenever you read about Australia, you do hear the term down under.</p> <p>“What makes you think scientists play a role in this story.”</p> <p>“Aierona, a little louder please.”</p> <p>“Do you know what it means? What does it mean Jake?”</p> <p>“Sit-up please”</p> <p>“I like the way you all are paying attention and respecting your fellow classmates.”</p> <p>“Correy, if you don’t have a reason for raising your hands, please don’t raise your hand.”</p>
<p>Teacher 2 Thursday 2/11/99 12:45p.m.-2:00p.m. Reading</p>	<p>“Today we are going to continue discussing the story we were reading on Tuesday.”</p> <p>“Who can tell me what we were discussing on Tuesday?”</p> <p>“Okay, we are going to complete our KWL Chart. These are the things that we know or think we know about a subject. We know a lot about corral reefs.”</p> <p>“We know that they are alive. We know they eat algae and minerals from the ocean. They live in warm climates and are found near the bottom of the ocean. They make homes and provide protection for other animals.”</p> <p>“So I guess your question is do they come in different sizes.”</p>

(table continues)

Table 7 (continued)

Observation	Effect of inclusion on learning opportunity for general education students
<p>Teacher 2 Thursday 2/11/99 12:45p.m.-2:00p.m. Reading (continued)</p>	<p>“Okay. How are the formed or how are the made?”</p> <p>“How do they survive?”</p> <p>“We know quite a few things, but we also want to know a lot of things about corral reefs. Now do we expect to find all the answers in here?”</p> <p>“So what do we have to do after we read it.”</p> <p>“Yeah, we may have to do some research and look at some more resources other than our textbook to get some of our answers.”</p> <p>“Can you speak a little louder honey.”</p> <p>“Hanna made the statement. Let her defend it.”</p> <p>“You mean it’s told in story form.”</p> <p>“Wait. One person at a time.”</p> <p>“Corral reefs. One thing you know about corral reefs, Rachel.”</p> <p>“Okay, something you know about corral reefs, Justin.”</p> <p>“John, what do you know about corral reefs?”</p>
<p>Teacher 2 Tuesday 2/16/99 Math</p>	<p>"Today, we will continue discussing fractions".</p> <p>"The objective was clearly written on the board." OC</p> <p>"Alright 7/8, count it out for me."</p> <p>"The teacher led the class through a brief guided practice exercise." OC</p> <p>"You're going to write a number sentence."</p>

(table continues)

Table 7 (continued)

Observation	Effect of inclusion on learning opportunity for general education students
Teacher 2 Tuesday 2/16/99 Math (continued)	"Okay, now let's get in our assigned groups to continue working on our fractions." "I'm going to give each group a problem to solve. I want you to solve it as a group." "Again I challenge you. Can that problem be reduced?" "Group 2 is doing a great job with their problem. They are talking, but they are doing it very quietly." "Do you understand what to do?" "Go for it!" "The teacher checked for understanding". OC

Note. OC denotes observations made by observer.

How the Principal and Teachers Determined That General Education Students Have a Meaningful Opportunity to Learn in Inclusive Classrooms

The principal determined that meaningful learning opportunities were evident for the general education students through the observation of student behavior, classroom participation, instructional strategies, and through monitoring students' performance on state-mandated tests. Each teacher mentioned monitoring students' work, observation and evaluating students' responses to questions as critical factors in determining whether meaningful learning opportunities for all students occurred. Teachers also stressed the importance for all students to actively engage in activities that promoted mastery and retention of skills in the content areas and enrichment classes such as music, media, art, and physical education (see Table 8).

Table 8

Raw Data Matrix on How the Principal and Teachers Determined Whether Regular Education Students Have a Meaningful Opportunity to Learn

Participants	How do you determine whether regular education students have a meaningful opportunity to learn?
Principal	<p>“That determination is made when I observe in and around the classroom.”</p> <p>“When I conduct formal and informal observations in the classroom, I can determine if all students are participating in what is going on in the classroom . ”</p> <p>“I observe the behavior of the students in any situation.”</p> <p>“I look at the end-of-grade test scores for each class.”</p> <p>“ When I have conferences with teachers, they inform me of the progress of their students. ”</p>
Teacher 1	<p>“I look at the scores they make on teacher-made tests”</p> <p>“Observing students in various situations is another way I determine if all students are learning.”</p> <p>“Results on the state-mandated tests give me an indication of just how much was understood by all.”</p> <p>“Other teachers inform you when they suspect that a student has not mastered a concept that you are responsible for teaching.”</p>
Teacher 2	<p>“I do a lot of whole group instruction.”</p> <p>“My tests are on grade level. I don’t water things down.”</p> <p>“I constantly monitor my students’ work and observe all of my students”</p> <p>“I do the same thing most teachers do. I ask a lot of questions and I give them challenging work.</p>

Summary

The principal and teachers' definitions of inclusion incorporated the concepts of collaborative planning by all teachers involved, including students in regular classrooms, and providing equitable educational opportunities to all children. Implementation of inclusion in this school district was left to the individual schools, their Individual Education Program (IEP) Committee, and classroom teachers. Teachers perceived that inclusion affected how they planned their work, how they interacted with other teachers, and how they implemented lessons. The principal felt that teachers changed instructional practices to accommodate all children and develop more favorable perception of exceptional children. There were no observable effects, positive or negative, of inclusion on the learning opportunities for regular and special education students.

CHAPTER 5

CONCLUSIONS, DISCUSSION, AND RECOMMENDATIONS FOR FUTURE RESEARCH

The purpose of the present study was to determine whether general education students have a meaningful opportunity to learn when they share a classroom with students with disabilities. To achieve this purpose, data were collected and analyzed in four areas: (1) principal and teachers' definitions of inclusion; (2) principal and teachers' perceptions of how inclusion is implemented in the school; (3) effects of inclusion on teachers' instructional practices; and (4) effects of inclusion on the learning opportunities for general education students. Conclusions, a discussion of results, and recommendations follow.

Conclusions

The conclusions are based on data collected from the principal and teachers during formal and informal interviews during the months of January and February 1999.

The Definition and Implementation of Inclusion

The principal and teachers were asked to define inclusion to ensure that the teachers and the principal fully understood the nature of the study and the concept being investigated. It was important to this study that all participants understood the term inclusion and the need for gathering data on current inclusive practices.

The principal's definition of inclusion centered on providing learning opportunities for every student in the school through collaborative teaching, joint planning, and ownership of all students by all teachers. The teachers agreed on a definition of inclusion that was in accord with popular thinking, but not completely aligned with the legal mandate of the IDEA to provide students with a free appropriate public education (FAPE) in their least restrictive environment (LRE). The teachers thoughts suggested that: (1) Students with disabilities should be included in regular classrooms and described an individualized process for determining placement (this process follows the law's requirement that to the maximum extent appropriate students with disabilities should be included in regular classrooms); (2) Joint planning to meet the needs of all students in the classroom should take place; and (3) The same educational opportunities should be provided to all students. Although the teachers described equitable opportunities, they used the misleading word same. However, the IDEA requires not sameness, but appropriateness of educational opportunities designed to provide benefit to those students who receive them.

The Individual Education Program (IEP) Committee determines how inclusion is implemented in this school. Class assignments of students whose IEPs require regular class placement are made by the building principal in collaboration with the IEP team designee. The principal also assigns teachers to these classes. As the IDEA requires, the primary members of the IEP Committee in this school include the parents or guardian of the student, a representative of the local educational agency, a special education teacher, a regular education teacher, and related service providers when appropriate.

Effects of Inclusion on Teachers' Instructional Practices

There was an effect on the teachers' perceptions of students with disabilities and on their instructional practices. Teachers also perceived the students with disabilities more positively. Instructional presentations were well planned and finely tuned by both teachers to meet the needs of all students in their classes. All students were actively engaged in the activities in the classroom.

Effects of Inclusion on the Learning Opportunities for General Education Students

There were no observable negative effects of inclusion on the learning opportunities for general education students in the classrooms involved in this study. The students in these classrooms actively participated in the class discussions and activities through cooperative groups. Students received teachers' assistance when needed. Teachers were not distracted by extended time with special needs learners or by behavioral interferences either in their self-reports or in the observed sessions.

Discussion

The Learning Opportunities of General Education Students

There were no observable negative effects on the learning opportunities of general education students in the two classrooms observed in this study. This conclusion was reached after observing each teacher four times. These results support previous literature which indicates that students of all grades, grouping, and achievement levels appreciate teachers who make instructional adaptations (Schumm & Vaughn, 1994). Staub and Peck (1995) also concluded that nondisabled students in inclusive classrooms were not harmed as a result of having disabled students in their classes. Denning (1995) suggested that average-achieving general education

students in inclusion classes do meet the same achievement levels on most subtests when compared to general education students in noninclusive classrooms.

Both teachers modified their instructional presentation so that all students would understand the lesson being presented. There was no evidence that general education students were affected in any way. There were no negative behaviors exhibited by the teachers nor was any student singled out in a nonprofessional manner during the visits. It should also be noted that the teachers said the students with disabilities in the two classes performed near grade level and did not require significant instructional modification nor additional time from the teachers observed.

Adjustments in Instruction

Both teachers indicated in their interviews that instructional monitoring of students' work, planning lessons to involve all students, arranging students in small cooperative learning groups, and presenting an array of instructional strategies when introducing new concepts were necessary to ensure all students an opportunity to learn in their classrooms. The teachers indicated that the modifications were designed to meet the needs of all of their students.

Both teachers were aware of the different learning styles of students and presented lessons incorporating different modes of communication. Both teachers presented concepts using visuals, incorporated technology when appropriate, assigned students to cooperative learning groups, and provided individual assistance when needed to all students.

Limitations

Caution is warranted in the interpretation of these results due to the limitations of the study. The two classrooms in which teaching practices were observed were selected by the principal of the school. The two classrooms were observed by the researcher four times each. Additional cases are needed to determine the effects of inclusion on regular education students. The students with disabilities in the two observed classrooms had mild disabilities and the teachers said that extensive instructional modifications were unnecessary. The inclusion of students with severe disabilities may have different effects on the instruction and learning of regular education students.

Recommendations for Future Research

Because the students with disabilities assigned to the two classes had mild learning

disabilities that did not require extensive instructional modifications by the teachers, future research might include classes that have more students with moderate or severe disabilities whose needs demand more assistance from the teachers. Future research might also involve the observation of three or more classrooms for an extended period of time. Additional observations will allow the researcher time to fully understand the teachers' schedules and other demands not observed in the classroom. Both teachers arranged their classes in cooperative groups. Future research might look at the participation of all students in the cooperative groups.

REFERENCES

- Ary, D., Jacobs, L. C., & Razavieh, A. (1996). Introduction to research in education. Philadelphia: Harcourt
- Baker, E. T., Wang, M. C., & Walberg, H. J. (1995). The effects of inclusion on learning. Educational Leadership, 52 (4), 33-34.
- Brophy, J. E., & Good, T. L. (1986). Teacher behavior and student achievement. In M. C. Wittrock (Ed.), Handbook of research on teaching (3rd ed., pp. 328-375). New York: Macmillan.
- Denning, Jr., W. V. (1995). An analysis of the effects of full-time inclusion on the academic achievement of elementary general education students. Unpublished doctoral dissertation, Virginia Polytechnic Institute and State University, Blacksburg, VA.
- Dugger, J. M. (1994). Perceptions and attitudes of teachers toward inclusion of handicapped students. Illinois School Research and Development Journal, 23, 5-7.
- Evans, M., Holland, B., & Nichol, P. (1996). Implementing a balanced inclusion program. Principal Magazine.
- Fuchs, D., & Fuchs, L. (1994). Inclusive schools movement and the radicalization of special education reform. Exceptional Children, 60, 294-309.
- Fuchs, D., & Fuchs, L. (1995). What's "special" about special education? Phi Delta Kappan, 76, 522-529
- Hines, R. A., & Johnston, J. H. (1996). Promoting achievement in inclusive classrooms: The principal's role. National Association of Secondary School Principals.
- Hocutt, A. M. (1996). Effectiveness of special education: Is placement the critical factor. The Future of Children: Special Education for Students with Disabilities, 6, 1, 77-102.
- Kauffman, J. M. (1989). The regular education initiative as Reagan-Bush education policy: A trickle-down theory of education of the hard-to-teach. Journal of Special Education, 23, 256-278.
- Lerner, J. (1997). Learning disabilities: Theories, diagnosis, and teaching strategies. Boston: Houghton Mifflin
- Lewis, R.B., & Doorlag, D. H. (1999). Teaching special students in general education classrooms. Columbus: Merrill.

O'Neil, J. O. (1995). Can inclusion work? A conversation with Jim Kauffman and Mara Sapon-Shevin. Educational Leadership.

Marston, D. (1996). A comparison of inclusion only, pull-out only, and combined service models for students with mild disabilities. The Journal of Special Education, 30(2), 121-132.

Murphy, D. M. (1996). Implications of inclusion for general and special education. The Elementary School Journal, 96(5), 469-487.

Office of Special Education Programs. (1997). Seventeenth annual report to congress on the implementation of the individuals with disabilities act. Washington, DC: U.S. Department of Education.

Patton, M. (1990). Qualitative evaluation and research methods. Newbury Park, CA: Sage.

Patzkowsky, B. L. (1995). Full inclusion is not for all students; A continuum of services must be provided. Western Michigan University.

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

Roach, V. (1993). Winners all: A call for inclusive schools. PTA Today, 18, 13-14.

Roach, V. (1995). Supporting inclusion: Beyond the rhetoric. Phi Delta Kappan, 295-299.

Sikorski, M. F., Niemiec, R. P., & Walberg, H. J. (1996). A classroom checkup: Best teaching practices in special education. Teaching Exceptional Children, 27-31.

Smith, J. D. (1998). Inclusion: Schools for all students. New York. Wadsworth.

Stainback, S., & Stainback, W. (1992). Learning for all students: Curriculum consideration in inclusive classroom facilitating. Baltimore: Brooks Publishing.

Staub, D., & Peck, C. A. (1995). What are the outcomes for nondisabled students? Educational Leadership, 52, 36-40.

Schumm, J. S., & Vaughn, S. (1995). Meaningful professional development: Lesson learned. Remedial and Special Education, 16(6), 344-353.

Thousand, J., & Villa, R. A. (1995). Inclusion alive and well in the green mountain state. Phi Delta Kappan, 288-291.

Udyari-Solner, A., & Thousand, J. (1996). Creating a responsive curriculum for inclusive schools. Remedial and Special Education, 17(3), 182-192.

Vaughn, S., & Schumm, J. S. (1995). Responsible inclusion for students with learning disabilities. Journal of Learning Disabilities, 28(5), 264-270, 290.

Vaughn, S., Schumm, J. S., & Brick, J. B. (1998). Using a rating scale to design and evaluate inclusion programs. Teaching Exceptional Children, (2), 41-46.

Wigle, S. E., & Wilcox, D. J. (1996). Inclusion: Criteria for the preparation of education personnel. Remedial and Special Education, 17(5), 323-328.

Willis, S. (1995). Inclusion gains ground: Movement raises both hopes and concerns. Association for Supervision and Curriculum Development, 37(9).

Wong, K. L., Kauffman, J. M., & Lloyd, J. W. (1991). Choices for integration: Selecting teachers for mainstreamed students with emotional or behavioral disorders. Intervention in School and Clinic, 27, 108-115.

Wright, S. P., Horn, S. P., & Sanders, W. L. (1997). Teacher 1nd classroom context effects on student achievement: Implication for teacher evaluation. Journal of Personnel Evaluation in Education, 11, 57-67.

Yin, R. K. (1994). Case Study Research: Design and Methods. London: Sage Publication.

Appendix A

Rating Scale of Components of a Responsible Inclusion Program

for Students with High-Incidence Disabilities

(Vaughn, Schumm, & Brick, 1998)

Directions: Rate each item on a 3-point scale.
 3 = implements
 2 = implements partially
 1 = does not implement or implements poorly

Component and Item	Rating
I. Each Student's Educational Needs Are Considered First	
1. Each student's academic progress and likelihood for success in an inclusion program influences placement in an inclusion program.	1 2 3
2. Each student's social progress and emotional needs influence placement in an inclusion program.	1 2 3
3. Alternative intervention models within the school are available for students who are not successful within an inclusion model.	1 2 3
4. Procedures for individually determining each student's progress in an inclusion setting are established and implemented (e.g., progress on a measure of oral reading).	1 2 3
5. Programs are designed to fit the needs of students rather than students forced to fit established programs.	1 2 3
II. Teachers' Skills, Knowledge, and Attitudes Toward Inclusion Classrooms	
6. General education teachers who teach in inclusion classrooms demonstrate beliefs and skills that facilitate their effectiveness in addressing the diverse learning needs of students with disabilities.	1 2 3
7. Teachers self-select their involvement in inclusion classrooms.	1 2 3
8. Teachers involved in co-teaching participate in selecting their co-teaching partner.	1 2 3
9. All teachers at the school identify the importance of accepting and valuing all students.	1 2 3

10. Teachers (general and special education) exhibit an orientation to instruction for students with disabilities that indicates their responsibility for the students' success. 1 2 3
- III. Adequate Resources Are Provided
11. Inclusion programs are viewed as investments and not as ways to reduce special education costs. 1 2 3
12. Staff and administration are committed to providing the resources necessary to develop or maintain high-quality inclusion classrooms. 1 2 3
13. Adequate personnel are available to provide effective inclusion models. 1 2 3
14. Teacher-student ratio is adequate to meet the instructional and social needs of students with disabilities in inclusion classrooms. 1 2 3
15. Adequate materials and curriculums are available to meet the needs of students with disabilities in inclusion classrooms. 1 2 3
16. Adequate technology is available to enhance learning of students with disabilities. 1 2 3
- IV. Inclusion Models Are Developed and Implemented at the School-Based Level
17. School personnel are involved in the development and implementation of the inclusion model. 1 2 3
18. Teachers and key stakeholders perceive that the school-level administrator is supportive of responsible inclusion programs. 1 2 3
19. The inclusion model reflects the need of the students in that school. 1 2 3
20. The implications of inclusion are considered for all school personnel (bus drivers, cafeteria workers, after-care workers, etc.). 1 2 3
- V. Parents Are Involved in the Development and Implementation of the Inclusion Model
21. Parents' views are considered when students' service-delivery models are implemented. 1 2 3
22. A plan is in place to gain the support of parents in the community. 1 2 3

23. A systematic, ongoing method of communication is planned to ensure that parents are informed about the placement of their children. 1 2 3
- II A Continuum of Services Is Maintained
24. School personnel realize that the needs of all students with high-incidence disabilities are unlikely to be met within the inclusion model. 1 2 3
25. Alternative services (e.g., resource, pullout, or self-contained classes) are available to meet the needs of students who are not progressing adequately within the inclusion model. 1 2 3
26. Students with disabilities are not placed in general education classrooms merely because alternative services are not available. 1 2 3
- VII. The Service Delivery Model Is Continually Evaluated and Altered
27. Procedures for evaluating the inclusion service-delivery model have been identified and are systematically implemented. 1 2 3
28. Effective inclusion models for high-incidence disabilities that are implemented at other sites are visited so as to identify successful components. 1 2 3
29. Procedures for fine-tuning and improving the inclusion model are considered on an ongoing basis. 1 2 3
- VIII. Ongoing Professional Development
30. The skills and knowledge needed by all the professionals at the school are assessed and considered when designing professional development experiences. 1 2 3
31. Professional development opportunities designed to meet the needs of all professionals, including support staff (cafeteria workers, after-school workers, etc) are provided on an ongoing basis to enhance their skills with students with disabilities. 1 2 3
32. Opportunities to visit classrooms of teachers who are effectively meeting the needs of students with disabilities in inclusion settings are provided. 1 2 3

IX. Philosophy on Inclusion Is Developed at the School Level

33. Opportunities to discuss issues related to inclusion are provided for all key stakeholders in the school, including teachers, parents, and support staff. 1 2 3
34. A written philosophy on inclusion exists that is endorsed by key stakeholders in the school. 1 2 3
35. The written philosophy on inclusion provides guidelines for the development of policy and service-delivery models. 1 2 3

X. Curriculum Approaches That Meet the Needs of All Students Are Developed and Refined

36. Appropriate instructional practices that increase active and intensive participation of students with disabilities in the learning tasks are implemented. 1 2 3
37. Teachers make instructional adaptations to meet the learning needs of students with disabilities. 1 2 3
38. Teachers make adaptations in materials to meet the learning needs of students with disabilities. 1 2 3
39. Adequate teacher time is allocated to meeting the needs of students with disabilities in the general education classroom. 1 2 3
40. Opportunities for reteaching or providing additional support for students with disabilities is evident. 1 2 3

XI. Roles and Responsibilities of the Special Education Teacher and Other Specialists (e.g., Speech and Language Therapist)

41. The roles and responsibilities of the special education Teacher and other specialist (e.g., speech and language therapist) within the inclusion model are specified. 1 2 3
42. Adequate opportunities for the special education Teacher and other specialists to provide direct and intensive education for students with disabilities is available. 1 2 3
43. Adequate time is available to co-plan and collaborate with other professionals, including the general education teacher. 1 2 3

XII. Roles and Responsibilities of the General Education Teacher

- 44. The role and responsibilities of the general education teacher within the inclusion model are specified. 1 2 3
- 45. Adequate opportunities for the general education teacher to provide appropriate instruction for students without disabilities is available. 1 2 3
- 46. Adequate time to co-plan and collaborate with other professionals, including the special education teacher, is provided. 1 2 3
- 47. Special area teachers (art, music, physical education) are provided with training and support as related to the students with disabilities in their classes. 1 2 3

Appendix B

A Classroom Checkup: Best Teaching Practices in Special Education

(Sikorski, Niemiec, & Walberg, 1996)

Observation Form for Productive Teaching Practices

Observer _____ Date _____
Instructor _____
Beginning Time _____ End Time _____

Scale for each Item:

Y = Yes, observed N = No, not observed N/A = Not applicable

Step 1: Introducing the Lesson

- | | | | | |
|----|---|---|---|-----|
| 1. | Presents brief overview of new concepts | Y | N | N/A |
| 2. | Relates new concepts to previous learning | Y | N | N/A |
| 3. | Alerts students to key questions that need to be answered | Y | N | N/A |
| 4. | Identifies specific objectives | Y | N | N/A |
| 5. | Conveys benefits of lesson | Y | N | N/A |
| 6. | Presents schedule of activities | Y | N | N/A |
| 7. | Clarifies expectations | Y | N | N/A |
| 8. | Establishes behavioral norms | Y | N | N/A |
| 9. | Uses pretests, if necessary | Y | N | N/A |

Step 2: Presenting the Lesson

- | | | | | |
|-----|--|---|---|-----|
| 10. | Proceeds in small steps at rapid pace | Y | N | N/A |
| 11. | Demonstrates or models appropriate behavior | Y | N | N/A |
| 12. | Signals transition between main points and key ideas | Y | N | N/A |
| 13. | Maintains eye contact | Y | N | N/A |
| 14. | Uses correct grammar-avoids jargon | Y | N | N/A |
| 15. | Speaks with expression and uses a variety of vocal tones | Y | N | N/A |

16.	Uses concrete and everyday examples	Y	N	N/A
17.	Shows nonexamples	Y	N	N/A
18.	Uses a variety of learning modalities (e.g., auditory, visual, and tactile)	Y	N	N/A
19.	Encourages students to paraphrase, summarize, or relate new information to existing knowledge	Y	N	N/A
20.	Asks higher-order, challenging questions	Y	N	N/A
21.	Suggests how new information could be applied to problem-solving	Y	N	N/A
22.	Models organizational learning strategies of outlining or creating a hierarchy	Y	N	N/A
23.	Demonstrates and encourages a variety of learning strategies	Y	N	N/A
24.	Demonstrates and encourages students to check their own comprehension	Y	N	N/A
25.	Encourages students to self-praise	Y	N	N/A
26.	Summarizes key concepts	Y	N	N/A

Step 3: Student Participation

27.	Sets high standards	Y	N	N/A
28.	Sets schedule of activities and identifies needed resources	Y	N	N/A
29.	Uses a variety of activities, including group exercises, demonstrations, debates, field experiences, and beadwork	Y	N	N/A
30.	Redirects student questions back to group	Y	N	N/A
31.	Uses a variety of comprehension checks to ensure that all students understand	Y	N	N/A
32.	Discourages inappropriate behaviors	Y	N	N/A

- | | | | | |
|-----|--|---|---|-----|
| 33. | Engages all students-for example, reminds silent students to participate | Y | N | N/A |
| 34. | Encourages peer interaction and cooperation | Y | N | N/A |
| 35. | Identifies and praises significant accomplishments | Y | N | N/A |

Step 4: Corrective Feedback

- | | | | | |
|-----|--|---|---|-----|
| 36. | Reviews content when necessary | Y | N | N/A |
| 37. | Reteaches when necessary | Y | N | N/A |
| 38. | Provides appropriate homework and explains assignments fully | Y | N | N/A |
| 39. | Provides accurate and rapid feedback on homework assignments | Y | N | N/A |
| 40. | Tests frequently, using a variety of evaluation strategies, particularly alternative assessments that include peer or self-assessment. | Y | N | N/A |

Appendix C

School demographic by grade level

Enrollment by grade level

Grade	Gen. Ed.	Special ed.
1	73	6
2	69	6
3	76	9
4	67	12
5	67	8
K	76	5

Appendix D

Teachers' Observation Schedule

	Day	Time	Subject
Teacher 1	Monday	8:00am - 9:45am	Math
	Tuesday	9:45am - 11:20am	Reading
	Thursday	9:45am - 11:20am	Reading
	Tuesday	12:20pm - 1:30pm	Math
Teacher 2	Monday	10:30am - 12:00pm	Math
	Tuesday	12:45pm - 2:00pm	Reading
	Thursday	12:45pm - 2:00pm	Reading
	Tuesday	8:00am -9:00am	Math

VITA

John A. Dixon, Jr.

Academic Degrees

Ed.D.	1999	Virginia Polytechnic Institute and State University, Educational Leadership and Policy Studies
C.A.G.S.	1996	Virginia Polytechnic Institute and State University, Educational Administration
Certification	1987	East Carolina University, Administration
MAED	1982	East Carolina University, Mental Retardation
B.S.	1971	Elizabeth City State University, Social Science/History

Professional Experience

1991-Present	Coordinator—Special Education, Visiting Assistant Professor, Elizabeth City State University, Division of Education, Elizabeth City, North Carolina
1990-1991	Principal, Pasquotank County Board of Education, Elizabeth City, North Carolina
1989-1990	Member/Consultant, State Visiting Team, North Carolina (Region 1)
1988-1990	Assistant Principal, Camden Board of Education, Camden, North Carolina
1984-1988	Department Chairman, School-based Committee Chairman, Camden Board of Education, Camden, North Carolina
1979-1981	Rural Outreach Program, Elizabeth City State University, Elizabeth City, North Carolina
1974-1982	Teacher, College of Albemarle (GED), Elizabeth City, North Carolina
1971-1974	Teacher, Cape Charles High School, Cape Charles, Virginia

Professional and Academic Association Memberships

Council for Exceptional Children
Phi Delta Kappa