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AN ANALYSIS OF CHANGES IN THE EFFECTIVENESS OF THE SPECIAL EDUCATION PROGRAM AND THE COSTS OF PROVIDING SPECIAL EDUCATION SERVICES AS A RESULT OF THE IMPLEMENTATION OF INCLUSION

A Dissertation Presented

by

JEAN STRATHIE

Submitted to the Graduate School of the University of Massachusetts Amherst in partial fulfillment of the requirements for the degree of DOCTOR OF EDUCATION

February 1999

School of Education
AN ANALYSIS OF CHANGES IN THE EFFECTIVENESS OF THE SPECIAL EDUCATION PROGRAM AND THE COSTS OF PROVIDING SPECIAL EDUCATION SERVICES AS A RESULT OF THE IMPLEMENTATION OF INCLUSION

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ABSTRACT

AN ANALYSIS OF CHANGES IN THE EFFECTIVENESS OF THE SPECIAL EDUCATION PROGRAM AND THE COSTS OF PROVIDING SPECIAL EDUCATION SERVICES AS A RESULT OF THE IMPLEMENTATION OF INCLUSION

FEBRUARY 1999

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Directed by: Professor Patricia G. Anthony

This study examined and evaluated the results of one Massachusetts school district’s decision to provide special education services in the regular classroom through the implementation of a model of service delivery commonly called inclusion. This decision caused radical changes in how special education services were delivered to students who had wide-ranging special needs.

This study examined the changes in perceptions about whether this new service delivery model was meeting the needs of the students receiving them, given their varied special needs, as well as cost and enrollment changes from 1993 to 1996.

The perceptions of the respondents about the effectiveness of the special education services provided through the utilization of the new service delivery model indicated that it did not meet the needs of the students who received them. The respondents did, however, believe that there were increased social benefits for students who have disabilities who received their special education services through the utilization of the inclusion model.
There were increases in the costs of providing special education services between 1993 and 1996 that were substantially higher than the comparable costs for providing regular education services. There were decreases in the enrollments in special education programs while, conversely, there were increases in the enrollments of regular education programs from 1993 to 1996.

There were also some conclusions that can be presented about whether the utilization of this service delivery model maximized the utilization of educational resources. It did not seem that the inclusion model of providing special education services maximized the utilization of educational resources, nor did it appear that the inclusion model of providing special education services to students who have special needs was a cost-effective way to provide these services.
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CHAPTER 1

INTRODUCTION

Background of the Problem

In 1975, the Education for All Handicapped Children Act (P.L. 94-142) was implemented to assure that every child between the ages of three and twenty-one who has a disability would be provided a "free appropriate public education" in the least restrictive environment consistent with the child's needs. Since then, public schools throughout the country have become responsible for educating not only those children with mild disabilities, but also children whose disabilities are so severe that it once was thought their needs only could be met in specialized institutions. In 1986, P.L. 99-457 was passed to ensure that all three- through five-year-olds who have disabilities also would receive the educational services specified in P.L. 94-142. In 1990, new provisions were added to P.L. 94-142 and the name was changed to the Individuals with Disabilities Education Act (IDEA).

The new provisions included in the IDEA broadened the scope of the original law and made eligibility for service more inclusive. Any child with "mental retardation, hearing impairments including deafness, speech or language impairments, visual impairments including blindness, serious emotional disturbance, orthopedic impairments, autism, traumatic brain injury, other health impairments, or specific learning disabilities" is eligible to receive educational services that he or she needs (IDEA, sec.1401[a][1], 1990). The IDEA has a zero-reject policy, which means that no
child with disabilities, no matter how severe, can be denied services (Timothy W. v. Rochester School District, 1989).

Chapter 766 of the Acts of 1972, the comprehensive special education law in Massachusetts, holds state and local officials in Massachusetts to a higher standard of special education services than other states. Although Chapter 766 is similar to the IDEA, there are some distinctions.

The most significant distinction between Chapter 766 and IDEA is in the level of education that each law mandates. IDEA requires a free appropriate public education that consists of "educational instruction by such services as are necessary to permit the child to benefit from the instruction". . . . Chapter 766, on the other hand, requires that special education programs meet the needs and maximize the capabilities of a disabled child, and that the Individualized Educational Plan be structured so as to provide the child with the "maximum feasible benefit" in the "least restrictive environment" consistent with that goal (DiNucci, 1991, pp.10-11).

The IDEA mandates that special education services be provided in the least restrictive environment in which the individual needs of the child can be met. The IDEA also mandates that the child only can be removed from the regular educational environment when the nature or severity of his disability is such that his education cannot be achieved satisfactorily in this environment even with supplementary aides and services (sec.1412[5][B]). Chapter 766 requires special education programs to meet the needs and to maximize the capabilities of a disabled child, and meet the needs of the child with the "maximum feasible benefit" in the "least restrictive environment" (DiNucci, 1991).

Although the intentions of both the IDEA and Chapter 766 were to assure that all children with disabilities would have the right to a free public education in the least
restrictive environment, during the 1980s most special education services were provided in segregated settings. Students who had disabilities were placed in special class settings or they were pulled out of the regular classroom for individualized educational services in special education classrooms (Will, 1986).

During the first part of the 1980s approximately three-quarters of all special education students in this country received their special education services in pull-out or separate programs (Gartner & Lipsky, 1987). In Massachusetts between the 1979-80 and 1988-89 school years, there was a shift to more students receiving more of their special education services outside of the regular classroom. During the 1979-80 school year 60.5% of the students in special education programs were in a regular classroom program with only up to 25% of their time spent outside the classroom in specialized services (prototype 502.2), while during the 1988-89 school year only 48.2% of these students were being serviced in the prototype 502.2. This change was accompanied by shifts in the 502.3 prototype (where up to 60% of the student's time is spent outside of the regular classroom) and the 502.4 prototype (where a student attends a special class composed entirely of other students with similar special needs for more than 60% of his/her school day). During the 1979-80 school year 11.4% of the students in special education programs were in the 502.3 prototype. This increased to 14.9% during the 1988-89 school year. An even greater increase was found in the students who were in the 502.4 prototype. During the 1979-80 school year 13.0% of the students were in the 502.4 prototype and during the 1988-89 school year this had increased to 19.8% (DiNucci, pp. 118-120).
Similar patterns were seen in the Barnstable, Massachusetts school district. Between the 1979-80 and 1988-89 school years there were increases in the amount of time that students with special needs were out of the regular classroom to receive special education services. While students in the 502.1 prototype increased from 8.0% to 12.9%, the students in the 502.2 prototype decreased from 70.1% in 1979-80 to 52.6% in 1988-89. Increases from 3.2% to 9.9% occurred in the 502.3 prototype and from 13.0% to 17.1% in the 502.4 prototype (Barnstable, 1979, 1988).

The number of children with disabilities and who received special education services in public schools increased during the 1980s. More than 4 million children who comprised 11% of the enrollment of public schools throughout the country received special education services in public schools in 1990 (U.S. Department of Education, 1991). The number of students who received special education services in Massachusetts and the amount of special education services they received also increased considerably during the 1980s. During the ten-year period between the 1979-80 and 1988-89 school years, while total public school enrollment (headcount) in Massachusetts decreased 20.0%, enrollment (headcount) in special education programs increased 5.6%. The amount of time that students spent in special education programs also increased. During this same period of time, the pupils served (full-time equivalent) increased 52.7% (DiNucci, 1991, pp. 118-120). DiNucci also reported that during the 1980-81 school year 13.4% of the total student enrollment received special education services and during the 1989-90 school year this figure increased to 17.1% (1991, p. 20). These trends are expected to continue until at least through the 1990s (DiNucci, 1991, p. 31).
Similar patterns have occurred in special education enrollments in the Barnstable school district. During the 1979-80 school year 9.2% of the students in Barnstable received special education services. During the 1988-89 school year this increased to 15.8%. During this same time period, the total school enrollment increased 0.9% while the special education enrollment increased 73.5% (Barnstable, 1979, 1988). During the late 1980s new ways to provide special education services in the regular educational environment were proposed. The Regular Education Initiative (Will, 1986) called for integrating students who have disabilities into the regular classroom. Proponents of this more inclusive approach predicted that this would benefit all students by ending a dual system of educating students with disabilities and their non-disabled peers in separate programs and by creating a unitary system of quality education that will create exemplary programs for all students (Gerrard, 1994; Lipsky & Gartner, 1989, 1994; Stainback, Stainback & Bunch, 1989; Will, 1986).

Opponents of this approach felt that this was being proposed primarily as a cost-saving measure and viewed it as a way to reduce federal influence and expenditures for special education. They raised equity and civil rights issues and were fearful that students with disabilities would be placed at even greater risk when they were included in regular classroom programs (Fuchs & Fuchs, 1994; Hocutt, Martin & McKinney, 1991; Kauffman, 1989; Martin, 1995; Weintraub, 1991).

Statement of the Problem

During the past few years since the movement toward more inclusive special education service delivery models, there have been significant changes in a) how special
education services are delivered to students who have disabilities; b) the number of students who receive these services; and c) the costs of these services. These changes have been evident throughout the country, in Massachusetts, and in the Barnstable school district.

Both the proponents and the opponents of the movement for more inclusive special education service delivery models offer convincing arguments. However, important questions have been raised and the answers are unclear. In order to answer these questions and to make important decisions about these changing service delivery models, there is a need to evaluate the effectiveness of special education programs in meeting the needs of individual students with disabilities. There is also a need to examine the changes that have occurred in where these services are provided and the costs of these services. These efforts should be comprehensive and should include the analysis of descriptive and quantitative data to determine the benefits of changing special education service delivery systems (Lewis, Bruininks, Thurlow, & McGrew, 1988; National Association of State Boards of Education, 1992).

Purpose of the Study

The purpose of this study was to examine and evaluate the results of one district’s decision to provide special education services in the regular classroom as an example of the many complex issues related to full inclusion. The school district that was examined is the Barnstable Public Schools which radically changed its delivery of special education services during the early 1990s.
During the 1990-91 and 1991-92 school years, many students who had more substantial special needs and were in out-of-district day school placements were returned to self-contained classrooms within the school district. The special needs of these students had previously not been able to be met in programs within the district because of the nature and severity of their disabilities. At the beginning of the 1992-93 school year, the self-contained programs in the Barnstable elementary schools in which these students were placed were closed, and the special education service delivery model was changed from one utilizing segregated programs to one implementing a full inclusion model. At the beginning of the 1993-94 school year, self-contained programs in which students with more substantial disabilities were placed at the middle and high school levels, were closed and a full inclusion service delivery model was implemented at this level as well. The move to a full inclusion model of delivering special education services to students who had milder disabilities did not occur at all levels until the beginning of the 1995-96 school year.

Barnstable Public Schools was chosen as the school district for this study because the move to full inclusion occurred first with the students whose needs had previously been met in the most restricted programs within the district. This change in the special education service delivery was implemented within a short time span and with limited preparation beforehand. Typically, school districts have implemented inclusion initiatives with students who have the least severe disabilities and whose special needs are met in the least restrictive programs within these districts. Also typically, these districts have then moved to include students with more substantial
disabilities over the next several years with increased preparation as these changes occur.

This study examined the new special education service delivery model in the Barnstable Public Schools and explored whether the model was meeting the needs of the students who received the services, given their varied special needs. It investigated whether this new service delivery model maximized the utilization of educational resources and examined comparisons between providing special education services through this new service delivery model being utilized in Barnstable and the previous service delivery models. It examined changes in special education costs and enrollments and the relationships between the changes in regular education costs and enrollment increases. It determined whether there were trends in the costs and enrollment patterns.

**Definition of Terms**

**Child**: school age child: any person of ages three through twenty-one to his/her twenty-second birthday, who has not obtained a high school diploma or its equivalent.

**Child in need of special education**: a child who has been determined by the evaluation team to need special education because of his/her disability is unable to progress effectively in regular education and who requires special education services in order to successfully develop his/her individual educational potential.

**Disability**: One or more of the following impairments:

Developmental Delay - The learning capacity of a child is limited, impaired, or delayed and is exhibited by difficulties in: receptive and/or expressive language;
cognitive abilities; physical functioning; social, emotional, or adaptive functioning; and/or self-help skills.

Intellectual - The capacity for performing cognitive tasks, functions, or problem solving is significantly limited, impaired, or delayed and is exhibited by: a slower rate of learning; disorganized patterns of learning; difficulty with adaptive behavior; and/or difficulty understanding abstract concepts.

Sensory - The capacity to see, even with correction, and/or hear is limited or impaired and is exhibited by: reduced performance in visual and/or hearing acuity tasks; difficulty with written and/or oral communication; and/or difficulty with understanding visual and/or auditory information as presented in the environment.

Neurological - The capacity of the child’s nervous system is limited or impaired and is exhibited by difficulties in: the use of memory; the control and use of cognitive functioning; sensory and motor skills; speech; language; organizational skills; information processing; affect; social skills; and/or basic life functions.

Emotional - The capacity to manage individual or interactive behaviors is limited, impaired, or delayed and is exhibited by difficulty which persists over time in the ability to: understand, build, or maintain interpersonal relationships; react and/or respond within established norms; keep normal fears, concerns, and/or anxieties in perspective; and/or control aggressive and/or angry impulses or behavior.

Communication - The capacity to use expressive and/or receptive language is limited, impaired, or delayed and is exhibited by difficulties in: speaking; and/or conveying, understanding, or using spoken, written, or symbolic language.
Physical - The capacity to move, coordinate actions, or perform physical activities is significantly limited, impaired, or delayed and is exhibited by difficulties in: physical and motor tasks; independent movement within the environment; and/or performing basic life functions.

Specific Learning - The capacity to use one or more of the basic psychological processes involved in understanding or in using spoken or written information is limited, impaired, or delayed and is exhibited by a significant discrepancy between achievement and intellectual ability in: listening; reading; thinking; speaking; writing; spelling; computing; and/or calculating.

Health - The physiological capacity to function is limited or impaired and is exhibited by: limited strength, vitality, or alertness; and/or difficulty in performing basic life functions.

Free appropriate public education: special education and related services which:
a) are provided at public expense under public supervision and direction and without charge; b) meet Massachusetts education standards; c) are provided to child in need of special education in preschool, elementary, or secondary education; d) are provided in conformity with an individualized educational plan; and e) assure maximum possible development.

Inclusion: the provision of special education services to each student, regardless of the nature of, or severity of his/her disability, within the regular classroom environment.

Individualized Educational Plan (IEP): the plan developed by the TEAM that describes the special education and related services which the child requires and
includes the following: a) the child’s current functioning; b) any measurable physical constraints on his/her performance; c) his/her learning style; d) yearly educational objectives and quarterly goals; e) suggested methodology and teaching approaches; f) methods and criteria for monitoring progress in meeting yearly objectives and program adequacy; g) a description of child’s participation in the regular education program; h) support services to the regular education teacher; i) the child’s physical education program; j) the criteria for movement to a less restrictive environment; k) a statement regarding the child’s expectations regarding the regular discipline code; l) the types and amounts of related services for the child; m) a statement about any parent-child instruction that is necessary; n) the child’s transportation needs; o) location of related services provided to the child; p) specialized materials and equipment needed by the child; q) the daily duration of the child’s program; r) the number of days per year the program will be provided; s) the starting date for each service; t) a statement about whether the child is expected to graduate from high school, criteria for graduation, and a plan for meeting these criteria; u) a statement about the child’s need for transition services for post-school activities; and v) the designation of the prototype through which the child’s program is to be provided and the specific program within each prototype.

Integration: the placement of students who have disabilities in educational programs also serving students who have no disabilities.

Least restrictive environment: the program and placement that ensures, to the maximum extent appropriate, given the child’s specific needs, that a child in need of special education is educated with children who are not in need of special education services and that a child in need of special education services is removed from the
regular education environments only when the nature of severity of the special needs is such that education in regular classes with the use of supplementary aids and services cannot be achieved satisfactorily.

Mainstreaming: involves the placement of students who have less severe disabilities in regular educational settings with the provision of support services when necessary.

Program prototypes:

502.1 special education services are provided to a child solely in the regular education classroom.

502.2 child spends no more than 25% of his/her time out of the regular education classroom.

502.3 child spends no more than 60% of his/her time out of the regular education classroom.

502.4 child is placed in a substantially separate program within the public school regular education facility.

502.4i child is placed in a substantially separate program in a facility other than a public school regular education facility.

502.5 child is placed in a private day facility for his/her school day.

502.6 child is placed and lives in a private residential facility.

502.7 child is either in a hospital or home placement.

502.8 child is placed in a home-based or integrated or separate center-based preschool program.
Pull-out program: any program outside of the regular education classroom where special education services are provided to a child in need of special education services.

Regular Education Initiative: a program model that proposes that any child, with or without a disability, be provided with the educational services he/she needs within the regular classroom environment.

Regular education program: the school program in which children without the need of special education services are assigned.

Resource room: a room within a public school regular education facility, but outside of the regular education classroom, in which a child with a disability may go to receive special education services.

Self-contained program: a special education program which is made up entirely of children in need of special education services who are grouped together because the methods and goals stated in each child’s Individualized Educational Plan (IEP) is compatible with the IEPs of the other children in the program.

Special education: specially designed instruction which is provided at no cost to the parents to meet the unique needs of a child in need of special education to develop the child’s educational potential.

TEAM: the team whose members refer a child for special education services, evaluate the child for special education services, and write the Individualized Educational Plan.
To progress effectively in regular education: to make documented growth in the acquisition of knowledge and skills within regular education according to chronological age and the individual educational potential of the child.

**Significance of the Study**

This study is significant because it expanded the knowledge within the field of special education by investigating whether the inclusion model of delivering special education services was meeting the needs of the students who received these services. This study expanded the knowledge and explored the following specific areas:

1. Whether the inclusion model of delivering special education services was perceived to be an effective way to meet the needs of the students who received these services.
2. Whether there were changes in special education costs.
3. Whether there were changes in special education enrollments.
4. Whether there were trends in the patterns of the perceptions about the effectiveness of the inclusion model in delivering education services, special education costs, and special education enrollments.
5. Whether the inclusion model maximized the utilization of educational resources.
6. Whether the inclusion model was a cost-effective way to provide special education services.

This study is significant because it investigated the results of the Barnstable, Massachusetts school district's decision to provide special education services in the
regular classroom. This decision was radical because: (1) the move to full inclusion in this district occurred first with the students whose needs had previously been met in the most restrictive programs within the district; (2) this change was implemented within a short time span; and (3) there was limited preparation for this change before it was implemented.

**Delimitations**

This study focused only on the changes that occurred in the delivery of special education services in the Barnstable Public Schools between the 1992-93 school year and the 1995-96 school year and may not be generalizable to other school districts. Since the researcher was a special education department head in the district and may have had a substantial interest in the results of this study, the issue of contamination is recognized. While the issue of contamination is recognized as a possible limitation of this study, it may also have been a possible strength of this study. The researcher had a proven ability to work with students, teachers, administrators, and parents within the district, and had served as an evaluator of a five-year study of seven Massachusetts school districts in the implementation of their initiatives to more fully integrate students who have special needs into regular education programs.

**Outline of the Study**

Chapter 1 includes the background of the problem, the statement of the problem, the purpose of the study, definition of terms, significance of the study, delimitations of the study, and an outline of the study. A review of related literature is presented in
Chapter 2. Chapter 3 presents the design of the study and the methodology. Research results and discussion, including the analysis and display of the data, are presented in Chapter 4. Chapter 5 presents a summary of the study, conclusions to be drawn, and recommendations for further study.
CHAPTER 2

REVIEW OF THE LITERATURE

Introduction

The purpose of this chapter is to review and analyze the literature related to the implementation of the new special education service delivery model being utilized in the Barnstable Public Schools. In this model, students who have disabilities receive their special education services within the regular classroom rather than through segregated programs. Three important areas of the literature are explored here. First, the Regular Education Initiative and the movement toward the inclusion of students who have disabilities into the regular classroom are reviewed since one of the major changes in the Barnstable school district in recent years has involved the movement to deliver more special education services in the regular classroom. Second, because this present study incorporates the use of internal evaluations of the school district's special education programs, literature pertaining to the value of internal and contextual evaluation of special education programs are examined. Third, literature pertaining to the cost involved in delivering special education services are reviewed to examine methodology appropriate for collecting cost data in the present study.

The Movement Toward More Inclusive Schools

There has been an historical trend toward more inclusive education for students with disabilities. "The whole history of education for exceptional students can be told in terms of one steady trend that can be described as progressive inclusion" (Reynolds &
Birch, 1982, p. 27). In recent years this trend has been reflected "by the emergence of concepts such as deinstitutionalization, normalization, integration, mainstreaming, zero rejection, delabeling, and merger" (Lipsky & Gartner, 1989, p. 41).

This trend toward inclusion began with the passage of the Education for All Handicapped Children Act (P.L. 94-142) in 1975 renamed the Individuals with Disabilities Education Act in 1990; the Act guaranteed every child with a disability between the ages of three and twenty-one the right to free appropriate public education in the least restrictive environment consistent with the child's needs. He/she can only be removed from the regular educational environment when the nature of his/her disability is such that his/her education cannot be achieved satisfactorily in this environment even with supplementary aids and services (sec.1412[5][B]).

Gartner & Lipsky (1987) discussed the

... duality inherent in PL 94-142. It contains a mixture both of attention to the needs of individual students and of provisions designed to solve problems that children with handicapping conditions experienced because the public school system, and other public agencies, failed to address the issue properly. (p. 369)

Gartner and Lipsky (1987) contend that although the implementation of P.L. 94-142 has accomplished providing special education services to many more students and increasing funds devoted to special education, some areas remained troublesome. These areas are: (1) referral and assessment procedures, (2) placement options, (3) educational programs, (4) least restrictive environment, and (5) parental involvement.

In 1986, Madeleine Will, then Assistant Secretary of Special Education and Rehabilitative Services, discussed the progress that had been made in special education in the decade immediately following the passage of P.L. 94-142. Special education has
(1) refined the concept and practice of individualized instruction; (2) re-defined the role of parents in the education of the handicapped child; (3) made education possible for one-half million previously unserved severely handicapped children; and (4) improved services for several million other handicapped children. (p. 3)

Additionally, "Special education and remedial programs have made substantial contributions to improving the quality of instructional practice" (p. 3) by making curriculum changes, developing curriculum-based assessment approaches, improving evaluation and record-keeping procedures.

Will maintained that "although special programs have achieved much, other problems have emerged which create obstacles to effective education of students with learning problems" (p. 5). She presented the following obstacles to continued progress: (1) the fragmentation of services being provided, (2) the development of a dual system of education, (3) the stigmatization of students, and (4) the fact that the placement decision has become a battleground.

In order to continue the progress that has been made and to overcome the obstacles that she cited, Will challenged educators "to form a partnership between regular education and the special programs and the blending of the intrinsic strengths of both systems" (p. 12). She stated:

The Office of Special Education and Rehabilitative Services is committed to increasing the educational success of children with learning problems. OSERS challenges States to renew their commitment to serve these children effectively. The heart of this commitment is the search for ways to serve as many of these children as possible in the regular classroom by encouraging special education and other special programs to form a partnership with regular education. The objective of the partnership for special education and the other special programs is to use their knowledge and expertise to support regular education in educating children with learning problems. (p. 20)
The Regular Education Initiative (REI) was proposed by the federal government "to review, improve, and coordinate instruction for students with disabilities within general education classrooms" (Lipsky & Gartner, 1989, p. 42). REI proposed changes that would encourage regular and special educators to share knowledge and to reconsider their previous methods for providing special education services (Will, 1986). "There is increasing evidence that it is better academically, socially, and psychologically to educate mildly handicapped children with nonhandicapped children, preferably within the regular education classroom" (Will, 1986, p. 12).

The implementation of the Regular Education Initiative has led to reforms which have had a major impact on both general education and special education. Some reforms "seek to bridge the gap between the two parallel systems, others attempt to blend aspects of each together, and yet others call for an end to dual systems" (Lipsky & Gartner, 1989, p. 271). The goal of these reforms is establish a merged or unitary system of education which will meet the needs of all students and act as an alternative to separate systems (Lipsky & Gartner, 1989).

The Regular Education Initiative calls for: (1) increased instructional time so that students who learn more slowly are allowed to move through the curriculum at a different pace, to use modified texts or supplementary materials, and to work in smaller groups or individually; (2) the development of support systems for teachers to assist them in finding new ways to cope with the varying needs of their students that would include building level support teams and additional training in assessment and planning educational alternative for students experiencing learning problems; (3) empowerment of principals to control all programs and resources at the building level to allow the
implementation of an integrated, cohesive educational plan merging regular and special education programs, thus creating comprehensive coordinated approaches to helping students who have learning problems; and (4) new instructional approaches that would enhance student performance in regular classroom settings (Will, 1986).

**Advocacy for the Regular Education Initiative and Inclusion**

There has been much debate about the implementation of the Regular Education Initiative and the movement to more inclusive schools. Proponents of this approach argue against the current special education system and for the Regular Education Initiative and other reforms in order to: (1) correct the inadequacies that exist in the present system, (2) provide additional benefits and improved outcomes for all students, and (3) correct discriminatory practices.

Gartner and Lipsky (1987) contend that a merged unitary system of education will improve the quality of education for all students, including students who have disabilities. This would occur as troublesome educational practices resulting from a separate system of providing special education services is drastically changed. One of these practices involves referral and assessment procedures.

Perhaps no area in special education has received as much concern as have procedures used for the referral, assessment, and eventual placement of students. Together, these activities raise substantive issues: (1) cost, a key factor in the congressional capping of the number of students (at 12 percent) who could be counted for funding purposes; (2) professional judgment, particularly with regard to identification of students with learning disabilities; and (3) discrimination, as seen in the disproportionate number of minority and limited-English-proficient students referred for evaluation and placed in certain categories. (p. 371)
By providing all quality educational services for all students within the regular classroom, students will no longer have to be referred, assessed, and labeled as having special needs to receive the services they need to make effective progress (Gartner & Lipsky, 1987; Lipsky & Gartner, 1989; Will, 1986).

Another practice that Gartner and Lipsky (1987) find to be troublesome in the system of providing special education service in separate programs is the placement options for students who have special needs.

While referral and assessment procedures vary widely, and students are “placed” in special education programs based upon such discrepant outcomes, PL 94-142 is clear concerning least restrictive environment (LRE) criteria, namely, that “removal from the regular education environment” is to occur “only when the nature and severity of the handicap is such that education in regular classes with the use of supplementary aids cannot be achieved satisfactorily” [Sec. 612 (5) (B)]. There is, however, wide variability in the implementation of the federal law at the local level. (p. 374)

Gartner and Lipsky contend that “students with seemingly identical characteristics qualify for different programs, depending on where they reside and how individuals on school staffs evaluate” (p. 374). They further contend that providing quality educational services for all students within the regular classroom will eliminate the utilization of “pull-out” programs which have been used despite lack of evidence of the effectiveness of such programs (Gartner & Lipsky, 1987).

Another practice that Gartner and Lipsky (1987) find to be troublesome is the utilization of separate special educational programs system to provide the special services to students who have disabilities.

The basic premise of special education is that students with deficits will benefit from a unique body of knowledge and from smaller classes staffed by specially trained teachers using special materials. . . . There is
no compelling body of evidence that segregated special education programs have significant benefits for students. (p. 375)

Gartner and Lipsky continue to say that there is substantial and growing evidence that goes in the opposite direction. They contend that “in recent studies comparing academic performance of mainstreamed and segregated students with handicapping conditions, the mean academic performance of the integrated group was in the 80th percentile, while the segregated students scored in the 50th percentile” (p. 375). They continue, “there is little qualitatively different in special education instruction in the areas of additional time on task, curriculum, adaptation, diverse teaching strategies, adaptive equipment, or advanced technology” (p. 376). Gartner and Lipsky maintain that providing special education services within the regular classroom will result in educators having higher expectations for students who have disabilities and that these expectations will result in improved student achievement and educational outcomes.

Gartner and Lipsky are also concerned that when special education services are provided in segregated environments, students do not always receive these services in the least restrictive environment. They state “that while many types of placement might be appropriate for a student, the one to be chosen should be the least restrictive, that is, the one which allows maximum integration of students with their peers” (p. 376). They are concerned that for many students who have special needs, their participation in regular education programs is limited and there is “a large discrepancy between reported availability and actual utilization of general classroom education” (p. 378) for students who have disabilities.
Another troublesome educational practice that Gartner and Lipsky contend has resulted from the utilization of a separate system of providing special education services involves parental involvement. They are concerned that “while their rights are specifically cited in federal and state laws, parental involvement in student assessment, program development, and the evaluation of students’ progress is limited” (p. 378).

Parents of children with disabilities often feel as if they share their children’s labels and are thereby perceived by others as part of the overall problem and in need of professional services themselves. Thus, should parents at an IEP conference express frustration or anger at the lack of educational or related services being provided to their children, professionals, rather than addressing the specific problem areas or providing the required services, are often quick to “diagnose” the parent as overwhelmed and over-protective and in need of psychological services to combat “their problems”. If, on the other hand, parents lead an active life and have less time to devote to their children’s education or therapeutic program than the professionals deem appropriate, this behavior is often diagnosed as a form of parental denial that requires psychological treatment for the family members. (p. 378)

The utilization of segregated special education programs leads to “power struggles” between parents and special educators according to Gartner and Lipsky and the “over-valuing of the knowledge of so-called experts” (p. 379). Gartner and Lipsky contend that this leads to “the devaluing or denigration of their (parents’) knowledge about their children” (p. 379) and conclude this occurs because of the placement of their children in segregated special education programs. Gartner and Lipsky continue, “In a merged or unitary system, effective practices in classrooms and schools would characterize education for all students” (p. 388).

Will (1986) also contends that utilization of new models for delivering special education services within the regular classroom will remove obstacles to the effective education of students with learning problems that have occurred as a result of separate
special education programs. One of the obstacles that Will cited is the fragmented approach that is utilized to deliver special education services.

Many students with learning problems do not fit neatly into the compartmentalized delivery systems created by special programs. In effect, many students who require help and are not learning effectively fall “through the cracks” of a program structure based on preconceived definitions of eligibility, rather than individual student needs and, as a result, do not receive assistance. (p. 7)

Will also cites the problem of students who have learning needs, but who do not meet eligibility criteria, being “misclassified and placed in programs for the mildly disabled in order to get help” (p. 7). She contends that with the utilization of a new service delivery model in which all educational services are delivered within the regular classroom would eliminate this problem (p. 7).

Another obstacle that Will sees eliminated with the utilization of the new service delivery model is the dual system of education.

The separate administrative arrangements for special programs contribute to a lack of coordination, raise questions about leadership, cloud areas of responsibility, and obscure line of accountability within schools. Most school administrators take the view that responsibility of students with learning problems belongs to special education or other special programs. These programs are usually the responsibility of the central office of the school district, but are delivered at the building level. This means that building principals do not develop ownership of the program’s educational goals. Nor are building principals always authorized or disposed to ensure the consistent high quality of special programs. As a result principals may not be able to use their influence to set the high expectations and standards for students with learning problems nor encourage teachers to “go the extra mile” for these children. Hence, the impact of these programs is lessened. (p. 8)

Will continues

The problem at the building level is further compounded by special program teachers working independently with students either in small groups or individually in resource rooms. This isolation minimizes
communication between special teachers and regular classroom teachers, resulting in a lack of coordination between ongoing classroom instruction and the specially designed remedial instruction. The result is that the remedial instruction does not complement or help the child with the curricula which he or she must master in the regular class. (p. 9)

Will contends that with the utilization of a service delivery model in which special education services are delivered in the regular classroom would eliminate the problems of coordination, leadership, responsibility, accountability and ownership inherent in the dual system of providing special education services.

A third obstacle that Will is convinced will be eliminated with the utilization of the new service delivery model is the stigmatization of students who have special needs. When students with learning problems are segregated from their non-handicapped schoolmates and labels are attached to them, stigmatization can result. The effects of stigmatization may serve to further isolate these students from their peers and increase negative attitudes about school and learning. The consequences of stigmatization and poor self-esteem have been fully described in the literature: low expectations of success, failure to persist on tasks, the belief that failures are caused by personal inadequacies, and a continued failure to learn effectively. In addition, negative staff attitudes, as a result of the stigma of special class placement can create an atmosphere which further hampers the student’s learning. (p. 9)

Will contends that the utilization of a service delivery model in which special education services are delivered in the regular classroom would eliminate the stigmatization that occurs when these services are provided in segregated settings (p. 9).

A fourth obstacle Will visualizes being eliminated with the utilization of the new service delivery model is that of the placement decision becoming a battleground. Parents naturally want the best for their children, a desire that lead some parents to interpret rigid rules and eligibility requirements of special programs as indications that school official are unwilling to help. For their part, schools are often ready to fall back of the stereotype of the “pushy parent”, especially when request for services and the insistence
on a stronger voice in decision-making create inconvenience, embarrassment, and confusion. As a result, a potential partnership is turned into a series of adversarial, hit-and-run encounters. (p. 10)

Will contends that the utilization of a new service delivery model in which special education services are delivered within the regular classroom will eliminate this obstacle as the regular classroom is adapted to provide for the special needs of all students (p. 11).

Will visualizes that obstacles inherent in the delivery of special education services in segregated setting will be eliminated with the merging of the regular education and special education systems.

The challenge is to take what we have learned from the special programs and begin to transfer this knowledge to the regular education classroom. This challenge is not only to transfer knowledge, it is also to form a partnership between regular education and the special programs and the blending of the intrinsic strengths of both systems. (p. 11)

Will continues with her belief that the obstacles she cites will be eliminated as regular and special educators work together within the regular classroom to improve the quality of education of all students who have learning problems (p. 12).

In Winners All: A Call for Inclusive Schools (1992), the National Association of State Boards of Education, also advocates for a new, inclusive model for delivering special education services to students who have disabilities. They cite inadequacies which resulted in poor outcomes for students with disabilities with the utilization of previous models in which special education services were delivered in segregated settings, and/or students were mainstreamed into the general education classroom for part or all of the school day.
The NASBE (1992) highlights two outcomes of special education utilizing previous models: “(1) the unnecessary segregation and labeling of children for special services, and (2) the ineffective practice of mainstreaming, which has splintered the school life of many students--both academically and socially” (p. 8).

The National Association of State Boards of Education (1992) continues

A vast and separate bureaucracy has developed to educate students labeled as disabled. This bureaucracy is characterized by separate and parallel policies for special education students and staff; separate funding mechanisms; separate administrative branches and divisions at the federal, state, intermediate, and local levels; a system of classification for labeling children that is considered by many to be demeaning and nonfunctional for instructional purposes; and a separate cadre of personnel, trained in separate pre-service programs, who serve only students with diagnosed disabilities. . . . This separate system may, in fact, be undermining attempts to fully integrate the impaired into society and to ensure that they have opportunities to lead full and satisfying lives. (NASBE, 1992)

The NASBE cites the following statistics which indicate that for many students who have mild to moderate disabilities and who are mainstreamed for part or all of the school day, the future is a bleak one: (1) Only 57% of these students graduate with either a diploma or certificate of graduation; (2) Twelve percent of these students have been arrested at some time in their lives, compared to 8% of the general population; (3) Only 13% of these students live independently within two years after leaving secondary school, compared to 33% of the general post-secondary school population; and (4) Only 49% of these students are employed within two years after high school. The NASBE contends that the movement to more inclusive schools would lead to brighter outcomes for students who have disabilities (1992).
In advocating for inclusive schools, the National Association of State Boards of Education cite problems with the current mainstreaming practices in which students leave regular education classes for part of their school day to receive special education services in a segregated setting.

Unfortunately, this common practice has left many students with fragmented educations and feeling that they neither belong in the general education classroom nor the special education classroom. At the same time, problems of communication and collaboration among the several kinds of teachers serving a child with disabilities have mounted steadily. (p. 10)

The NASBE also contend that students who are mainstreamed into general education classes are not perceived as belonging to those classes because they are frequently mainstreamed into special subjects and activities rather than for academic work. These students who are mainstreamed do poorly because: (1) they are often viewed as visitors to the class rather than seen as part of the overall general education student body; (2) the expectations placed on them in special education classes are often lower than the expectations placed on them in general education classes; and (3) as they pass in and out of general education and special education classes, they lose instructional time and are exposed to a dual curriculum that is rarely coordinated across programs. The NASBE contends that the utilization of inclusive educational programs would benefit students who have disabilities and they would perform better academically when these problem areas are eliminated (1992).

Another proponent of inclusive education, the Massachusetts Board of Education (1992), states that the benefits of integration for students with special needs include: “improved social and academic skill development; improved educational
outcomes; more effective preparation for independence and community life; and improved opportunities for obtaining gainful employment upon graduation. Further, nondisabled peers and students with special needs enrolled in integrated activities develop an appreciation of individual similarities and differences. Their data show that nondisabled peers gain in academic achievement when they participate in integrated programs (p. 5).

One of the characteristics that contributes to a productive learning environment in an inclusive classroom that the Massachusetts Board of Education discusses is heterogeneous grouping. The Board maintains that this grouping practice accommodates the increasing student diversity found in today’s society by promoting the use of effective instructional practices for all students. It also contends that not only do the disabled students benefit; there are distinct advantages for nondisabled peers as well. Nondisabled students gain in self-esteem and social opportunities as well as increased academic achievement (p. 5).

The provision of instructional services in the regular classroom for disabled students reduces the amount of instructional time that these students would miss if they were to receive special education services outside of the regular classroom. This practice ensures: “continuity in instruction, consistency in teacher expectations, and a more cohesive educational program” (p. 5).

Another benefit of integrated programs is that they foster teacher collaboration as instructors plan together to accommodate student differences in instructional activities. Still another benefit the Board cites is that students who have special needs have the “opportunity to practice needed skills in an integrated environment” (p. 5) and
are “more likely to generalize those skills across environments” (p. 5). These students also have “increased opportunities to enhance their development of functional academic and social skills when participating in integrated programs” (p. 5).

The Board also discusses long-term benefits of integration for students who have special needs. It contends that these students “have more opportunities and success in community-based services as adults” (p. 6); and they are “more likely to secure and retain employment when they leave school” (p. 6). Integrated learning provides disabled students with opportunities “for structured and casual interaction with nondisabled peers” (p. 6); and their nondisabled peers “become an important source of modeling, assistance, and friendships” (p. 6). “For many students the sense of belonging to a nondisabled peer group is one of the most enriching aspects of integration. Friendships that begin within the classroom setting often extend outside of the school environment and facilitate integration in the larger community” (p. 6).

The Massachusetts Board of Education also contends that integration provides a financial benefit to school systems because it ultimately results in a more cost efficient system. Cost savings are accrued through reduced transportation costs, the placement of regular and special education programs into one building, the consolidation of administrative responsibilities for both regular and special education, the more efficient utilization of educational and remedial services, shared curriculum materials and resources, and the availability of peer tutors. (p. 6)

The Massachusetts Board of Education (1992) also has questions about the efficacy of the existing special education service delivery system in which students who have special needs are removed from regular education classes to receive special education services. The Board is critical of “discrepancies among regular and special education curriculum and instruction, loss of instructional time as students move
between programs, and the difficulty in generalizing skills across environments” (p. 7),
and contends that these “limit the effectiveness of this model” (p. 7) because important
learning experiences are missed. “Pull-out programs results in substantial reductions in
the amount of instructional time” (p. 7) and “effective schools research indicates that the
single most important variable affecting academic achievement is the amount of
instructional time provided” (p. 7).

The Board maintains that the utilization of programs to provide special
education in segregated learning environments has contributed to a high dropout rate of
students with special needs, and to the trend toward long term placement in these
programs, making placement in special education programs, “a final destination” (p. 7)
for most students with special needs. There is also “a lack of evidence that separate
special education programs produce better student outcomes” (p. 7) in any area. There
are few similarities in what occurs in regular and special education classrooms and “it is
more difficult for students with special needs to participate in regular education
programs when there are discrepancies among regular and special education curriculum
demands, instructional materials, and instructional practices” (p. 7).

The Massachusetts Board of Education maintains that the inadequacies they cite
will be corrected as more inclusive classrooms replace segregated special education
service delivery models, and there will be benefits and increased outcomes for all
students in these inclusive classrooms.

Lipsky and Gartner (1994) also express concerns about the inadequacies in the
outcomes for students who have disabilities in the current system of providing special
education services. “Young people with disabilities are not doing as well as their counterparts in the general population” (p. 10) in a number of areas:

- more exiters with disabilities left secondary school by dropping out;
- fewer dropouts with disabilities completed GEDs;
- fewer graduates with disabilities attended postsecondary schools, although about the same percentage attended postsecondary vocational schools;
- fewer youth with disabilities had paid jobs, both during and after secondary school;
- more employed youth with disabilities worked part-time and in low-status jobs;
- fewer out-of-school youth with disabilities achieved residential independence; and
- more youth with disabilities were arrested. (p. 10)

Lipsky and Gartner (1994) contend that these inadequacies can be attributed to the current models of providing special education services in more segregated settings and contend that there will be improvements in these outcomes for students who have disabilities as the movement to more inclusive classrooms continues to grow.

Lipsky and Gartner (1994) are also concerned with equity issues related to students who have disabilities and the provision of their special education services. They contend that the general societal attitude toward issues of disability are related to the viewing of disabilities in a medical model where students with impairments require special treatment, and a part of that special treatment is a special and separate education system. They contend that these attitudes and equity issues will change as special education services are provided in inclusive settings (p. 28).

Stainback, Stainback, and Bunch (1989) are concerned that the regular education and special education systems have existed for many years and the resulting dual system of education are “unfair” (p. 15).
By assigning some students to “special” education, we physically separate them from their peers. Others, although mainstreamed, carry with them the label “special” and are separated psychologically both in their own minds and in the minds of their teachers from their “regular” peers. (p. 15)

Stainback, Stainback, and Bunch continue by advocating for the merging of “special and regular education into one unified system of regular education structured to meet the unique needs of all students” (p. 15) and provide a rationale based on three premises for such a merger.

Their first premise is that instructional needs do not warrant a dual system. They contend that there are not two distinct types of students, “regular” and “special”; that this distinction is based on the erroneous conceptualization that there are two kinds of students, the “normal” and the “abnormal”. “All students differ along continuums of intellectual, physical, and psychological characteristics” (p. 16) and being a special education student has been justified on the basis that some students deviate to an extreme from the “norm” or “average” on a wide range of characteristics deemed pertinent to educational success. Cutoff points that have been set on scales measuring these attributes are arbitrary and have separated students on the basis of these cutoffs. All students do differ to varying degrees from one another along the same continuums of differences. “The designation of arbitrary cutoffs does not make students any more different between the special and regular groups than within these groups” (p. 16) and these designations “have not proven of significant utility to teachers charged with educating students with differing abilities and characteristics” (p. 16).

In short, there are not—as implied by a dual system—two distinctly different types of students, “special” and “regular”. Rather, all students
are unique individuals, each with his or her own set of physical, intellectual, and psychological characteristics. (p. 16)

They continue that the dual system is based on the assumption

... that there is a particular group of students who need individualized educational programs tailored to their unique needs and characteristics. Such a position is educationally discriminatory. . . . All students are unique individuals, and their individual differences influence their instructional needs. (p. 16)

There is no separate group of students who require special individualized services to meet their educational needs, “individualized educational programming and services are important for all students” (p. 16). They continue that there “are not two discrete sets of instructional methods—one set for use with “special” students and another for use with “regular” students (p. 16).

While instructional methods need to be tailored to individual characteristics and needs, “few, if any, can be clearly dichotomized into those applicable only for ‘special’ students or only for ‘regular’ students” (p. 17). Stainback, Stainback, and Bunch continue, “the actual teaching strategies used with any child are but a part of the continually changing pattern of services provided in response to the individual and changing needs of the child” (p. 17).

The notion that special methods, materials, and programs are needed for some students is an outgrowth of the belief that there are at least two kinds of people and two psychologies of learning: the psychology of the “normal” child and the psychology of the “special” child. (p. 17)

Stainback, Stainback, and Bunch continue with

. . . the instructional needs of students do not warrant the operation of a dual system. On the contrary, these needs support the merger of the two systems into a comprehensive, unified system designed to meet the unique needs of every student. (p. 17)
Their second premise on which the rational for merger is based, centers on the inefficiency of operation and they contend that maintaining two systems is inefficient for the several reasons. First,

The dual system creates an unnecessary and expensive need to classify students. This is because it becomes necessary with a dual system to determine who belongs in which system. Considerable time, money, and effort are currently expended to determine who is “regular” and who is “special” and into what “type” or category of exceptionality each “special” student fits. This continues to be done in spite of the fact that a combination of professional opinion and research indicates that classifications often done unreliably, that it stereotypes students, and that it is of little instructional value. (p. 18)

Second, they contend that the dual system has fostered competition and duplication, instead of cooperation among and between professional of regular and special education. “Educators should share their expertise and pool their resources to obtain maximal ‘mileage’ from their instructional efforts. However, the dual system approach has interfered with such cooperative efforts” (p. 19). They contend that the breakdown of professional relationships results in inefficiency on many levels. The special/regular dichotomy in research, for example, “often interferes with widespread use of research findings, since potentially useful information may be overlooked by special or regular educators because of its affiliation with the other system” (p. 19).

Another example they cite is the parallel special and regular education teacher preparation departments and programs at colleges and universities. Third, inefficiency occurs in direct service programs in dual systems.

At the local, state, and federal levels there are generally divisions or offices of special and regular education that tend not to cooperate or share in the use of personnel, materials, equipment, or in the development and operation of accounting, monitoring, and funding mechanisms. (p. 19)
Stainback, Stainback, and Bunch continue with their concern that although there has been discussion about collaboration and cooperation between regular and special educators, there has been little opportunity for this to happen. It is, they contend,

... typical practice for special educators to meet and talk about mainstreaming, cooperation, and collaboration in their segregated, special education conferences, while regular educators meet in their regular education conferences to talk about issues of concern to them. . . .

Such divisions and poor professional relationships not only reduce the potential benefits of pooling expertise and resource, but also encourage detrimental, counterproductive advocacy attempts. Factions within education, perpetuated by the dual system, limit the advocacy potential for the education of all students, leading to competition rather than cooperation between the groups. . . .In short, a dual system creates artificial barriers between people and divides resource, personnel, and advocacy potential. (p. 19)

Stainback, Stainback, and Bunch’s third concern about the inefficiency of a dual system of education is related to eligibility by category, which interferes with attention being focused on the specific learning needs and interests of each student. “In the dual system, an elaborate procedure for classifying/categorizing students is used to determine who is and who is not eligible for a variety of education and related services” (p. 20) and often these categories do not reflect the specific learning needs of individual students.

Such categories--perpetuated by the dual system--actually interfere with providing some students with the services they require to progress toward their individual educational goals. Eligibility for educational and related services. . . .should be based on the abilities, interests, and needs of each student as they relate to instructional options and services, rather than on the student’s inclusion in a categorical group. (p. 20)

They continue with their premise that “all human beings in need of assistance should be entitled to assistance, whether or not they fall within prescribed categorical
limits. . . . Eligibility criteria should exist only if some people are entitled to assistance and others are not” (p. 21).

Stainback, Stainback, and Bunch’s fourth concern about the inefficiency of a dual system of education is related to what they call the “deviant” label.

The dual system requires students to fit into the available regular education program or be labeled as deviant. With the dual system, if a student exhibits learning or behavior characteristics that do not match the demands of the regular education program, the student is labeled “deviant”, “different”, “special”, or “exceptional”. Once labeled, an attempt is then made to provide the student an appropriate program through special education in the regular classroom, resource room, or special class. The premise is that the student does not fit the program and should change to a “special” program, rather than that the regular program should be modified or adjusted to meet the needs of the student. In addition, this system does not allow for addressing the unique learning needs and characteristics of the large numbers of nonlabeled students who can adjust only marginally to the demands of the regular program (p. 22).

They contend that a dual system contradicts the basic tenet of American education that “the education program should fit the needs of the student rather than that the student should fit the needs of the education program” (p. 22); and continue that a merger of regular and special education “could set the stage for achievement of that goal” (p. 22).

The fourth and final premise on which Stainback, Stainback, and Bunch base the need for a merger of regular and special education “is that the dual system fosters an inappropriate and unfair attitude about the education of students classified as having
disabilities” (p. 22). It is unfortunate, they contend, that a “charitable attitude” is displayed; it is viewed that it is extraordinary to provide an education to students who have disabilities and this “notion is perpetuated by the operation of a dual system” (p. 23). As a result, students with disabilities “continue to be viewed as special charity cases” (p. 23).

In a merged system, all students would be provided the opportunity to receive an education geared to their capabilities and needs as a regular, normal, and expected practice. This is important, since equality suffers when the education of some students is viewed as special, different, and charitylike, while the education of others is viewed as regular, normal, and expected. (p. 23)

They conclude by stating that the rationale for a merger of special education and regular education programs is based on their view that there are many more advantages to developing a unified system that meets the need of all students rather than the dual system that now exists (p. 23).

Lipsky and Gartner (1989) also contend that the division between what is called regular and special education hinders the creation of exemplary educational programs for all students. For this to occur, school systems must “acknowledge the belief that all students can learn, and to accept the responsibility to assure that this happens” (p. xxv).

They contend there are

... shared sets of values and views that are believed to lead toward both excellence and equity in education. These include: (1) The belief that students are more alike than different; (2) The belief that all students have individual needs; (3) The need to fashion educational programs, in schools and communities, adapted both to these shared and individual needs; (4) The need to do this in ways that are respectful of student differences, individual capacity, unique strengths of persons with disabilities, and the roles of parents; (5) The recognition that there are methods of school organization, instructional strategies, and use of personnel, that provide the bases effectively to educate all students in
integrated settings; and (6) The realization that the refashioned school will not only produce better education for all students, it both needs and will produce expanded and enhanced professional roles for school personnel. (p. xxx)

Lipsky and Gartner contend there has been less progress in increasing student outcomes in recent years.

Less progress has been made in the quality of education provided, whether measured by knowledge and skills required, graduation rates, return to general education, or post-high school achievement. The operation of parallel programs and systems for students called normal and for others labeled as handicapped is both cause and consequences of these limits. (p. 8)

Lipsky and Gartner are concerned about discrimination in the referral and assessment of students. They maintain there is “differential treatment of children of color and those whose proficiency in English is limited” (p. 11). They are concerned that referrals for special education services occur when students vary from what is considered to be the school norm in student behavior and academic progress. “The assumption in such cases is that there is something wrong with the student. In particular, referral is more likely to occur in cases where the student is a member of a minority group or from a family whose socioeconomic status varies from the district’s norm” (p. 12).

Another proponent of inclusive education, Linda Couture Gerrard (1994), reframes the issue as one “of social justice in which separate education of special education students is not only unequal, but detrimental to the development of all students” (p. 58). She continues, “Schools and individual classrooms within schools are microcosms of the society in which they exist. In the ‘school society’, as in the general society, dominant, and subdominant students have complementary roles” (p. 62). She
contends that in a healthy society, the dominants function for the subdominants even though the subdominants help and assist the dominants. “These roles cannot be assumed if dominant, regular education students, and subdominant, special education students are educated in separate settings” (p. 62). She sees interactions between these two groups as “a manifestation of social power” (p. 62) in which the dominants are in charge and the subdominants have needs to be fulfilled. Students who have special needs who have been in separate settings have been harmed by policies allowing this to occur. She continues, “any change we hope to bring about must take into consideration some technique of balancing the powers that regular and special education students have” (p. 62).

Gerrard said that the implicit intention of both federal and Massachusetts legislation indicated a strong preference for integrated programs, in which students with special needs are placed in the least restrictive environment. These students only may be separated from regular education programs when there is clear evidence that, even with additional service, their participation is deemed inappropriate. “The fundamental right to interact educationally and socially with nondisabled peers underlies the concept of least restrictive environment” (Massachusetts Board of Education, 1991, p. 3).

Gerrard contends that contrary to federal and Massachusetts laws, “special education students (in Massachusetts) are spending less rather than more time with their typical peers” (p. 63). She compares enrollment in various special education categories in Massachusetts from 1974 to 1990 and found...

... that the percentage of students placed outside the public schools in residential settings decreased by 78%. This figure is somewhat misleading, however, because it actually resulted in increased enrollment
in other substantially separate programs, not greater inclusion with typical peers. The number of students placed in private day school programs increased 71%. Students enrolled in substantially separate classes within the public schools increased 120%. ... Students with special needs who remained in the regular education programs with special modifications decreased 71%. The percentage of the public school population placed within separate programs with the public schools in Massachusetts increased by 450%. (p. 63)

Gerrard questions why this has occurred and concludes that although we provide a greater variety of services to meet individual needs, we still have inefficient educational organizations and we still see students who have special needs as students who should be removed from regular education classrooms in order to maintain order in our schools. As a result:

... our students are suffering. Special education student outcomes have been poor; there is a high dropout rate for students with special needs; there has been a trend towards long-term placement in special education programs; there has been a lack of evidence that separate programs produce a better result than inclusive programs; pull-out programs cause children to miss part of their regular education curriculum, which creates gaps in their learning; and special education program placements have been used to discriminate against racial and ethnic minorities. (p. 64)

Gerrard contends that a new paradigm must be put into place and inclusive education must be viewed as part of the more general school reform rather than as special education reform so that

... inclusion then becomes part of the normal operating procedure of the educational system. Reform and restructuring plans, such as school-based management, must include creative options for inclusion that meet the needs of all of the students in the system. Resource management teams composed of community members, administration, teachers, parents of typical, special education and minority students can develop plans to share the resources of special education. For example, by combining the teacher/student ratio for regular and special education it may be possible to significantly lower the overall student/staff ratio and provide individualized education for all students without budget increases...
An extremely important piece of educational reform for inclusion is the education of regular education teachers in the procedures and practices of the special education entitlement laws. Of equal importance is the continued advocacy of the special education staff for their students. The practice of inclusive education will benefit both special and regular education students. It will create an environment in which the needs of all students will be taken into consideration. Every student has the right to be educated fairly, to form social attachments which can extend from the school to the home and to learn from a diversity of attitudes, cultures, learning styles, and outlooks. (pp. 64-65)

Gerrard also contends that

... the school system may actually incur savings through inclusion. For example, an inclusive model would cost considerably less than a private day school, there would most likely be additional savings in transportation, and a unitary school system could eliminate duplication in administrative staff (running one system instead of two). (p. 64).

Gerrard stresses that the practice of inclusive education will benefit all students by creating an environment in which the needs of all students will be met. She contends that inclusive education

... signifies an end to segregated education which has been demonstrated to be inherently unequal. It puts the intent and spirit of the special education entitlement laws into practice. This would clearly be a victory for the special needs students. Inclusive education would also be a victory for the regular education students because it would bring resources, pedagogy and special education expertise to regular education. (p. 65)

Gerrard argues that the inclusion must be part of the general school reform movement to correct the inadequacies that exist in the present system that have led to discriminatory practices. She further argues that the movement to inclusive programs “is an issue of social justice as well as an issue of equity” (p. 66).

The proponents of the movement to inclusive schools contend that the way special education services have been provided has led to the establishment of a dual
system of education that provides services that are fragmented, creates segregated learning situations in which students who receive these services are stigmatized, over-identifies students with disabilities, provides few benefits for the students who receive these services, and that is expensive to operate. They maintain that these programs have been inadequate and unresponsive to the needs of the disabled and the nondisabled, and not coordinated with the regular education program or other special programs. They argue that all students have unique learning needs that are not being met in the classroom or in special education programs.

Proponents contend that the money that is spent on a special education system does not provide the benefits it purports to provide. They cite the inadequacies of the current system and maintain that the elimination of this separate special education system and the restructuring of the general education system is necessary to make changes that are necessary to provide quality educational services that will better meet the needs of all students.

Proponents maintain that the implementation of the Regular Education Initiative will lead to the establishment of a restructured unitary system of quality education that will be responsive to the needs of, and will create exemplary programs for, all students. They contend that this will create a regular education system that can accommodate the diverse learning styles and needs that all children bring to the classroom. They argue that all students have unique learning needs and that there are no instructionally relevant reasons for distinguishing between disabled and nondisabled. They maintain that the need for disability determination and labeling and the stigmatization of students would be eliminated.
They also maintain that in this restructured unitary system of quality education all resources would be utilized more efficiently and more equitably to meet the needs of, and to benefit all students. They contend that financial resources that have been spent on separate programs would be able to be used to provide equal educational opportunities and the emphasis would be on collaboration of all segments of the unitary system to accomplish this. Proponents of the Regular Education Initiative argue that its implementation would lead to compliance of the mandates of P.L. 94-142 and the IDEA to provide services for students with disabilities in the least restrictive environment (Gartner & Lipsky, 1987; Gerrard, 1994; Lipsky & Gartner, 1989, 1994; MBOE, 1992; NASBE, 1992; Stainback, Stainback & Bunch, 1989; Will, 1986).

Opposition to the Regular Education Initiative and Inclusion

Opponents of the Regular Education Initiative and the movement to more inclusive schools argue against its implementation because they contend that (1) the general education system cannot meet the needs of the disabled; (2) the rights of the disabled will not be protected; and (3) the reasons for its implementation are political rather than educational.

One of the first critics of the Regular Education Initiative was Kauffman (1989) who contends that the REI represents a “dramatic shift in policies governing the treatment of students with special needs” (p. 256) and that it is “consistent with the conservative agenda for economic reforms” (p. 256). He said that the REI is based on the “trickle-down” theory of the Reagan-Bush administration, and was initiated by Madeleine Will, a Reagan political appointee. This theory, he continues, presumes that
the greatest benefits will be accrued indirectly by the educationally disadvantaged by providing benefits to the more educationally advantaged students directly. Kauffman argues that the REI will produce benefits for students who learn most easily and not for those who are most difficult to teach. “High performers will make remarkable progress, but the benefits for students having the most difficulty in school will never arrive” (p. 257).

Kauffman (1989) continues that the Regular Education Initiative is consistent with the Reagan-Bush education policy which

... consisted primarily of three strategies: (1) fostering an image of achieving excellence, regardless of substantive change, (2) federal engagement from education policy, and (3) block funding of compensatory programs. All three strategies have had a negative effect on programs for students with special needs. (p. 260)

Kauffman said the REI, like other Reagan-Bush initiatives, focuses on an issue with a highly emotional appeal and “offered simplistic answers to complex problems “ (p. 261). He continues, “advocacy for the REI rests primarily on the emotional and public relations appeal of the proposed reforms, not on logical or empirical analyses of the probable consequences of those reforms” (p. 261).

The REI as a political strategy, then, is rhetoric organized around four primary emotional-laden topics: (1) integration (with racial integration as a metaphor for integration of the handicapped), (2) nonlabeling (especially slogans such as “rights without labels”), (3) efficiency (i.e., deregulation and decentralization), and (4) excellence for all (the capstone of a trickle-down theory of educational benefit to handicapped students). (p. 261)

Kauffman (1989) contends that rhetoric about integration trivializes the needs of people with disabilities, “whose differences require accommodations far more complex than disallowing skin color as a criterion for access or opportunity” (p. 261). The
physical, cognitive, and behavioral characteristics of students with disabilities are “more complex and relevant to learning and to the function of schools in our society than is ethnic origin” (p. 262) and separateness may be necessary for equality of opportunity “when separation is based on criteria directly related to teaching and learning” (p. 262). He continues that P.L. 94-142 “guarantees procedural rights, not rights to specific curricula or services, because only the procedures designed to effect appropriate education could be prescribed for so diverse a population as handicapped children” (p. 262). “The moral basis of the legal entitlement of handicapped students to special education . . . . is derived from the extraordinary educational requirements imposed by their characteristics” (p. 262).

Kauffman (1989) addresses the rhetoric about nonlabeling and claims that labeling unnecessarily stigmatizes students by contending

Arbitrary decisions involving characteristics distributed along a continuum are frequently necessary to promote social justice, even though the arbitrary criterion is less than perfectly correlated with the performance of responsibility in question. (p. 264)

Kauffman (1989) is concerned about the stigma associated with special education labels, but contends that the whatever negative aspects there may be to labeling, they are outweighed by the benefits of providing the special services that are needed. “Taking away their label will not make their problem disappear” (p. 264) and these students will be more stigmatized if they are given their special education services in the regular classroom in front of their peers than if they are pulled out for these services in a separate class. He is concerned that we could not ensure that the rights of the disabled children who are not labeled.
Kauffman (1989) contends that the rhetoric about efficiency was employed to appeal to the financial savings that would be reaped by restructuring what REI proponents deem as duplicative, inefficient, and fragmented programs for the handicapped. “Combining general and special education budgets and services or combining all compensatory programs would almost certainly have the effect of decreasing the special services to handicapped students” (p. 266). He is concerned that

Teachers must choose between (a) allocating more time to the production of expected mean outcomes for the group, which sacrifices gains of the least capable learners, or (b) allocating more time to the least capable learners to narrow the variance among students, which inevitably sacrifices achievement of the students who learn most easily. (p. 266)

Kauffman (1989) is concerned that “in the context of scarce resources and an emphasis on competitive excellence” (p. 266) classroom teachers would be forced to utilize resources to the disadvantage of students who are handicapped.

Kauffman (1989) contends that the rhetoric about excellence for all will have detrimental effects on students who are handicapped. “Excellence and equity are always competing issues; what is gained one is lost in the other. Excellence requires focusing support on the most capable learners; equity requires the opposite” (p. 267).

Kauffman (1989) also questions how feasible it is to expect that general education will change so dramatically that it will be able to provide an appropriate education for every student, including those who are disabled, when it has not been able to do so before.

The history of education does not suggest that a single program of general education has ever been so supple or accommodating of extreme heterogeneity of learners as to serve all students well, nor does a logical analysis suggest that such a program is possible, particularly when its focus is excellence defined a higher mean achievement. (p. 267)
Kauffman (1989) contends that what is necessary is the “protection of education resources for handicapped students” (p. 267) so that the gap between the educational “haves and have-nots” is not widened. Funds that are now provided for special education services for students who are disabled must be preserved for this purpose.

The Regular Education Initiative is a “flawed policy initiative” (p. 268) also because according to Kauffman: “(1) a lack of support from key constituencies, (2) the illogic of its basic premises, (3) a lack of specificity in the proposed restructuring, and (4) the proponents’ cavalier attitude toward experimentation and research” (p. 268).

The Regular Education Initiative is not, as its name implies, an initiative of regular education. Rather it is a “self-criticism of some special educators” (p. 268) and an attempt to make general educators take the initiative “in solving the instructional problems of handicapped and other difficult-to-teach students” (p. 268). Kauffman contends that the REI cannot work because it attempts to “coerce” regular education teachers into accepting the REI as a fait accompli. He is also concerned that “no evidence has been brought forward to suggest that most special education teachers see the REI as their agenda or believe that it will work” (p. 268). He questions how successful the REI can be without the consensus of general and special educators.

Kauffman (1989) notes the illogic of the concern of the REI for students who are disabled, students “whom general education has failed” (p. 269). He feels that it is illogical that proponents of the REI cite the failure of special education programs and yet suggest that “(a) although special education has failed, it has insights to offer general education about how to keep students from failing, and (b) procedural protections that have not worked in special education will now work in general education” (p. 269).
Kauffman (1989) continues:

A more rational suggestion is that if special education has developed powerful interventions, they should first be implemented reliably in special education settings, then applied experimentally in general education. A more reasonable gamble with students’ procedural rights would be first to find ways of effecting them more fully under current regulations for education of the handicapped, then to see whether they could be guaranteed in general education, and with fewer regulations. Note that if proponents of the REI admit that special education has indeed developed successful interventions and procedural protections, one of their major lines of argument for reform is vitiated. (p. 269)

Kauffman (1989) disagrees with the argument of REI supporters that general education is now better equipped to deal with the needs of handicapped students within the regular classroom. He believes that the REI supporters see it as a way to provide supplemental resources to general education. He contends that the implementation of the REI will “compound the difficulties now experienced by general education in meeting the needs of an extremely diverse student body” (p. 270).

Kauffman (1989) also views the REI as a “flawed policy initiative” because of its “lack of specificity” on how special and general education should be restructured. It is not clear who would be responsible for what problems, how and where services would be made available, and how special instruction and services would be provided without losing regular instructional time. “REI appears in some respects to be a strategy without tactics, a top-down reform of education without full consideration of the implications of change for front-line educators or students” (p. 271). He is especially concerned that proponents of the REI have yet to “state explicitly and in considerable detail how restructuring special and general education will address the problems of students with histories of school failure” (p. 271).
Another reason for his view of the REI as a “flawed policy initiative” given by Kauffman is its “cavalier attitude toward experimentation and research”. He does not agree that research supports the conclusions of the REI advocates. Kauffman concludes that “given the research available today, the generalizations that education in separate classes is never effective and that effective education in regular classrooms is feasible for all handicapped students . . . . are indefensible” (p. 274).

Kauffman (1989) concludes that the REI is a “complicated set of issues that demands careful analysis and challenges us to seek more effective ways of integrating many handicapped students into the mainstream” (p. 275) and cautions that the “simplistic notion that all handicapped students must be fully integrated into general education” must be rejected (p. 275).

McKinney and Hocutt (1988) are concerned that there are a number of complex policy issues related to the Regular Education Initiative that have received “insufficient attention” (p. 16). The first issue they discuss is their concern that the goals and objectives of the REI are “not stated explicitly” (p. 16) and this leads to “confusion about what exactly what the REI is intended to accomplish” (p. 16). They are concerned that “the goals and objectives for the initiative are stated imprecisely and are therefore open to alternative interpretations” (p. 21). Additionally, they are concerned that it is not clear how special education resources will be allocated to meet these imprecise goals and objectives.

McKinney and Hocutt (1988) are also concerned that the REI is “a potential conflict between the underlying values that drive policy in special and general education” (p. 18). Special education policy has been based on the value of “vertical
McKinney and Hocutt (1988) contend there has been inadequate discussion about teachers' allocations of professional and material resources for the class as a
whole and the effect of this allocation on disabled students. They further contend that there has been inadequate discussion about "the extent to which effective methods developed in special education can be implemented successfully in regular classrooms" (p. 20).

McKinney and Hocutt (1988) also see the need for additional research on the REI components "to assess not only their overall effectiveness, but also for whom they are effective, their impact on regular education programs, and their feasibility and cost of implementation (p. 21). They are concerned that "many of the key assumptions behind the REI remain to be tested adequately" (p. 22). The REI represents a radical change in how special education services are provided and there has been insufficient discussion of these important policy issues.

Weintraub (1991) expressed his concern that although the movement to more inclusive schools has a profound impact on regular educators, the discussion about the movement has "taken place almost exclusively within the special education community. There have been few regular educators who have advocated an inclusive system and or who have even spoken out against such a system" (p. 69). He continues that although one-tenth of the children in our schools are students with disabilities, there is no recognition of this in reports on educational reform. "The regular education initiative was in reality a special education initiative, directed at regular education promoted by special educators, without the involvement or interest of regular educators" (p. 69). He expresses concern that it will be difficult to implement such a complex change in how special education services are delivered if there is so little discussion of the social,
political, and educational ramifications of this change that involves regular education teachers.

Weintraub (1991) is also concerned that some important issues have to be kept in mind in the movement to more inclusive service delivery models.

First special education as a legally-based delivery system, has at its foundation the premise that, because of their unique educational needs, students with disabilities vary so greatly that the appropriate education for the child must be individually determined. Thus, Public Law 94-142 and all state laws and regulations require an elaborate set of procedures and protections for determining what is appropriate for an individual student. These policies empower the student’s parents and professionals who know the student to determine, through a process of preparing an individualized educational program (IEP), what is appropriate. (p. 69)

Weintraub (1991) is concerned that proponents of full inclusion are “challenging the fundamental legal premise of special education” (p. 70). He continues that Federal and state policies define special education as “specifically designed instruction to meet the unique needs of the child”.

Handicapped children and youth are defined by these policies as having a disability and requiring special education. Thus, students must have a disability, a unique educational need and require specially designed instruction, before they are eligible for special education. In addition, the regular educational system must first attempt to meet the child’s needs through the use of ‘supplementary aids and services’. Therefore, legally, only students who actually need special education and for whom the regular education system has demonstrated that it cannot provide appropriate service, are eligible for special education. If this logic is followed in practice, then only students who have a disability and are unable with assistance to benefit from regular education, are eligible for special education. (p. 70)

Weintraub (1991) is also concerned that proponents of the Regular Education Initiative argue that students with disabilities should not be labeled because of the stigma they feel is associated with such a label. Weintraub contends that the label provides protection to students who have disabilities.
For government to provide protections and special benefits to a class of people, it is necessary to define the members of the class and establish eligibility criteria. To be determined to have a disability not only entitles a student to a certain special education rights, but also to a vast array of life-long benefits. These rights and benefits are not available to persons without disabilities. (p. 70)

Because of the "historical and continuing patterns of discrimination against persons with disability in education, employment, housing, transportation, and other sectors of society" (p. 70), people with disabilities and their advocates have fought to access the opportunities that have been denied. Weintraub contends that labeling is necessary to guarantee students with disabilities the rights and benefits to which they are entitled. He is concerned that the movement to more inclusive schools might lead to a loss of benefits, rather than increased benefits, for students who have disabilities.

Martin (1995) suggests while "that inclusion is a very attractive philosophy" (p. 192), "there is little scientific evidence to support its widespread adoption at this time" (p. 192). He is concerned that while there is no clear-cut definition of what inclusion is or what an inclusive program should look like, general enthusiasm for inclusion is the criteria for its implementation.

There are many differing approaches to what is called inclusion, so that practices will differ markedly from setting to setting, and in fact from teacher to teacher and from child to child. As a matter of public policy, a federal or state government, even a local school system, cannot responsibly adopt "inclusion" without defining its proposed program. (p. 192)

Martin (1995) is concerned that his "worst fears" about inclusion are being realized. He contends that inclusive programs "offer less individualized instruction to children" (p. 194), that they suffer from "some of the same problems of organization, planning, and coordination that affect current programs" (p. 194), that related services
are not provided as frequently as they are in current programs, and that the value of these programs are “determined primarily by teacher and administrator ‘feelings’ combined with, in some instances, parent ‘feelings’ “ (p. 194).

Martin continues that what is absent from these programs is “careful, systematic measurements on the child, including not only achievement scores but also specific measurement on areas of difficulty” (p. 194). “Sophisticated measures of self-concept, socialization, and so forth” are missing” (p. 194). Instead, he contends opinions about what is happening in these programs are being utilized to make decisions about their how successful they are. He stresses the need for “more careful evaluation of the outcomes of (inclusive) special education programs, both academically and socially” (p. 198).

Martin (1995) is concerned that while the current system of providing special education services is failing because it does not provide enough services to students who have disabilities, inclusive service delivery models provide even fewer services to these students. He is concerned that emotional problems may be created for students whose special education services are provided in the regular classroom, and while these emotional problems are not unique to inclusion, they are not being solved by inclusion either.

Martin continues that more resources are needed to improve current special education programs. “It is simply naive to think that the kinds of challenges we face in special education will not require more intensive instruction and behavioral treatment” (p. 198). He believes that “effective and individualized inclusion programs will cost
more, not less, to become successful” (p. 198) and that this money would be better spent on improving the programs we have. He concludes:

The challenge facing special and general educators is not to fit the child into the program, as these (inclusive) approaches do all too frequently, but to deliver effective education to each unique child. . . . We do not need to change our philosophy and goals of including persons with disabilities more fully into our society; we just need to avoid simplistic solutions, like focusing on placement and general education improvement rather than improved, specially designed instruction and services. Most especially, we must accept the moral obligation to measure what we do in terms that are important and significant to the total lives of our students. (p. 199)

Martin (1995) raises important questions that he contends have to be answered to determine the effectiveness of inclusive programs. These include:

(1) Are the approaches utilized in inclusive programs effective with all students in all learning situations?

(2) Are placement and instruction decisions made based on the individual needs of the child?

(3) If children with varied needs have identical programming, does the program meet their varied needs?

He is concerned that inclusive programs are being enthusiastically adopted on a widespread basis with little evidence of any evaluation of academic and social outcomes. He fears that students' special needs are not being met and that policies should be developed to protect these children from “well-intentioned experimentation” (p. 193).

Roberts and Mather (1995) are concerned that the movement towards more inclusive programs has become more extreme, and full inclusion for all students with
learning disabilities has become the goal for many proponents of the movement. They are fearful that this extremism will lead to a loss of educational opportunities for students with learning disabilities and a loss of the continuum of alternative placements for these students (p. 46).

Roberts and Mather are concerned that there is so much confusion about the terminology related to full inclusion. Terms such as mainstreaming, least restrictive environment (LRE), Regular Education Initiative (REI), full inclusion, full integration, unified system, and inclusive education are used interchangeably to describe very different programs, and Roberts and Mather contend that this terminology must be clarified so it is clear what is meant by these terms when they are used to describe programs.

Roberts and Mather are particularly concerned that some proponents of full inclusion interpret the term least restrictive environment as federal support for full inclusion, while Roberts and Mather conclude that the least restrictive environment “refers to the education of individuals in programs that address the unique needs while promoting individual freedom as much as possible” (p. 47). They fear that this misinterpretation will lead to a denial of important rights for students with disabilities.

Of the six requirements of the LRE specified in the law (CFR 34 S300.552), three are mandatory, whereas three are qualified. The mandatory requirements pertain to: (a) the availability of a full continuum of alternative placements, (b) the consideration of possible harmful effects of a placement decision on either the child or the quality of services, and (c) annual determination of the Individualized Education Plan (IEP) and placement decisions. The requirements that are qualified pertain to (a) the education of individuals with disabilities within regular classes to the maximum extent appropriate, (b) their removal from these classes only when education cannot be achieved satisfactorily with the use of supplementary aids and services, and (c) attendance at the
neighborhood school unless otherwise stated in the IEP. . . Although the IDEA regulations encouraged the education of students in regular classroom whenever possible, a range of alternative placements was also mandated. . . . In other words, students who could be served in regular classrooms should not be served in resource rooms; those who could be served adequately in resource rooms should not be placed in self-contained classes. (p. 47)

Roberts and Mather believe that both proponents and opponents of full inclusion share a desire to create successful learning environments for all students. However, they are concerned that assumptions made about what full inclusion means may lead to unclear assumptions about the ability of programs that are described as full inclusion programs to meet the needs of students with different kinds of disabilities. They are concerned that “some school districts are moving toward full inclusion models despite the lack of well-designed, supportive research and insufficient information on subject exceptionality” (p. 51).

They conclude:

We must, however, strike a balance between our desire to integrate all students and our obligation to provide the intensity of services necessary for each child to reach his or her individualized educational goals. Inclusion is not the only way to provide services to students with LD (Orton Dyslexia Society, 1994 cited). To be anti-full inclusion is not to be pro-exclusion (Lieberman, 1992 cited), but instead to support appropriate, individualized educational programs. As noted by Lieberman, the intent is not to question the ideals or philosophy of full inclusion, but rather to question the strategy for accomplishing those goals. (p. 54)

Fuchs and Fuchs (1994) are also concerned that the movement toward more inclusive programs has recently become more extreme, the rhetoric has become increasingly strident, and its perspective has become more insular and disassociated from general education’s concerns. They are also concerned that many proponents of
inclusive schools who are becoming more extreme in their criticism of other special education programs for students with disabilities are creating impediments to the formation of a productive alliance with general educators. They contend that for meaningful special education reform which provides services meeting the needs of students with varying disabilities to occur, an productive alliance between special and general educators must occur.

Fuchs and Fuchs state that when “proponents of the Regular Education Initiative (REI) tried to interest general education in special education concerns... general education took little notice” (p. 295). They contend that as rhetoric of the proponents of full inclusion becomes more strident, it becomes more disassociated from general education’s concerns” (p. 295) and they “offer a rather pessimistic prediction about the current movement’s success in forging a productive alliance with general education” (p. 295). They stress how essential this alliance is if programs that are more inclusive are to be successful in meeting the needs of students with disabilities.

Fuchs and Fuchs are concerned about what they view as change in who is advocating for more inclusive programs and the degree of inclusion that advocates are seeking. During the late 1980s, two distinct groups advocated for the Regular Education Initiative, the “high incidence” group and the “low incidence” group.

The larger of these two groups included those with interest in students with learning disabilities, behavior disorders, and ‘mild/moderate’ mental retardation, . . . .the so-called ‘high incidence’ group. . . . .and also included nonspecial educators who approached special education reform from the perspective of advocacy for at-risk students without disabilities. At least two characteristics united these REI supporters: first, a willingness to offer a no-holds-barred critique of special education, and second, a belief that the field must recognize that it is part of a larger system, not a separate order; that it must coordinate and
collaborate with general education and that a stronger general education means a stronger special education. (p. 296)

The second group of REI proponents consisted of advocates for students with severe intellectual disabilities. Although members of the first group, the “high incidence” group and the second group, the “low incidence” group expressed “similar-sounding critiques of special education” (p. 296) and met “to coordinate tactics” (p. 296), the primary concern of the second group was “to help integrate children with severe intellectual disabilities into neighborhood schools” (p. 296).

This rather disparate, “low-incidence” group proceeded parallel to, rather than under the banner of, the REI. Most were not enthusiastic supporters because they saw it as a policy initiative for children with “high incidence” disabilities. Nevertheless, they gave it their tacit approval because its goals, though different from their own, meshed with their overall strategy. They understood that the central issue . . . was to achieve a restructuring whereby most students with mild and moderate disabilities would be transferred on a full-time basis to mainstream settings. By contrast, during the middle to late 1980s, most members of their own group were thinking “neighborhood schools”, not “mainstream”. . . . Thus, we infer that many in the “low-incidence” group had the following strategy: “Let the REI folks get the ‘high-incidence’ students into the mainstream. This will make room for our children in self-contained and resource settings in the neighborhood school”. (p. 296)

Fuchs and Fuchs contend that “those speaking for the students with ‘high-incidence’ disabilities set the goals for the (REI) movement and the tone of the debate” (p. 296) and the “low incidence” group “viewed the REI as a secondary concern” (p. 297). The leaders of the REI movement, the ‘high incidence” group, had three primary goals. “The first was to merge special and general education into one inclusive system. . . . This reconfiguration would unite a balkanized education system. It would also circumvent the need for an eligibility process” (p. 297). The second goal
was “to increase dramatically the number of children with disabilities in mainstream classrooms by use of large-scale full-time mainstreaming as opposed to the more traditional case-by-case approach” (p. 297). The third goal, “implicit in the first two, was to strengthen the academic achievement of students with mild and moderate disabilities, as well as that of underachievers without disabilities (p. 297).

Fuchs and Fuchs contend that the REI supporters generated tactics, “some of which were downright ingenious, others irritatingly vague or inconsistent. Several were cleverly aimed to curry favor with both special and general education communities” (p. 297). These included waivers from state and federal regulations that had been implemented to protect the rights of students with disabilities, modifications that eliminated some parts of the continuum of placement services provided in legislation to protect the rights of students with disabilities, and strategies to increase mainstreaming efforts on a large-scale basis. These REI supporters “recognized the importance of building bridges to various constituencies, of developing broad-based support for REI ideas and proposals. . . . Most REI leaders did not advocate an end to special education” (p. 298). Fuchs and Fuchs further contend that the REI was never embraced by the leaders of general education reform. “At its most effective, the REI was a special education initiative” (p. 299).

More recently special education reform has been symbolized by the term inclusive schools. Like the REI. . . the newer term seems to defy straight-forward interpretation. And like the REI, this is partly because “inclusion” means different things to people who wish different things from it. For the group that wants least, it is old wine in a new bottle, a subtle form of co-opting reformist impulses to maintain the status quo. To those who want more, it means decentralization of power and the concomitant empowerment of teachers and building-level administrators; a fundamental reorganization of the teaching and learning process.
through innovations like cooperative learning and thematic teaching; and the redefinition of professional relationships within buildings. . . . But to yet a third group, those who currently lead the inclusive school movement, “special education reform” is an oxymoron: No meaningful transformation can occur unless and until special education and its continuum of placements are eliminated altogether. The “inclusive school” denotes a place rid of special educators, where full inclusion reigns. (p. 299)

Fuchs and Fuchs contend that there have been changes in the leadership of the movement to more inclusive schools from the “high incidence” group to the “low incidence” group. This has occurred because “many REI supporters became disillusioned and devitalized by general education’s lack of interest in special education and by many special education organizations’s hostility, often masked by an official neutrality” (p. 299). The “low-incidence” group tends to “focus on a single issue, identify with a precisely defined constituency, and use rhetoric effectively” (p. 300). They advocate “normalization”, making available “to the mentally retarded patterns and conditions of everyday life which are as close as possible to the norms and patterns of the mainstream society” (p. 300). The rhetoric of this group has hardened, and although the leadership of this group “presumes to speak for all students with disabilities, its position differs markedly from the official views of many advocacy and professional groups, primarily those representing the views of the “high incidence” group.

This “low incidence” group is calling for the elimination of the continuum of special education services and they advocate focusing on social competence and friendships for the members of this group. This sharply contrasts with the “high incidence” group’s primary concern of “strengthening the academic performance of
students with disabilities and those at risk for school failure” (p. 301). Fuchs and Fuchs are concerned that

... their (the “low incidence” group) continued provocative rhetoric will polarize a field already agitated. A troubling sign that special education is in the process of dividing into opposite camps is the emergence of a new extremist group to which the full inclusionists inadvertently gave life; namely, the reactionaries who champion the status quo and all but rule out thoughtful self-criticism that can lead to constructive adaptations. (p. 305)

Fuchs and Fuchs (1994) conclude that a partnership between special and general educators is essential to implement special education reforms that will benefit all students with disabilities. They are concerned that as the movement toward more inclusive programs becomes more extreme, as the rhetoric becomes increasingly strident, and as its perspective becomes more insular and disassociated from general education’s concerns, impediments to the formation of a productive alliance with general educators are being created. This productive alliance between special and general educators must occur if services that will meet the needs of students with varying disabilities are to be provided, and the rights of these students are to be protected.

In 1995, Fuchs and Fuchs discussed the need for change in both special and general education. They caution, however, that inclusive programs cannot meet the needs of all students with disabilities and that there continues to be a need for a continuum of services in special education for these students. They implore general and special educators to retain what is special about special education and identify resources (input) that are only provided through the utilization of special education programs and
One important aspect of resources for special education programs is the impact of the IDEA.

The IDEA (Individuals with Disabilities Education Act) reflects the strategy of weighting resources in favor of children with disabilities to help them perform as much like nondisabled children as possible. Under IDEA, school districts must provide and pay for an appropriate education for every child with a disability, regardless of cost... IDEA requires districts to ensure that all students receive a free and appropriate education. (p. 525)

The IDEA also requires that students with disabilities be placed in the least restrictive educational environment in which their needs can be met and to provide supplementary devices and services that are necessary for them to benefit educationally. An individualized education plan (IEP) including long-term and short-term goals must be developed and must specify necessary related services. In order to facilitate the realization of the goals and objectives in the IEP, special educators have smaller classes than those assigned to general educators. Another important special education resource is the preparation of special educators who “tend to have more advanced degrees” (p. 525). Still another resource is special education researchers who “have found innovative ways to bridge the divide between research and practice” (p. 525).

Fuchs and Fuchs (1995) contend that these “special inputs have translated into special outputs” (p. 526). They cite a meta-analysis of 50 independent studies of special classes versus regular classes conducted by Conrad Carlberg and Kenneth Kavale who concluded that special classes were “significantly superior” for students with learning disabilities, behaviorally disorders, and emotional disturbances (p. 526). Fuchs and
Fuchs also cite a narrative review exploring the effectiveness of resource rooms that was conducted by Paul Sindelar and Stanley Deno and concluded, “their findings are consonant with those of Carlberg and Kavale: resource rooms were more effective than regular classrooms in improving the academic achievement of students with learning disabilities or emotional and behavioral disturbances” (p. 526).

Fuchs and Fuchs (1995) examined what is special about a special educator’s approach to instruction that would distinguish it from services provided in inclusive classrooms. “At least two features, we believe: the use of empirically validated procedures and an intensive, data-based focus on individual students” (p. 527). They continue:

Virtually all validated special education practices share one important characteristic: they focus the special educator’s instructional decisions on the individual student. Individualized instruction is perhaps the signature feature of effective special education practice. It exemplifies a basic value and represents a core assumption of special educators; professional preparation; it requires teachers to reserve judgment about the efficacy of instructional methods until those methods prove effective for the individual student; it necessitates a form of teacher planning that incorporates ongoing, major adjustments and revisions in response to an individual student’s learning patterns; and it requires knowledge of multiple ways to adapt curricula, modify instructional methods, and motivate students. (p. 528)

They contend that inclusive programs cannot meet the needs of all students with disabilities because of the inability of the general educator to adopt instructional adaptations for students with disabilities.

We have found that the instructional adaptations that general educator make in response to students’ persistent failure to learn are typically oriented to the group not to the individual, and are relatively minor in substance, with little chance for helping students with chronically poor learning histories. (p. 528)
Fuchs and Fuchs (1995) continue:

Many of the instructional practices utilized by special educators with students with disabilities “do not transfer easily to most mainstream classrooms, where teachers have many students and often a different set of assumptions about the form and function of education. Focusing intensively on the individual students—as most special education practices require—means that teachers must conduct different instructional activities for different students at different times. This approach is simply impractical for classrooms of 25 to 35 students. (p. 528)

Fuchs and Fuchs (1995) conclude:

For sound reasons, mainstream teachers have important competing priorities: the good of the group and the extent to which activities are engaging and maintain classroom flow, orderliness, and cooperation. These operational priorities (and a committed teacher) can make general education a productive learning environment for 90% or more of all students. For the remaining children, however, a different orientation is required. Special education, with its emphasis on empirically validated practices and its use of data-based decision making to tailor instruction to the individual student’s needs, has the capacity to effect better outcomes for this small minority of learners. (p. 529)

Fuchs and Fuchs conclude that changes are needed in special education, but these changes cannot decrease any of its unique resources nor can they eliminate any of the placement options that exist to provide services needed by students with disabilities.

Schumm and Vaughn (1995) summarized a series of investigations that were conducted over a five-year period and indicated that general education teachers “feel that they lack preparedness to teach student with disabilities, lack opportunities to collaborate with special education teachers, and make infrequent and unsystematic use of adaptations” (p. 169). They indicate a need for general educators to be prepared to teach students who have disabilities for the movement toward inclusion of these students in general education classrooms to be successful and meet their needs.
Schumm and Vaughn reported on four issues that emerged in their research. The first issue was that many general education classroom teachers “lack the knowledge, skills, and confidence they need to plan and make instructional adaptations for students with disabilities” (p. 172). Teachers indicated that their teacher preparation and professional development programs did not include instruction on how to teach students with high-incidence disabilities, they had misconceptions about special education instruction, and they were unsure about how to plan and instruct students who represented a ever-broadening range of academic, cultural, and linguistic diversity.

The second issue was that “special education teachers and reading resource specialists are valuable in helping them plan and make adaptations for students with disabilities, but human resources are not readily available” (p. 174). The high caseloads of specialists, the lack of planning time, and the lack of any plan for collaboration contributed to the unavailability of these resources.

The third issue was “although students prefer teachers who make instructional adaptations, such adaptations are not implemented in the classroom as frequently as students--and to some degree teachers--would like” (p. 174). Some reasons for this include: (1) the teachers’ workloads and their perception that these adaptations being “too labor-intensive” (p. 175) and demanding too much of their planning time, and not being their responsibility to do; (2) barriers such as class size, teachers’ access to materials, or the physical environment of the classroom; (3) some adaptations consume so much time that they obstruct content coverage; and (4) some students are resistant to these instructional adaptations.
The fourth issue was “the adaptations are typically not part of a systematic plan for individual students” (p. 176) because these adaptations were “idiosyncratic, incidental, inconsistent, and not part of an overall plan for an individual student in the classroom” (p. 176).

Schumm and Vaughn conclude that most general educators are not prepared for students with “high-incidence” disabilities to be included in their classrooms at this time and inclusion is not likely to be successful until general educators are prepared to assume their roles in inclusion.

Collective results from these studies reveal that the stage is not set for inclusion. Classroom teachers’ instructional practices are largely improvisational attempts to accommodate the needs of students with disabilities. Although many classroom teachers across grade levels and settings are concerned with meeting the educational and social needs of students with disabilities, they are not ready. (p. 172)

The opponents of the movement to inclusive programs contend that the special education system was created because of the inability of the general system to meet the needs of the disabled and that general educators are not prepared to teach students with disabilities. They argue that the general education system has demonstrated that it cannot meet the needs of even the most mildly disabled and cite increasing referrals for special education services, which are initiated by general educators who cannot meet the needs of their students with disabilities.

Regular educators are under pressure to improve educational outcomes for the majority of students and opponents of the Regular Education Initiative and the movement to more inclusive programs are fearful that the needs of the disabled will go unmet. Opponents predict that if inclusive programs are implemented, they will result
in a need for a separate special education system to be reestablished in the future and many students will have lost important educational benefits during this period of experimentation.

Opponents of the Regular Education Initiative and the movement to more inclusive programs argue that improvements can be made to the special education system and that too little emphasis has been placed on efforts to accomplish this. They maintain that if increased resources, including financial resources, are made available for research and development, problems can be identified, analyzed, and solved. They contend that improvements can be made to both the regular and special education systems and both systems can be enhanced without the elimination of the special education system.

Opponents contend that the motivation for the implementation of the more inclusive program has been political and financial, rather than educational. They believe that it has been proposed primarily to save money and to reduce federal influence and expenditures for education and that it will result in reduced equity for the disabled. They believe attempts are being made to combine regular and special education programs because of fiscal constraints, and fear that any savings that result will be subsumed into the larger regular education budget while important special education programs will be lost. They maintain that the greatest benefits of the these reforms will accrue to the more abled, while benefits for the disabled will be lost.

Opponents fear that these attempts to combine regular and special education will result in the loss of hard-won rights and equity for the disabled and the return to unacceptable pre-P.L.94-142 and the IDEA conditions. They contend that the these
reforms may violate the mandates of P.L. 94-142 and the IDEA to identify students with disabilities and to provide them with a free appropriate education in the least restrictive environment consistent with their needs. They stress the importance of maintaining a separate special education system and targeting resources and personnel to students with disabilities so that they will not be placed at even greater risk (Fuchs & Fuchs, 1994, 1995; Kauffman, 1989; Martin, 1995; McKinney & Hocutt, 1988; Roberts & Mather, 1995; Schumm & Vaughn, 1995; Weintraub, 1991).

**Evaluation of Inclusive Programs**

Both the proponents and the opponents of the Regular Education Initiative and the movement to more inclusive schools make convincing arguments, but critical issues remain unresolved. (1) Are the special education services provided within the regular classroom effectively meeting the needs of the disabled students receiving these services? (2) Do all fully inclusive programs provide students with varied disabilities with improved outcomes? (3) Do fully inclusive programs maximize the utilization of educational resources? Several studies have endeavored to provide at least partial answers to these questions.

One recent study, a case study of a fifth grade student with learning disabilities who was mainstreamed back into his regular classroom on a full-time basis, was conducted by Zigmond and Baker (1994). The purpose of this study “was to explore the nature of the reading program experienced in the special education setting during the baseline year and in the mainstream setting during the implementation year for one student” (p. 108). During this second year, Randy, who was reading on the first-grade
level, received a developmental reading program utilizing a fifth-grade book. This program was conducted in the classroom for only 300 minutes per week (the amount of time other students worked on reading) rather than the 690 minute program he experienced in the resource room the previous year.

Though he was allocated less time for reading instruction in the mainstream, that time was spent more efficiently each day, with considerably less of Randy’s reading time spent off-task. But Randy also spent less time talking (about things reading-related) and writing than he had in the resource room. And despite all these differences in time allocation and time distribution, minutes per week of time-on-task in oral and silent reading was virtually the same in the mainstream as the year before in the pull-out program special education program. (p. 115)

They continue, “Not only did Randy not get more reading once he was returned to the mainstream, he also did not get individually tailored, remedial instruction on specific reading skills in which he was deficient” (p. 116).

Zigmond and Baker report that Randy and his teachers believed that he had a very good year and that he was happy and he was challenged in the regular classroom. However, Zigmond and Baker contend that “one of the most powerful forces propelling change in the service delivery model of special education is the desire for better outcomes for students with LDs” (p. 116) and Randy did not achieve improved outcomes. “The data indicated some significant differences in the opportunities to learn in the two settings, but they do not show significant improvements in reading achievement when in the mainstream” (p. 108).

Zigmond and Baker conclude, “What we are ‘buying’ with any full-time mainstreaming program must be understood at the level of Randy, or we will never
provide him or anyone else with disabilities with an ‘appropriate’ education.

Unfortunately, this case study suggests that we still have a long way to go” (p. 116).

Kozleski and Jackson (1993) also conducted a study of one child with severe disabilities, including severe mental retardation, who was fully included in the regular education program. This study followed Taylor through the third, fourth, and fifth grades where she participated in a full educational inclusion program, with assistance from a paraprofessional in the third and fourth grade classrooms. They “chose to target two key areas that may illuminate the curriculum and instruction dilemma: (a) the impact of inclusion on social/interpersonal relationships, and (b) the impact of inclusion on skill acquisition” (p. 154).

Kozleski and Jackson contend that the development of social/interpersonal relationships among all of the students in Taylor’s classes had a positive effect on Taylor.

Students in Taylor’s fifth-grade class spoke of their class as a group of students who were team members; they included Taylor in that group. Further, sociometrics revealed a growing acceptance of Taylor from the first to second semesters in the fifth grade. Anecdotal reports from parents, teachers and other staff members provide evidence that out-of-school interactions also developed over time in fourth grade. In both fourth and fifth grades, the number of students that Taylor initiated interactions with grew over the course of the year, and those interactions increased in diversity. Even during her third-grade school year, peers interacted in nonacademic activities with Taylor with increasing frequency. (p. 171)

Kozleski and Jackson reported, “It was difficult to sort out what aspects of skill growth and behavior change were the results of direct instruction, incidental learning, and/or maturational processes (p. 171). They contend that Taylor’s participation in class and her peer relationships were related to improvements in skill areas.
The focus on participation and socialization may well have positively influenced a number of other, related skills, such as increased use of verbal language; improvement in articulation; and skills in completing procedures for bus rides, walking home from school, going to lunch in the cafeteria, and participating in writer’s workshop. Moreover, Taylor learned to identify the written names of her classmates and to ask peers to read signs, notes, and books to her. It may be that an inclusion model that incorporates the student with disabilities into the routines and patterns dictated by the typical curriculum provides an effective incidental teaching model. (p. 172)

Kozleski and Jackson conclude:

There is some evidence that deviating from a reductionist, analytic model of skill acquisition in which there is a direct relation between the explicit content of the student-teacher interaction and learning outcomes yields results that benefit the long-term needs of the learner. (p. 174)

Although these two studies involving individual students provide some insight into what happened to them in their full-time inclusion programs in their schools, they raise some questions. For example, Randy did not receive special education services during his fifth-grade year to remediate his reading difficulties and yet, his achievement in reading was about the same for the two years of this study. Randy did not achieve less that he had the previous year despite the reduced time spent on reading and despite his reading services being provided in the classroom by regular educators. What would have happened if Randy had more time for reading in his regular educational program, or if his reading was taught by a special educator within his regular classroom?

All of Taylor’s educational services were provided by regular educators in the regular classroom. She was not provided with any alternative communication system and she did not receive any services from special education personnel. Would her educational outcomes have been increased if she had received special education services from special education personnel within the regular classroom? Would her long-term
needs be better met in a program that was modified to include some specific
task-analytic approach to teaching her new skills? These questions indicate the need for
exploring and developing service delivery systems that focus more specifically on the
needs of the students with disabilities.

In 1993 McIntosh, Vaughn, Schumm, Haager, and Lee conducted a study that
examined 60 general education teachers’ classrooms (kindergarten through grade 12) in
which students with learning disabilities were integrated to examine “how general
education teachers’ behaviors toward mainstreamed students with learning disabilities
compared with their behavior toward students without disabilities, and the interactions
between students, and between students and teacher” (p. 249). The teachers that were
involved in this study were considered to be effective general education teachers.

The results of this study indicate

... that students with learning disabilities are treated by their general
education teachers much like other students. There is, of course, a
positive and negative side to this finding. On the positive side, students
with disabilities appear to be accepted by the teachers; treated by the
teacher fairly and impartially; involved in the same seat arrangement as
other students; and particularly at the middle and high school level, work
on the same activities and use the same materials as other students in the
class. (p. 257)

They continue

The potentially troublesome side of this finding is that instruction in
mainstreamed classes is not differentiated to meet the needs of students
with disabilities, and few adaptations are provided. Students with
learning disabilities are included in class activities, but are participating
very little. They are not very engaged in the learning process, either by
their own or by the teacher’s initiation. Across all grade levels, when
these students are compared with their classmates without disabilities,
they infrequently ask the teacher for help or assistance, do not volunteer
to answer questions, participate in teacher-directed activities at a lower
rate, and interact with both the teacher and other students at a lower rate.
(p. 259)

These researchers looked for possible reasons for this. One reason might be that the primary mode of instruction for social studies and science classes at all grade levels is whole-class activities, when the teacher “infrequently interacts with the students with learning disabilities” (p. 259). The students with learning disabilities are “extremely low on volunteering to answer questions or requesting assistance” (p. 259). The authors offer two possible related explanations. First, these students have been characterized as “inactive learners” who have a response style that is “passive and disengaged, with little self-monitoring of what is being learned or what parts of information are being missed” (p. 259). Second,

... there is a large cognitive gap between their knowledge and the material presented in class. Because so little of the classwork is adapted to meet the individual learning needs of students and the primary mode of instruction is large group, most of the students with learning disabilities are not engaged in the learning process. (p. 259)

The findings of this study raise some questions. They suggest that even those teachers who have been identified as being effective with students with disabilities make few adaptations to meet these students’ special learning needs (p. 259). If these findings are the norm, what are the long-term implications for students with learning disabilities who are mainstreamed into general education classrooms where large-group and undifferentiated instruction occurs? Another question relates to the expectations that are placed on regular education teachers. Is it feasible that general classroom teachers can make the adaptations that are necessary for students with disabilities to be more successful in these mainstream classes? A third question is what role can special
education teachers assume to work with general education teachers in developing feasible adaptations and expectations for students with disabilities who are mainstreamed into general classroom settings?

A study conducted in 1994 by Hollowood, Salisbury, Rainforth, and Palombaro investigated “the use of teacher and student time in an inclusive elementary school where students with mild to profound disabilities were enrolled in general education classrooms” (p. 242). There were 6 participants with severe disabilities and 12 students without disabilities. These participants were in 8 classrooms where special education and general education teachers and paraprofessionals worked together to provide services to the 6 students with severe disabilities. Trained observers were used to record time used for instruction as well as for levels and types of student engagement in the instruction and types of interruptions that occurred.

This study was conducted to investigate whether the presence of students with severe disabilities diminishes the quality or opportunity for instruction for students without disabilities (p. 242), “to examine uses of time in elementary school classrooms that included students with mild to profound disabilities” (p. 242), and to compare “engagement ratios of students enrolled in classrooms with and without peers with severe disabilities” (p. 242).

The authors emphasized four findings from their investigation. First, the time allocated to instruction fell within “high allocation levels” (p. 248), “created an important foundation of instructional opportunity for the entire school day, and enhanced the probability that time used for core instruction would be high” (p. 248). Second, “the quantity of time actually used for instruction was unaffected by the
presence of students with severe disabilities” (p. 248). General education and special education teachers and paraprofessionals shared responsibilities in these classrooms, but roles and responsibilities were clear and enabled these staff members to focus attention on the students for whom they had responsibility. “Related to this second finding, students with severe disabilities evidenced the highest levels of used time relative to typical peers” (p. 249) because students with severe disabilities were required to be on task by the personnel who were working closely with them. “Learning opportunities for students with severe disabilities were, of necessity, embedded within naturally occurring routines within and outside of the classroom context, creating a greater range of instructional options” (p. 249).

Third, “data from this study indicate that the presence of students with severe disabilities in general education classrooms did not significantly affect the level of engaged time of classmates without disabilities” (p. 249). Fourth, any losses of instructional time that occurred “were unrelated to the presence of students with severe disabilities” (p. 250). The interruptions that occurred “were attributable to administrative interferences, transitions between activities, and typical students” (p. 250).

Because of the limited number of participants, this study raises the question of whether these results can be replicated in other settings with more students. Another question, related to the relationship of the outcomes for students with severe disabilities and students without disabilities, concerns how instructional time is utilized.

A recent study conducted by Padeliadu and Zigmond (1996) investigated the perspectives of 150 students with learning disabilities in grades 1-6 from seven school
sites. The vast majority, 78%, of these students received their special education services in the resource room, while 16% received these services in self-contained programs, and 6% were mainstreamed on a full-time basis in the regular education classroom.

This study was undertaken to provide information on the perceptions of students with LD of their special education placement and help clarify whether specific subject characteristics pertaining to school placement and time spent in the mainstream are related to students’ perceptions. The following research questions were posed: (1) How do students with LD perceive special education placement? (2) What percentage of students with LD have an accurate perception of special education placement? (3) Are participant characteristics (e.g., age, sex, IQ score, academic achievement) associated with accurate perception of special education placement? (4) Is time-per-week spent in the mainstream positively associated with an accurate perception of special education placement?. (p. 16)

Students were interviewed and the results indicate “that students with LD are aware (a) of what their special education placement involves and (b) that the accuracy of their perception is related to their age and intelligence level” (p. 21). Almost all of the students knew that not all of the students in their classes went to a special education class and these students provided some interesting perspectives on how and why they had been assigned to receive special education services. “The majority of the students responded that academic problems were the major reasons leading to assignment to special education” (p. 21) and that the way students behaved had nothing to do with special education placement. These students gave positive responses that indicated that they went to the special education class to “get help” (p. 21). “Nearly 40% of the students reported that they missed something when they were pulled out of the mainstream” (p. 21) and most of the students said that they missed instruction in a specific academic subject. Some said that “they missed recreational or fun and
free-time activities in which their classmates participated" (p. 21). “The majority of students liked going to special education class” (p. 22) and the reasons they liked going to the special education class were related to getting extra help and to participating in reinforcement systems, such as treats or games, used in special education.

These findings “that students with LD like going to special education class and they perceive it as a place where they can get help” (p. 22) are important to consider as changes are being made in how special education services for these students are delivered. These findings raise questions about how to preserve the positive attributes that students with learning disabilities associate with going to special education classes when their services are delivered in the general education classrooms and how to utilize perceptions about special education services from the students who receive them—the students with learning disabilities.

Data from three multi-year studies were analyzed by Zigmond, Jenkins, Fuchs, Deno, Fuchs, Baker, Jenkins, and Couthino (1995) and they concluded “that--for a significant proportion of students with learning disabilities--enhanced educational opportunities provided in the general education setting do not produce desired achievement outcomes” (p. 531).

These authors analyzed data from three research projects that were conducted at the University of Pittsburgh, the University of Washington, and Vanderbilt University.

Each developed a model for (1) altering general education classroom conditions that previously had necessitated the referral of students to special education, (2) returning students with disabilities from special education settings to general education, and (3) accommodating students with disabilities more effectively within those mainstream classrooms. (p. 533)
The authors indicated that these three research projects were all considered to be “model programs” (p. 539) and all three projects included the development of strategies designed to (a) assist teachers to analyze and solve instructional problems; (2) manage classrooms to maximize academic learning time for all students, those with and without disabilities; (3) provide appropriate instructional and learning opportunities for students with disabilities who have differing academic, instructional, and curricular needs; (4) consistently monitor the progress of students and adjust instruction based on this monitoring; and (5) deliver special education and related services appropriate to meet the individual needs of students with disabilities within the general education setting (p. 539).

All three required large investments of time and resources for preparation, planning, training, technical assistance, and support. All three were able to win the cooperation of general education school personnel in a genuine restructuring effort. And most important, all three defined results at least partly in terms of academic growth. (p. 539)

The findings from these three model multi-year studies “suggest that general education settings produce achievement outcomes for students with learning disabilities that are neither desirable nor acceptable” (p. 539). For “approximately half of the students with learning disabilities in the six schools, achievement outcomes after a year of fully integrated educational programs and services were unsatisfactory” (p. 539).

Zigmond, Jenkins, Fuchs, Deno, Fuchs, Baker, Jenkins, and Couthino continue:

It is important to remember that these three projects invested tremendous amounts of resources--both financial and professional--in the enhancement of services for LD students in the mainstream setting. Despite this investment, the achievement outcomes were disappointing. Furthermore, these models did not answer the question of how best to provide services for students with serious learning problems. (p. 539)
The authors conclude that the research conducted to date, including these three multi-year studies, "provides no basis for eliminating the continuum of services for students with learning disabilities and no basis for the conclusion that satisfactory outcomes can be achieved in the general education setting" (p. 540).

The Summer 1995 issue of the Journal of Special Education was devoted to discussion of a study conducted by Zigmond and Baker. Their "aim was to understand how special education teachers functioned in full-time mainstreaming models and how services were organized for students on IEPs, but mostly whether students with LD, served full-time in the mainstream, were receiving a special education" (p. 114). Their research addressed the following two questions:

(1) What is a special education in the context of full-time mainstreaming and the Regular Education Initiative? (2) What are the policy implications of a determination that full-time mainstreaming models fail to provide students with learning disabilities a uniquely special education? (p. 111)

The authors continue:

Traditionally, special education has been viewed as a proactive force in providing appropriate educational experiences to students in need of something different. . . . What happens to this entitlement when education is improved for all students such that students of every description are fully integrated into general education classes and no student must be given a special designation (label) to access individually tailored services? In such a system, what is special education? What constitutes specially designed instruction for which there is special funding and special accountability? (p. 111)

Zigmond and Baker initiated their study in 1993 when they visited "five well-established full-time mainstreaming models of service delivery for elementary-age students with learning disabilities and documented the nature of the educational experience being offered in these models" (p. 112). These five sites were selected
because of they “represented a wide geographic distribution and a variety in their approach to full-time integration of students with LD” (p. 112).

Zigmond and Baker report that they found a “system of supports and services that are provided to students with disabilities to enable them to access the full mainstream curriculum” (p. 245). All students--those with disabilities and those who were not disabled--had the same access to a system of supports and services that were provided by the special education teachers when they co-taught in general education classes, and the authors contend that they were “dissatisfied” with what they saw (p. 245).

They question whether they “did not see a good special education practice being delivered because these were models new to inclusion and still evolving” (p. 246) and they respond:

Place is not the critical element in defining special education; theoretically, relentless, intensive, alternative educational opportunities could be made available in any venue of a school. But in practice, or at least in the practice of schooling that we have observed, place does set parameters on what can be accomplished. Within the ecology of the general education classroom, where the learning and social interactions of dozens of students must be orchestrated, the how of instruction (materials, instructions, structure) could be tinkered with, but the what of instruction (curriculum, pacing) was less amenable to change. Valuing place over all else leads one to accept the mainstream curriculum (however it is reformed) as immutable and defines the goal of special education as access. (p. 246)

They continue, “In our observations with students with LD in the inclusive settings, their engagement with learning tasks and their participation levels in these classrooms suggested that not much learning was taking place” (p. 247).
Zigmond and Baker contend that there are four implications for policy and teacher education from this study. First, they cite the need for “adding resources to strengthen the continuum of services” (p. 247) because special education for students with learning disabilities will require more resources in the future, not fewer (p. 247). Second, they cite the need for “joining general educators to recreate schools” (p. 247) because “inclusion is fundamentally not a reform of special education but a reform of the mainstream” (p. 248). Special education must, however, “be part of the ongoing dialogue in general education that will lead to reform of curriculum, school organization, and professional development” (p. 248). Third, they cite the need to “focus on individual needs” (p. 248) and contend that the field of special education must rededicate itself to providing for the unique learning needs of students with disabilities (p. 248) and demand evidence of its effectiveness for these students (p. 249). And finally, they cite the need to preserve the “unique preparation of special educators” (p. 249) because “there will continue to be a need for special educators with specialized skills” (p. 249). “Regardless of how well prepared a general educator is, the focus of general education practice is on the group. . . . The special educator’s focus has always been, and should continue to be, on the individual” (p. 249).

They conclude, “Special education is at a crossroads” (p. 250). Although they contend that these five cases indicate that there was a strong commitment to change to improve services to students with disabilities, “current reform of special education into full inclusion deprived the students with Individualized Education Programs of the special services to which they were entitled by law” (p. 250).
As we begin to understand the pragmatics of educational reform, it is clear that we are as far from solutions as we have ever been. We must find a way to balance the values of inclusion with the commitment to teaching individual students what they need to learn. The full inclusion we have studied tips the scale. Future reform efforts that combine inclusive schooling with the additional resources and specially trained personnel needed to achieve the individual educational goals of students with LD, in whatever service option is appropriate, might achieve that elusive equilibrium. (p. 250)

While each of these studies answers some questions related to the utilization of more inclusive models of providing special education services to students with disabilities, each raises other questions to be explored in future studies. There continues to be a need for extensive research related to the effects of providing more services for students with disabilities in more inclusive programs in our public schools and improving the outcomes for these students.

**Special Education Program Evaluation**

Both the Individuals with Disabilities Education Act and Chapter 766 of the Acts of 1972 of the Commonwealth of Massachusetts mandate each school district to submit a plan describing how the district will provide special education services for the subsequent three years. An important part of this plan is the description of how the district is going to make improvements in its program. The program improvement plan is required to include recommendations from the special education program evaluation which is completed at least once every three years by the district (IDEA, sec.300.146, 1990; Chapter 766, sec.506.1-506.3, 1972).

Every three years each school district in Massachusetts is required to evaluate the effectiveness of its special education program, related services, and administrative
procedures for which it is responsible under Chapter 766 (sec. 506). Since the early 1980s these tri-annual evaluations of the special education program in the Barnstable Public Schools had been completed by out-of-district consultants. Although these evaluations met the requirements of the federal and state regulations, they were limited in scope and in their contributions to program improvements in the district.

In 1993 and 1996, comprehensive internal evaluations of the Barnstable school district’s special education programs were completed. This present study incorporates data of these two evaluations, designed and conducted by the staff of this school district to evaluate the program within the context of the changes that have been occurring in the district. Literature pertaining to the value of internal and contextual evaluation of special education programs is examined in the following section.

Periodic educational program evaluation is necessary to focus systemically on past performance and assess how the utilization of resources has aligned with program goals (Guthrie, Garms, & Pierce, 1988). The evaluation of educational programs that are undergoing changes assists in assessing the merit, value, or worth of these changes; in formulating educational policy about these changes; in providing a basis for decision-making; and in the reorganization of program management (Borg & Gall, 1991). Educational program evaluation involves the systematic collection of data; the examination of the data; the assessment of the components of the program to determine the effect of one component; and the examination of the effects of programmatic changes on the constituencies involved in the educational process. The evaluation of existing educational programs is an important process for assessing program responses
to changing needs, and systemic changes necessary for directing program improvements (Borg & Gall, 1991).

The process of program evaluation is crucial to the improvement of special education programs at this time because of changes in how special education services are provided to students with disabilities. The Individuals with Disabilities Education Act changed the way special education services are delivered to students who have disabilities by mandating that special education services be provided to children who have disabilities in the least restrictive environment in which the individual needs of the child can be met. The IDEA further mandates that the child can only be removed from the regular educational environment when the nature or severity of his disability is such that his education cannot be achieved satisfactorily in the environment even with supplementary aides and services (sec.1412[5][B]).

The impact of the Individual with Disabilities Education Act, the Regular Education Initiative, and the movement to more inclusive schools has changed how special education services are delivered to students with disabilities. More of these services are provided within the regular classroom environment. A special education program evaluation can be utilized to assess the benefits to students with disabilities that result from special education program changes, to make judgments about the services these students receive, and to make decisions about the direction of future program improvements (Vallecorsa, deBettencourt & Garriss, 1992).

The evaluation of special education programs is different from those of general education programs in several ways.
The purposes of evaluation within special education, while not unrelated to those in general education, are distinct in that (a) certain methods, activities, and services are prescribed by law or policy in special education that are not prescribed in general education; (b) the instructional complexity of special education requires that it contribute to and serve the goals of other parallel (e.g., related services) and overarching (e.g., general education) programs, while maintaining the integrity of its own goals and objectives; and (c) the comprehensive breadth of behavior (e.g., intellectual functioning, adaptive behavior, social development, fine and gross motor skills, applied living skills, academic achievement, etc.) that is critical to the success of a special education program, generally, is not a goal of the traditionally narrower programs found in general education. (Borich & Nance, 1987, p. 10)

Borich and Nance (1987) contend that because of these distinctions between the purposes of evaluations of general education and special education programs, a different model of evaluation of special education programs is necessary. They suggest three distinct focus areas for the evaluation of special education programs:

1. **Compliance**: adherence to local, state, and federal rules and regulations which designate programmatic expectations related to legal and funding constraints;

2. **Coordination**: the degree of overlap and/or gaps in services which exist among special education program components and between special education programs and external (parallel and overarching) educational programs which provide services to the same population of students; and

3. **Change**: the measurement of student progress (or lack thereof), parents’ attitudes, and staff competencies, which may be compared periodically to determine program “effectiveness” (p. 10).

In order to meet what Borich and Nance contend is the “intrinsic purpose” (p. 16) of special education program evaluations, “to determine what is good practice and to identify effective interventions” (p. 16), they suggest:

It is now time for professionals to turn to this task, both for ethical reasons (what is truly in the best interest of the students?) and for political reasons (how can additional federal and state funds be justified for highly specialized and expensive, yet unproven programs?). Special educators must look beyond the immediate ends of programs within the schools and ask themselves what effect their interventions have on the
individual as he or she proceed into the workplace and the larger community environment. (p. 16)

Wang (1987) discuss the need to develop a data base on the implementation of a variety of program models in order to achieve educational excellence for all students, including those with disabilities.

Information is needed to further understanding and specification of what constitutes effectiveness (indicators of efficacy); the conditions that influence effectiveness (e.g., program features and classroom environments); and the features of cost-effective, alternative programs and practices, particularly programs and practices directed at students with poor prognoses for educational success. An overriding design concern in the task of gathering information on the conditions and impact of educational programs is the extent to which the resulting data base will be useful to researchers, educators, policy makers, and parents in their choice of a venues for improving schools’ capabilities to become increasingly more effective in maximizing the chances of schooling success for all students. (p. 27)

Wang contends that discussion about this data base should include three topics:

(a) the rationale and research bases for information on program features, implementation conditions, and a wide array of program efficacy indicators as the basic data sources for program evaluation and monitoring of program implementation; (b) the specific types of data that should be included; and (c) the implications for using the data base to more effectively serve students with special needs in regular classroom settings. (p. 27)

Wang continues that two major areas of concern should be discussed in the development of this data base:

The first is the need for information on the learning environment (where, how, and the conditions under which instruction and learning take place). The second area of concern is the need for information on a variety of outcomes of effective schooling, particularly what students learn beyond the basic skills as measured by achievement tests (e.g., the quality of students’ functioning inside and outside the school learning environment, students’ ability to learn on their own and from others, and the students’ perceptions of self-competence). (p. 27)
Wang (1987) is concerned that all information on specific features of school learning environments that are effective “in maximizing all students’ chances for schooling success” (p. 31), especially the chances of success for students who have disabilities, is gathered and utilized to maximize this effectiveness.

Examination of research and practice supports the contention that information on learning environments or conditions, combined with a broadened data base of student outcomes, can greatly enhance innovative program development, school implementation, and strategic planning. (p. 31)

The National Association of State Directors of Special Education (1994) identifies the following eleven characteristics of evaluations of programs for the education of students with disabilities. The evaluation: (1) has clear definitions and purposes; (2) is feasible; (3) is flexible; (4) capitalizes on prior work; (5) is results-oriented with the goal of improving instructional practice; (6) reflects consensus on outcomes and is inclusive of all students; (7) contains incentives and supports; (8) meets multiple levels of need and use; (9) involves stakeholders; (10) addresses accountability dilemmas; and (11) is linked to reforms for all students (pp. 13-16).

The National Association of State Directors of Special Education (1994) continues:

The desire of special educators to move beyond compliance monitoring to evaluation the effectiveness of special education programs has been expressed for over fifteen years. Approaches to evaluating effectiveness have been put forth since shortly after the Passage of the Education of All Handicapped Children Act of 1975 (now the Individuals with Disabilities Education Act or IDEA) while noting the lack of consistent definition of terms, lack of consensus on a conceptual model to interrelate the inputs, processes and outcomes in special education programs and, most importantly, lack of agreement on what it means to have an effective special education program. While all of these concerns still remain today, a number of significant changes are taking place in the
ways that evaluation of services to students with disabilities is viewed and in the ways evaluation is approached. (p. 30)

The Association describes some of the changes that have occurred in how special education program evaluations are conducted. The first change involves the impact of state and federal involvement in the focus of these evaluations. State and federal regulations mandate these evaluations and specify some areas to be included. The second change involves the addition of accountability of results as a component of the special education program evaluation. This evaluation is being utilized as a tool to determining if special education services are resulting in expected changes and if the effort is worth the results that are being achieved (pp. 31-34).

The third change involves the addition of the measurement of outcomes in special education program evaluations. The need to gather information in order to understand what outcomes are, or are not, being achieved and what adjustments must be made to improve those outcomes has been emphasized in recent years. The fourth change involves the movement from simple to complex conceptual models of special education program evaluations. These models have evolved from simple input-process-output ones to complex models which take into consideration context factors and external influences to special education services. The fifth, and final, change cited by the National Association of State Directors of Special Education involves the integration of outcomes of special education with general education and human services frameworks. The indicators of effectiveness have been changing to reflect the changing service delivery system and have included indicators of
effectiveness for all students that reflects a more inclusive model for delivering special education services (pp. 34-42).

Even though changes are taking place in the ways that evaluation of services to students with disabilities is viewed, the National Association of State Directors of Special Education contends that "the evaluation of educational services to students with disabilities still lacks clear definitions of terms. Debates about purposes, standards and procedures abound" (p. 42). There is, however, "expanding interest in having common data to answer critical outcome questions" (p. 43). They conclude:

Evaluation of outcomes for students with disabilities and evaluation of the effects of supports and services to individuals with disabilities are now viewed in the broader framework of conceptual models that includes context, input and process variables that affect those outcomes and effects. (p. 43)

The National Study of School Evaluation (1987) advocates the utilization of a self-study as part of an overall school evaluation. As part of the self-evaluation of a special education program within the school, the National Study of School Evaluation requires the completion of the following sections: (1) major outcomes of the program; (2) follow-up to previous evaluations; (3) organization for instruction; (4) description of program offerings; (5) components of the instructional program; (6) facilities and equipment; (7) learning climate; (8) evaluations; and (9) judgments and recommendations (p. 340).

Major expectations include "the expressed beliefs that govern the activities of personnel and organizations" (p. 341) and should "communicate the substance and outcomes" (p. 341) of special education programs. The self-evaluation of major
expectations associated with special education programs includes a determination whether students with disabilities are: (a) accomplishing their goals and objectives; (b) participating in other school activities; (c) exhibiting an understanding of their rights and responsibilities; (d) developing good work habits; (e) developing knowledge and skills commensurate with their needs; and (f) developing an awareness of local opportunities for employment or postsecondary education (p. 341).

The self-evaluation of the follow-up to previous special education program evaluations that have been completed includes both the significant changes that resulted from the recommendations of these previous evaluations, as well as recommendations that have been made but have not yet been implemented (p. 343).

The self-evaluation of the organization for instruction section includes an examination of the following areas: (a) the effectiveness of school policies pertaining to the special education programs; (b) the extent to which this program is an essential component of the total school program; (c) the identification and assessment of students with disabilities; (d) the exit criteria for these students; (e) referrals to appropriate related services; (f) the use of clinical referral information; (g) the adequacy of the supportive services; and (h) financial support for the special education program and services (p. 345).

The self-evaluation of the description of the offerings includes an examination of: (a) whether there is periodic assessment of special education services; (b) the relationship between the special education services and the school’s stated philosophy and goals; (c) the enrollments in specific programs; (d) the scope of programs and special subject offerings in light of student needs; (e) the correlation between school
programs and resources for additional education and training; and (f) the adequacy and appropriateness of related services (p. 347).

The self-evaluation of the components of the instructional program are extensive and includes an examination of: (1) the preparation of the faculty; (2) the extent to which the faculty keep informed about current educational developments; (3) the extent to which faculty demonstrate continued professional growth; (4) planning and preparation for instruction; (5) the relationship between instructional activities and the stated goals and objectives of the program; (6) the development, implementation and evaluation of individual education programs; (7) the effectiveness of individual education programs in promoting appropriate academic performance and social behavior of the students; (8) the scope of instructional materials and media; (9) the quality, quantity, accessibility, and maintenance of instructional materials and media; (10) the utilization of instructional materials and media; (11) the adequacy of the student assessment program in providing for individual differences; (12) the reporting and utilization of student assessments; (13) the effectiveness of the methods used in program evaluation and student assessment; (14) the assessment of teaching effectiveness; (15) the utilization of the previous evaluations to make program changes; and (16) the determination of the overall effectiveness of the program (pp. 347-53).

The self-evaluation of the facilities and equipment includes an examination of the extent to which the facilities and equipment are adequate and effectively utilized to achieve the major expectations, goals, and objectives of the program (p. 354).

The self-evaluation of the learning climate includes an examination of: (1) the extent to which the learning climate supports the attainment of the program’s major
expectations, goals, and objectives and fosters individual student achievement, satisfaction, and self-esteem; (2) the frequency with which the program is evaluated, and revised if necessary, in terms of content and student needs; and (3) the degree to which the students, teachers, parents, community members, administrators, and school board members have a positive perception of the learning climate (p. 355).

The self-examination of the evaluation section includes a study of evidence that: (1) the instruction, offerings, instructional components, facilities, and learning climate contribute to the achievement of the major expectations of the program; (2) the program has been carried out as designed; (3) the methods of evaluation of the program are valid and reliable; (4) students are achieving the major outcomes of the program; and (5) the program contributes to the achievement of the identified goals (pp. 356-57).

Finally, the self-evaluation of the judgments and recommendations includes descriptions of: (1) the most satisfactory aspects of the program; (2) the aspects of the program than need improvement; and (3) the specific means for correcting the limitations (pp. 357-58).

After the self-study phase of the evaluation is completed by the school staff, the National Study of School Evaluation (1987) recommends that a visiting committee made up of professional colleagues not directly involved in the school program, provides a reaction to the self-study. Reports of the visiting committee are then utilized to develop a plan of continuous improvement to be implemented by the staff of the school being evaluated (pp. 7-8).

Vallecorsa, deBettencourt, and Garriss (1992) also recognize the importance of self-study in evaluations of educational programs.
Regular evaluation of school programs can be of enormous help to school professionals—provided they are the ones who plan the evaluations, conduct the evaluations, and use the evaluations to guide their school improvement activities. Evaluation is a powerful tool for documenting school needs, identifying strengths and weaknesses in school programs, and discovering how to improve almost every aspect of school life. (p. vii)

They continue:

Nowhere is the need for program evaluation more evident than in the field of special education. Since the passage of P.L. 94-142, the Education of All Handicapped Children Act, program evaluation has been a required activity in special education to ensure that programs and projects are meeting their intended goals. Although early efforts in this regard focused almost exclusively on questions of legal compliance, more recent efforts have shifted to include many areas of interest. School personnel are now interested in questions that go beyond issues of program access and procedural safeguards. They increasingly are interested in addressing issues of program appropriateness and program quality. For example, it is no longer enough to know that long- and short-term objectives are being specified in individualized educational plans (IEP’s) and that the documents are being reviewed in accordance with federal mandates. School personnel now want to know if students are learning at rates commensurate with their ability and handicap. They want to know if their assessment procedures place students in the most appropriate programs and if these procedures provide useful information to guide instruction. They want to judge the effects of individual programs and identify areas where improvements must be made. (p. 1)

To determine whether special education programs are meeting their intended goals and to determine areas where improvements must be made, Vallecorsa, deBettencourt, and Garriss (1992) list fourteen standards and indicators of quality:

(1) quality special education programs actively provide the staff resources necessary for program success; (2) quality special education programs involve all personnel who work with handicapped students in appropriate training to strengthen their ability to provide effective services; (3) facilities provided for educating handicapped students maximize integration of handicapped students within the total school environment in ways that go beyond minimal legal compliance; (4) the range and variety of instructional materials, supplies, and equipment for the special education program are sufficient to meet effectively the needs
of students served; (5) quality special education programs exceed minimal compliance standards with respect to implementing procedures to identify and place those in need of special education services; (6) quality programs for handicapped students exceed minimal compliance standards with respect to maximizing students’ participation in the regular education program with nonhandicapped peers; (7) effective special education programs are well coordinated; (8) students are successful in the special education program; (9) quality special education programs implement program evaluation activities that go beyond those required for purposes of compliance monitoring; (10) quality special education program emphasize principles of effective practice widely held to be applicable across grade levels and areas of exceptionality; (11) in addition to reflecting principles of sound practice that apply across special education programs, quality programs for exceptional students at the secondary level also reflect principles widely held to be applicable to the secondary level; (12) in addition to reflecting those general practices that apply across special education programs, quality programs for severely and profoundly handicapped children reflect principles of sound practice widely held to be appropriate for this population; (13) the climate for special education reflects a sense of belonging among students and staff and students and staff members feel they are a part of the total school environment; and (14) school personnel hold positive attitudes toward handicapped students and work to promote educational growth and development of positive self-concepts among these children. (pp. 98-104)

Vallecorsa, deBettencourt, and Garriss (1992) contend that school personnel “can do much to improve the quality of the instructional programs and service-delivery options in their schools by systematically evaluating program quality using criteria found to be associated with effective special education programs” (p. 4). They emphasize:

... the need for program evaluation in special education that goes beyond the question of legal compliance. It is no longer enough to know only that your programs are meeting federal mandates. Questions such as whether one is meeting program needs, whether specific elements in your programs need improvement, or whether programs are meeting their intended goals also need to be answered. (p. 96)
Vallecorsa, deBettencourt, and Garriss conclude that regular evaluations of special education programs can be an important part of maintaining program quality. Evaluations that are planned and conducted by program personnel will be utilized by them to guide their improvement activities.

Stainback and Stainback (1988) discuss the importance of internal and contextual special education program evaluations. “An in-depth, holistic description of events, programs, procedures, and/or philosophies as they operate in context in natural settings is often needed in order to understand and make informed decisions” (p. 11). They contend that the study of subjective values, “that is, what people such as teachers and students think and feel about educational matters” (p. 13) often influence what occurs in educational settings, “since people often make decisions based on what they think or believe” (p. 13). They contend that it is important to ascertain what teachers, parents, and students think about special education programs, procedures and philosophies and that evaluation procedures that involve them will lead to a better understanding of their feelings about: (a) the social significance of the goals of the program; (b) the social appropriateness of the procedures utilized; and (c) the social importance of the outcomes of the program (p. 13).

Borg and Gall (1991) discuss the importance of subjective methods of inquiry and the appropriateness of responsive evaluation in focusing on the concerns and issues of stakeholders. They define a stakeholder as “anyone who is involved in or affected by the entity being evaluated” (p. 764) and identify four phases of an evaluation that focuses on the concerns and issues of the persons who have a stake in the evaluation. The first phase involves “initiating and organizing the evaluation” (p. 764). This phase
involves identifying what is to be evaluated, the purpose of the evaluation, and who are the stakeholders. The second phase is to “identify the concerns, issues, and values of the stakeholders” (p. 764). This phase involves interviews and questionnaires administered to all or a sample of stakeholders. The third phase involves gathering “information that pertains to the concerns, issues, and values identified by the stakeholders” (p. 765). Descriptive information about the program being evaluated and the standards that will be used is gathered during this phase. The fourth and final stage of a responsive evaluation is “to prepare reports of results and recommendations” (p. 765) and to provide extensive descriptions of the concerns and issues identified by the stakeholders.

Lafleur (1993) discusses the value of internally conducted participatory program evaluation. This type of evaluation engages “primary users in as many phases of the evaluation process as possible” (p. 4) and involves primary users in the entire evaluation process, including data collection, analysis and interpretation of the findings. Lafleur concludes that “the involvement of primary users in the evaluation process results in positive staff development, feelings of empowerment, and a sense of competence about evaluation issues and procedures” (p. 25).

Lobosco and Newman (1992) discuss the importance of involving stakeholders in the evaluation of early childhood special education programs, and recognize that different stakeholders have different needs for the evaluation process. They contend the collaboration of all who are involved in a special education program will strengthen the entire evaluation process. Their involvement will lead to the evaluation of those issues that are important to them as individual stakeholders. “The contextual issues of the
evaluative information may have a differential effect on decision-making information needs” (p. 459).

They continue, that although differing constituencies may have differing purposes for the evaluation, it is important that the differing constituencies work together to clearly define the purpose the evaluation before it is begun. They discuss the “need to keep the purpose of the evaluation and the corresponding decisions as a focal point in the design, the conduct, and the report of the evaluation “ (p. 460) so that desired results will be achieved.

Lobosco and Newman (1992) maintain that both qualitative and quantitative data are needed to meet the contextual evaluation needs of an early childhood special education program. “Neither quantitative nor qualitative information alone is adequate to meet the information needs” (p. 460) of early childhood special education programs. The contend that mixed-method evaluation and triangulation will “temper conflicting information needs” (p. 460).

The involvement of stakeholders in the evaluation process will assist with the utilization of evaluation results. Use of stakeholder-based evaluation and responsive evaluation techniques are recommended as a means of meeting stakeholders’ needs for involvement in the decision process and for facilitating the interaction between personal contact with the program and use of information from other sources to enhance reliance on one’s own experiences as a basis for decision making. (p. 461)

Lobosco and Newman (1992) support a constituency-based evaluation model which involves stakeholders with their differing perspectives. They contend that the diversity of their perspectives will lead to a stronger evaluation process and resulting implementation of recommendation.
Schrag (1994) suggests that there has been a “shift from documenting the process of educating students (with special needs) to demonstrating positive outcomes” (p. 6) that has lead to accountability and program improvement. This has become the primary reason for implementing evaluations of special education programs for students with disabilities. She contends that stakeholder-based evaluation that “involves active participation in the evaluation process by stakeholder groups whose interests are affected by the program being evaluated or whose decisions can influence the direction of the program” (p. 7) will provide a vehicle for a greater variety and diversity of views than more traditional evaluation processes.

Stakeholder-based evaluation has emerged to help promote greater use of study results to get constituencies more invested in the process and products of research and to make evaluations more responsive to diverse needs. Stakeholder-based approaches work especially well for evaluations that seek to integrate and reconcile diverse perspectives on a given issue or program. (p. 8)

Schrag continues that stakeholder-based evaluation results in a more diverse evaluation process. Their involvement in developing evaluation methods and appropriate topics will lead to a more comprehensive evaluation. It results in “greater stakeholder ownership of the evaluation process and results” (p. 8). Active participation by stakeholders with diverse interest “makes for articulation of a greater variety of views than is typical in most evaluations” (p. 8). She contends there is “less separation between process and product--and more interactive feedback over the course of the evaluation than is typically the case in most evaluations” (p. 8). The stakeholders who will be involved in the evaluation process will also be involved in making necessary
program improvements. They will understand what changes have to be made and how to implement these changes because of their involvement in the evaluation process.

Special education program evaluations are utilized to determine the appropriateness of program services for individual students who have disabilities as well as to determine whether these services are provided to individual students in the least restrictive educational environment consistent with their individual needs. If the least restrictive educational environment for a student is the regular classroom for any part of his/her school day, there is a need to evaluate the student’s services that are provided in the regular education program. The ability of his/her regular education teachers to provide these services, the adaptability of the curriculum to his/her individual needs, the modifications of classroom assessment tools, the specialized resources that are provided in the regular classroom, and other requirements of his/her Individualized Educational Plan will be part of any evaluation of the special education program, and should involve the teachers who provide these services.

When students with disabilities receive their special education services in the regular education classroom, the evaluation of special education program evaluations should include assessments of the following: (a) the staff development pertaining to special education that is provided to regular and special educators; (b) the collaboration between and among regular and special educators and providers of special services; (c) pre-referral curriculum modifications and procedures; (d) the referral and student eligibility processes; (e) student assessment practices; (f) the process of decision-making related to the development the Individualized Educational Plan and the placement process; (g) parent’s rights; (h) the methods used to assess the progress of individual
students; (i) the availability and utilization of special resources; (j) the facilities and specialized equipment; and (k) the evaluation methods of the special education department (Borich & Nance, 1987; National Association of State Directors of Special Education, 1994; Stainback & Stainback, 1988, Vallecorsa, deBettencourt & Garriss, 1992).

Evaluative procedures involving in-depth, internal, holistic approaches are utilized to provide data about special education programs in the context of the overall systems in which they operate. These procedures, conducted in the natural settings where the programs are operating, are useful to achieve an understanding of the program components and the variables and interrelationships and to make informed decisions (Borich & Nance, 1987; Stainback & Stainback, 1988).

The self-evaluation of special education programs is utilized to improve the quality of the program through a comprehensive examination of what happens to students with disabilities in their school environment (National Study of School Evaluation, 1987). Involving primary service providers and users in all phases of the special education program evaluation process provides important insights into the systemic changes that occur, their effects on the program, the variables and interrelationships that affect the special education program, and the feelings of members of all of the constituent groups about the program.

The internal evaluations of special education programs focuses on the key issues of service providers and users and define areas in need of improvement. Participants in these internal evaluations provide insights into problem areas, causes, and solutions and the participants are empowered to collaborate to improve special education programs.
Internal evaluations provide unique insights into the distinctive characteristics of special education programs (Lafleur, 1993; Vallecorsa, deBettencourt & Garriss, 1992).

Internal evaluations of special education programs provide insight into the effects of systemic changes have on how these programs operate, how and why the program components are developed, and whether they are successful or not, as well as provide reasons for the level of success that is achieved (Borich & Nance, 1987; Schrag, 1994; Vallecorsa, deBettencourt & Garriss, 1992).

Changes in service delivery models have resulted in significant changes in how special education services are provided. Internal evaluators elicit more in-depth answers that focus on key issues and assess the program within the context of the changes that occur. They evaluate the effects of these changes on the program and the students who receive special education services, and identify program improvement areas.

Conducting an internal special education program evaluation leads to the development of collaborative relationships that are important to the eventual improvement of the program. Internal evaluators have insights into program strengths and weaknesses and have a stake in the development of a unified approach to making program improvements (Lafleur, 1993; Vallescorsa, deBettencourt & Garriss, 1992).

The development of an internal evaluation process increases participant effectiveness in making improvements, documents varying needs of programs within the district, supports requests for program changes and identifies program alternatives. Special education personnel within a district are able to improve the quality of special education instructional programs and service delivery options in their schools by
systematically evaluating program quality using criteria found to be associated with
effective special education practices (Vallecorsa, deBettencourt & Garriss, 1992).

The impact of the Individuals with Disabilities Education Act, the Regular
Education Initiative, and the movement to more inclusive schools changed the way
special education services are provided to students with disabilities. Many of the issues
that have been raised by both the proponents and the opponents of this movement to
more inclusive schools can be examined through the implementation of internal
evaluations of special education programs. This process can lead to improvements in
how special education services are provided to students with disabilities, as changes in
how these services are delivered occur.

The special education evaluations that were completed in Barnstable in 1993 and
1996 utilized an internal evaluation process to examine the effectiveness of the program
and to make recommendations about program improvements.

The Impact of Inclusion on Special Education Costs

The Individuals with Disabilities Education Act, the Regular Education
Initiative, and the movement to more inclusive schools have changed the way special
education services are provided to students with disabilities. However, it is still unclear
what impact the new service delivery models have on the costs of providing special
education services to students with disabilities. Both proponents and the opponents of
this movement to more inclusive schools raise issues about how the costs of more
inclusive service delivery models will change.
The Massachusetts Board of Education (1992), in advocating for the utilization of more inclusive service delivery models, contends that providing special education services in more inclusive settings provides a financial benefit to school systems because it ultimately results in a more cost efficient system. Cost savings are accrued through reduced transportation costs, the placement of regular and special education programs into one building, the consolidation of administrative responsibilities for both regular and special education, the more efficient utilization of educational and remedial services, shared curriculum materials and resources, and the availability of peer tutors. (p. 6)

The Board continues with the contention that there are "cost savings for regular and special education when students receive services in an integrated classroom model as compared to a resource room model" (p. 6). The Board's conclusion is that "integrated programs are cost effective. While this conclusion should not be the primary rationale for developing integrated programs, the potential for cost savings and improved education for students are important considerations" (p. 6).

McKinney and Hocutt (1988) express concern that the implementation of an integrated system of providing special education services in the regular education classroom will lead to "a resource allocation method that blurs the distinction between special and regular education and also offers the potential for diminished services" (p. 19) and resources designated for special education services. They are concerned that teachers will face difficult decisions about "how to allocate their professional and material resources" (p. 20) to effectively meet the needs of all students, including those with disabilities.

Kauffman (1989) addresses the issue of resource allocation for special education services for students with disabilities and expresses his concern that these students will
have decreased services as a result of the movement to more inclusive service delivery models.

Combining general and special education budgets and services or combining all compensatory programs would almost certainly have the effect of decreasing the special services available to handicapped students. Specific budget lines are set aside for whatever purposes are deemed more important. Individuals who wish to achieve a specific financial goal must scrupulously set aside funds for that specific purpose. The same principle applies to the budgets of public institutions. In this era of deficit spending, the appeal to efficiency through block funding and deregulation is politically savvy. Ironically, politically liberal proponents of the REI are supporting an initiative that policy analyses indicate is virtually certain to retard or reverse progress in providing services to handicapped students. (p. 266)

He concludes: “In the case of the REI, fiscal constraints are a scarcity condition obviously motivating the attempts to combine programs into more efficient packages, regardless of the consequences” (p. 273) for students with disabilities.

The National Association of State Boards of Education (1992) raises three important issues related to special education finance and the development of more inclusive models for providing special education services to students with disabilities. First, as new models of service delivery are implemented, some costs may decrease while other costs increase.

Creating an inclusive system of educational services does not necessarily lead to reduced expenditures on special education services. Yet in most districts, inclusionary programs have not cost more, while the outcomes for students have been better. District officials who have been working on inclusion advise that local boards must view their budgets broadly. For instance, savings in transportation costs that may be realized as a results of students returning to their neighborhood schools may be offset by higher personnel costs in providing in-class assistance to included students. What is generally needed is redeployment of educational resources, focusing on creating greater support in the classroom. (p. 30)
Second, in some states there are increased financial benefits to districts that place students with disabilities in separate programs and “these funding practices have also contributed to the segregation of students into isolated programs” (p. 30).

Special placement of students often “trigger” the flow of extra dollars to school systems. It seems to matter little or not at all whether students’ learning outcomes are advanced; the money flow is generally based solely on “input” considerations. These funding practices were developed to ensure that every student received service and that more expensive forms of service got more financial support. (p. 30)

These funding practices have worked to the detriment of districts that develop and implement more inclusive models for providing special education services to students with disabilities. “At its worst, these funding mechanisms have encouraged districts to place students in highly restrictive educational placements in order to receive the maximum amount of funding possible from the state and federal government” (p. 31). The National Association of State Boards of Education calls for changes in financing special education services so districts are not penalized for implementing more inclusive service delivery models.

Third, the Association calls for changes that will create special incentives for all districts to implement inclusion. It discusses a pilot program approach to accomplish this purpose that has been utilized in California.

The state (California) awards demonstration grants to those local districts that have proposed projects that are most likely to increase district capacity to meet the needs of all learners. The intent is to provide maximum latitude and flexibility to schools and districts in designing comprehensive and integrated restructuring demonstrations what will dramatically improve learning for all students. (p. 34)

While these are important issues raised by the National Association of State Boards of Education, the Association did not discuss how to link incentives for
developing inclusionary programs with increased benefits or outcomes for students with
disabilities.

Parrish (1995) addresses similar fiscal issues related to the inclusion movement.
One of the issues he addresses involves the effects on a state’s fiscal policy on program
provisions.

Each of the states and the federal government have a different set of
policies and procedures for determining allocations of special education
aid to local school districts. Each set of policies has been designed to
achieve different fiscal and program objectives. Some tend to be more
supportive of inclusive placements and integrated services than others.
(p. 1)

Parrish presents the following principles that affect the movement to more
inclusive programs:

- financing policy will influence local program provision;
- there are no incentive-free financing systems; and consequently
- it is essential to develop provisions that will support, or at least not
  obstruct, program goals, when developing fiscal policy. (p. 1)

He maintains, “Prior to the design of funding provisions, it is imperative to
determine specific goals for a given social intervention and then to design the financing
system accordingly” (p. 2). More specifically, he maintains the movement to more
inclusive models for delivering special education services to students with disabilities is
a goal that is commonly held at the federal level and across the states” (p. 2). He
continues:

However, it is becoming increasingly clear that special education fiscal
policies sometimes affect program provision in unanticipated ways and
may sometimes serve as a barrier to the implementation of more
integrated and inclusive programming for students with disabilities.
Governmental statements of support for more inclusive placements are
not likely to change local practice if the accompanying fiscal provisions
actively discourage them. . . .
Thus, prior to considering the relationship between special education finance policies and the removal of incentives for restrictive placements, it is necessary to develop some agreed upon definition of the specific reforms being pursued. Such reforms generally include the removal of fiscal incentives for placing students in private rather than public schools, in specialized rather than neighborhood schools, and in segregated classrooms and settings throughout the school day. However, they may also include issues related to greater flexibility in the use of local resources, the creation of intervention systems for all students, and the creation of fiscal disincentives for labeling students as “special education.” (p. 2)

Parrish recommends the removal of incentives for identifying students as special education students when less restrictive placements alternatives and interventions are sufficient to meet the students’ needs. He proposes providing a “seamless set of services” (p. 2) to meet the needs of all students “to reduce the barriers built around these categorical programs, which result in the separation of associated programs and services” (p. 2). Parrish contends that these barriers “lead to the inefficient use of resources through the required maintenance of multiple administrative units, accounting structures, and facilities; and to the inefficient provision of services” (p. 2) for students with multiple special needs. This separation of services can lead to maintaining more restrictive models for providing special education services for students with disabilities.

Parrish contends:

... appropriate instructional programs and related services cannot be provided without adequate financial support... (and) policies that underlie educational financing mechanisms may be as important in affecting program provision as the amounts allocated. (p. 2)

He concludes, “Clearly, fiscal policy has the capacity to drive or deter reform. However, it is also clear that changes in fiscal policy alone are unlikely to be sufficient to cause program change” (p. 3). States that have been most successful in coordinating
program and fiscal reform “emphasize the need for financial incentives, or at least the
removal of disincentives... to effect such desired program changes as the
implementation of fully integrated education services for all students” (p. 3).

McCarthy (1993) also addresses the relationship between fiscal policies and
program changes in special education. She contends that there has been “little progress”
(p. 281) at the state level in establishing unified fiscal and programmatic policies for
providing special education services for students with disabilities. She is concerned that
financial incentives or disincentives may be causing some public school personnel to
seek the least expensive option rather than the least restrictive alternative.

Inclusion models are creating additional concerns among school
personnel because state education aid is often allocated according to the
amount of time children spend with special education teachers. Policies
in many states pose barriers to the full inclusion of children with
disabilities in regular classrooms, and there are fears that states will
reduce appropriations when children are moved from special education
classes into the regular education program. (p. 281)

and McCarthy (1993) raise interesting issues about the relationships between fiscal
policies and educational reforms and the development of more inclusive models for the
delivery of special education services to students with disabilities. Ultimately these will
affect the individual students who receive these services.

In Special Education: Good Intentions Gone Awry (1993), Edward Moscovitch
discusses the relationship between how special education services have been provided in
Massachusetts and the costs for these services. He contends that the system of special
education that resulted from the passage of Chapter 766 in 1972 is directly opposite
what was proposed.
Chapter 766 of the Acts of 1972 was drawn up by a reform coalition that wanted to assure all children a place in public school and guarantee that children with disabilities would not be separated unnecessarily from their peers. . . . In far too many cases, however, children with special needs spend most or all of their time in separate classes. (p. 1)

Moscovitch continues that the passage of Chapter 766 has lead to the creation of an expensive special education system that did not achieve the results intended by its founders. “Maintaining this system (of special education) has become very expensive. . . . As a result, special education draws resources away from regular education and other municipal programs” (p. 2).

Moscovitch contends that “creating a separate education system for children with special needs was not the intent of Chapter 766 or of the federal legislation; and an increasing number of parents and children’s advocates have come to believe that the social and educational needs of these students are not being adequately met” (p. 2). He advocates for the development and implementation of more inclusive programs because inclusion benefits all children as when “teachers provide individualize instruction—and educational challenges—to all children in an enriched classroom environment” (p. 3).

The discrepancy between unexpectedly high expenditure on the one hand and continued dissatisfaction with the program on the other--even among many of the parents, teachers, administrators, and advocates who work so hard to make it succeed--invites a closer look. (p. 2)

Moscovitch expresses concern about the division between regular and special education and competition between them for limited funds for education. “As long as total school budgets are constrained, the laws that give absolute priority to special education expenditures inevitably do so at the expense of regular education programs”
As the money spent on special education has increased, the money spent on regular education has declined.

Moscovitch contends that “the interplay between school finance and the special education laws in Massachusetts acts to discourage integration by destroying the funding base necessary to build an enriched regular education curriculum” (p. 17). In Massachusetts the financing of special education “is left almost totally to local government” (p. 17)

Massachusetts has not taken the extra cost of providing special education programs as a state fiscal responsibility... This is in marked contrast to the rest of the country, where the greater part of the extra cost of educating children with disabilities is typically borne as a direct state appropriation...

The discrepancy between special and regular education funding has become a vicious circle. As regular education programs are cut, more and more parents are tempted to put their children into special education programs. This is particularly true when we remember that the definition of who is and who is not a special education student is such an ambiguous one... The more students enrolled in special education, the less money there is for those remaining. This fiscal squeeze raise issues of equity and the long-term viability of the system... The funding squeeze is steadily eroding the quality of regular education and cutting out the very resources necessary to enrich the regular classrooms special needs students should be moving into. Unless we break this vicious circle, we cannot expect large-scale integration to occur. (pp. 17-19)

Moscovitch advocates moving toward inclusive schools as a way of utilizing total school budgets to enrich regular education programs for all students, but cautions about unrealistic expectations about saving money this way.

It would be a mistake to expect a program of inclusion to produce significant savings in the early years. Rather, schools should use existing resources and new funds available to expand the capabilities of classroom teachers and to provide them extra assistance.

A successful program along these lines might show savings in non-instructional areas, particularly if it can eliminate costly programs to send special needs students by bus or cab to distant public or private...
schools. Savings will also occur as the administrative burden of the special education program is reduced and as public schools cut down the number of students for whom they pay private school tuition. Enriched regular education classes, however, are likely to cost about the same amount as the separate special education classes they replace.

In the longer run, schools can reap financial benefits by spending what until now has been a steady increase in the proportion of students in special education. But for now, we should develop inclusion programs primarily for their educational rather than for their financial benefits. (pp. 21-22)

Moscovitch argues that the special education programs in Massachusetts are not providing students with disabilities the kind of education that they need and the kind that was envisioned by the authors of Chapter 766, and he is concerned that the size and growth of special education in Massachusetts is eating away at the foundations of the state’s educational system.

McLaughlin and Warren (1994) discuss the implications of how inclusion policies impact district budgets. They acknowledge the fear that inclusion is being implemented to save money and contend that there has been little examination of how resource allocation changes as the movement to inclusion occurs.

There is also the fear that inclusion could be used as a means to save money at the expense of students in needs of specialized educational services. In particular, concerns have been raised that special education teaching positions may be reduced as students move into integrated classrooms, or that the entire inclusion movement is designed to save transportation costs. While inclusion has been extensively discussed in the literature, information is notably absent regarding the allocation of resources or how those allocations change as a result of the moving to inclusion. (pp. 2-3)

To obtain information about the impact of inclusion on the costs of providing special education services to students with disabilities, McLaughlin and Warren interviewed administrators in 12 school districts committed to including all students
with disabilities. Based on this study involving these 12 school districts, they conclude that inclusion does cost more initially. “This investigation suggests that initial implementation of inclusion can require additional resources” (p. 25). Some of these costs may entail new expenditures incurred in renovating buildings and hiring new instructional assistants, or they may represent a reallocation of existing funds, such as reallocating funds that had been incurred for out-of-district placements to provide additional staff development for teachers who will receive these students as they return to the district’s schools.

Obviously, start-up costs are associated with inclusion, and a move toward inclusion appears to put increased demands on district special education and operational budgets as districts build the capacity of individual schools to serve students with multiple and severe disabilities. (p. 25)

As districts become more involved in inclusion, McLaughlin and Warren contend that inclusion can cost less.

Does inclusion cost more relative to other modes of service delivery? Most likely not. When the costs of providing services in home schools are examined relative to costs of transportation and educational services in cluster programs or specialized schools, inclusion appears to be less expensive. (p. 25)

McLaughlin and Warren conclude that “in order for districts to recognize these savings, dollars would need to follow the student into the new program” (p. 25). They contend that creating inclusive schools will continue in school districts. “In short, the effort can be as expansive as the funds available or as constrained as the budget, but creating inclusive schools will continue” (p. 28). McLaughlin and Warren view this investigation as only “a beginning step in understanding the cost implications of inclusion” (p. 6) and maintain that additional research is needed “to identify the
resources that are impacted by inclusion, and gain some general understanding about how district budgets might be affected” (p. 6).

In advocating for the creation of inclusive schools, Van Dyke, Stallings, and Colley (1995) base their support for the philosophy of inclusion on three fundamental arguments.

First, we believe that inclusion has a legal base. . . . A second argument for inclusion rests on the results of research on best practices. . . . (that) continues to show that students who are not pulled out do better than those who are segregated. . . . Finally, but perhaps most important, a strong moral and ethical argument can be made for the ‘rightness’ of inclusion: It is the best thing to do for the students. (p. 476)

Van Dyke, Stallings, and Colley contend that inclusion is not a way for a district to save money. “Whatever else it may be, inclusion should never be seen as a money-saving option for a school or a district” (p. 476). Money may be reallocated to provide different types of services for students with disabilities. “Under inclusion, no support services are taken away from students; indeed, even more support may be required to enable a student to function optimally in the general education classroom” (p. 476). Inclusion is not a program that a school system should consider as a way to save money. To do it right will cost more money. However, the payoffs for all students are likely to be worth the extra cost (p. 478).

However, Van Dyke, Stallings, and Colley continue that they have been creative in developing ways to reallocate resources to maximize their utilization and to keep costs down.

Our school system did not increase funding during two years of inclusion; we operated on a frozen budget. Though costs have now increased as more schools in our division have begun to adopt inclusion, our per-pupil expenditures for students with special needs are still less
than those of most neighboring school systems, especially those that bus students to other schools and those that pay tuition for students with special needs to attend schools in other districts. (p. 479)

They conclude:

We also found ways to reallocate resources, despite the fact that Virginia allocates special education funds categorically and not according to inclusion models. We have found that, through writing waivers, we can place teachers in cross-categorical positions so that they may consult from school to school on student needs. A cost comparison of self-contained versus inclusive programs in our system showed that, with the latter, money could be saved on classroom equipment, transportation, instructional materials, and mobile classrooms. (p. 479)

Mawdsley (1995) contends that as inclusion has become more prevalent model for delivering special education services for students with disabilities, important concerns about its costs have been raised.

Inclusion raises important concerns for public school officials who are responsible for seeing that services are provided. Not the least of the concerns may be the political reality that different populations within a school district could perceive inclusion as a threat to the quality of educational services offered, a reality that may have unpredictable consequences when school tax levies are at stake. (p. 27)

Parents who do not have children who have special needs may perceive inclusion "as consuming an increasing percentage of already limited resources for students in regular classrooms" (p. 27). Parents who have children who have special needs "may perceive inclusion as a threat to the quality of services provided" (p. 27) to their children.

Mawdsley is concerned that "few school districts have attempted to analyze systematically the cost of inclusion" (p. 29). It is still unclear, he contends, how costs of providing special education services are being affected. For example, as special education resources are being decentralized and brought to the students in the regular
education classrooms, personnel costs for regular education teachers, special education teachers and teachers assistants are affected. Mawdsley contends that not only is it unlikely that a district can reduce the number of regular education teachers, more classroom teachers may be needed because of the extent inclusion increases class sizes. He also contends that these possible increases in regular classroom teachers is not likely to be offset by decreases in special education teachers or teacher assistants. He cites a recent study completed by the Center for Special Education Finance. "A recent federally funded study in six school districts in five states revealed that all of the districts increased the number of instructional assistants or aides" (p. 28). Even with more instructional assistants or aides, some special education teachers will still be needed as consultants and support facilitators. Additional personnel may have to be added to provide more specialized supportive services such as catheterization. It is unclear whether needs for different kinds of personnel will result in lower costs and whether there will be any savings in overall personnel costs.

Mawdsley contends that average per pupil costs for providing special education services for students with disabilities varies, depending on the degree of disability and the type of placement required to meet the students' needs. It is difficult to determine how costs change as new service delivery models are implemented without careful examination of these costs. For example, savings might be made in transportation costs because students are being transported to schools within the district on regular school buses instead of being transported to special schools outside of the district. However, these savings may vary because of the costs of retrofitting the regular buses that are used to transport these students to schools within the district.
In addition, costs for adaptive materials and building renovations are likely to increase as more students with disabilities receive their specialized services within the regular classrooms. While building renovation costs are usually a onetime cost, these costs can be extensive. Costs for adaptive materials may increase as these materials have to be provided in several locations instead of being centralized in one location. It is still unclear how costs for personnel, transportation, adaptive materials and building renovations will change as inclusion continues.

Whether inclusion will produce economies in resources for school districts is difficult to determine. School districts that have developed inclusive models have reported mixed results. Generally, there does not appear to have been any savings in personnel costs, although some overall reduction in expenditure in transportation has occurred. Where structural changes have been made . . . not enough time has passed so that those costs can be averaged over several years. Likewise, one-time purchases of adaptive materials that can be kept and used for a number of years contribute to the initial impression that inclusion is more costly. (p. 31)

McCormick and First (1994) contend “inclusive schooling will have a substantial impact on school systems” (p. 30). They identify some financial components of this substantial impact. They specify various types of costs which may change as a result of the movement to more inclusive service delivery models for students with disabilities. The areas of physical space, instructional time, and related services are areas in which changes in costs may occur as inclusion is implemented and they suggest that cost accounting be utilized to identify costs changes that occur.

Does inclusion schooling cost more or less than other approaches? The answer to this question will vary depending on many factors. Our point is that thorough analysis of necessary costs must be done in order to answer this question and in order to anticipate what will need to be provided to give inclusive schooling the highest probability of succeeding. Failure to take the costs into account can lead to a
frustrating, inconvenient and unsuccessful experience for all concerned—students, teachers, related services personnel, parents, administrators and boards. . . . Effective cost accounting will facilitate planning, budgeting and a better cost-benefit analysis. . . . Whether one is a supporter or critic of inclusive schooling, the financial implications of decisions regarding inclusive schooling should be honestly and thoroughly recognized. (pp. 35-36)

Lewis, Bruininks, Thurlow, and McGrew (1988) contend that although the need for special education services is well established in the literature, “the efficiency and productivity of special education services has received only minimal attention from policy makers, researchers, or practitioners” (p. 203). While some attention has been focused on examining the costs of special education, however, “little attention has been given to linking these costs with outcomes” (p. 203).

Within special education, there exists a real need for current information about public school programs for students with handicaps. We need information on the outcomes of programs for students with special education needs, about the costs of serving such students, and about the relationships between benefits and costs. (p. 1)

They continue:

Benefit-cost analysis is an economic accounting procedure that involves weighing and quantifying both the costs and the benefits of a particular program, and deriving an estimate of the program’s efficiency. In some cases, when it is impossible to assign quantitative values to all benefits and costs, the more limited tool of cost-effectiveness analysis must be used. In this case, the costs of achieving key outcomes are identified and compared across programs to assess relative efficiency. The primary issue addressed by benefit-cost and cost-effectiveness analyses is whether the various outcomes of a program justify their costs in terms of economic efficiency and quality of life factors. This is a crucial question for special education programs. (p. 4)

They maintain that there is a need for analyses of costs and benefits of special education services to assess the “relative economic efficiency of alternative programs through comparing their benefits against their costs of services” (p. 204). The
utilization of these analyses would assist in determining “whether the monetary outcomes of particular special education services for school-age children and youth are worth their resource costs” (p. 204).

Lewis, Bruininks, and Thurlow (1991) studied efficiency considerations in delivering special education services to persons with severe mental retardation and they contend that there is a need “to determine whether the outcomes of particular special education services are being offered in their most efficient manner” (p. 129). They recommend the utilization of benefit-cost analysis to examine the relative efficiency of special education services to measure “as many of the costs and outcomes as possible in both monetary and other terms and illustrating the relevance and value” (p. 130) of these services. “Such analyses force administrators and policy makers to address questions of resource usage in relation to expected postschool benefits for students with handicaps” (p. 137).

Lewis, Bruininks, Thurlow, and McGrew (1988) and Lewis, Bruininks, and Thurlow (1991) discuss the need for an linking monetary and nonmonetary costs and long-term benefits of special education. Although their discussions occurred before issues about the costs of more inclusive service delivery models for providing special education services to students with disabilities were raised, their arguments for benefit-cost analyses in special education are valid ones.

Lewis (1993) addresses the need to answer questions related to determining “the efficiency and productivity of special education services” (p. 58). He contends that this need
. . . relates to determining which program or service alternative is most cost-effective. Here the focus is on determining which program delivers the most outcomes per dollar of resources; or, alternatively, which program incurs the lowest cost per unit of service output. (p. 58)

Lewis continues:

The notion of measuring and estimating efficiency in special education has been confusing for many, but in reality it is a rather straightforward concept that involves attempting to express a relationship between inputs and outputs. In this relationship, the focus is either on minimizing inputs (generally expressed as resource costs in monetary terms) or on maximizing outputs (generally expressed as outcomes or benefits in either monetary or nonmonetary terms). It is nothing more complex than a ratio of resource inputs to any measure of output selected and compared across two or more alternatives. (p. 58)

Lewis maintains that the utilization of formal economic evaluation, focusing on “measuring as many of the costs and outcomes as possible in both monetary and other terms” (p. 63) will “permit us to determine the relative efficiency of particular special education services for children and youth” (p. 63).

Chaikind, Danielson, and Brauen (1993) contend “over the past 20 years, total costs for those receiving special education in comparison to the costs for regular education have changed little, consistently being approximately two times the costs of regular education” (p. 344). However, they maintain “there is a need for improved special education cost data to enable more detailed cost analyses and comparisons of special education program costs over time” (p. 344). They continue:

A clear understanding of the costs of special education and related services can facilitate assessments of these efforts. . . . A current examination of special education costs is also imperative from a policy perspective as a means of understanding the nature of special education services and their cost requirements. (p. 344)
Chaikind, Danielson, and Brauen contend there is a need for an examination of special education costs to address some important questions. Are there some common conclusions about special education costs can be derived from and examination of the data? How do aggregate costs of special education change over time as new service delivery models are implemented? What policy implications can be derived from these analyses of cost data?

They also maintain there is a need for examining the relationship between costs and outcomes. “One potential area for further research, for example, might be the relationship between the costs of special education and outcomes, especially outcomes that evaluate the acquisition of skills” (p. 366). Because various program types and service delivery models have different cost implications, an important issue to be examined is whether a program or service delivery model makes a difference in skill acquisition.

The entire issue of special education trends including enrollment patterns for children with specific disabilities and potential cost changes... needs to be assessed in greater detail. Knowledge of these trends can be valuable to the special education community in formulating expectations about special education programs, as well as in planning for more optimal programs to meet the needs of future generations... Knowledge of cost trends... will enable a better understanding of the changing nature of services provided, program efficiencies, economies of scale, and resource use in special education programs. (p. 367)

Chamber, Parrish, Lieberman, and Wolman (1998) contend that at this time there are “no comprehensive and accurate data sources that indicate what public schools in the U. S. are spending on special education services” (p. 1). They continue that “the Office of Special Education Programs (OSEP) stopped requiring the collection of these
data after the 1987-88 school year because of concerns over their accuracy and the inability of the states to provide this information” (p. 1). They contend that since the Office for Special Education Programs stopped requiring these data, there have been no comprehensive data on special education expenditures.

In 1994-95, The Center for Special Education Finance surveyed states in order to supplement the 1987-88 data from the Office of Special Education Programs. Chambers, Parrish, Lieberman, and Wolman report that of the 24 reporting states, only 13 “could report a high degree of confidence in their responses” (p. 1). They report that “considerable variability exists across the 24 reporting states in the average expenditure per student, ranging from $2,758 in Indiana to $8,501 in Connecticut” (p. 1). They are concerned that as more inclusive models for providing special education services are implemented, there are no accurate data about their costs.

Clearly, more refined data are required to provide an accurate estimate of what is currently being spent on special education in the U. S. There are no current, uniform data sources that track expenditures for special education services at the federal or state level. While OSEP gathers information annually on the numbers of children with disabilities and the allocation of these children among placements, there is no accurate information currently available on expenditures or costs of these alternative placements from which total expenditures might be estimated.

More detailed and refined data will be required to ascertain what kinds of resources are actually being utilized in each type of placement to serve the needs of students with disabilities. This is particularly critical in a period that has seen a growth in interest among policymakers and educators in the implementation of more inclusive service delivery models for meeting the needs of students with disabilities. (p. 4)
Need for Additional Study

As the models for delivering special education services to students with disabilities become more inclusive, there is a need for additional information on special education costs and outcomes that can lead “to informed policy making” (Chaikind, Danielson, and Brauen, 1993, p. 368) and making “more informed decisions about special education” (p. 368).

Chambers, Parrish, Lieberman, and Wolman (1998) conclude “that more uniform, refined data are required for more accurate estimates of special education expenditures, particularly as policymakers and educators are considering more inclusive models for meeting the needs of students with disabilities” (p. 1).

A number of important issues have been raised for which there is little consensus. First, there are conflicting thoughts about how the movement to more inclusive models for delivering service education services to students with disabilities affects the costs of special education. Second, although there are important relationships between fiscal and programmatic policies, it is unclear how these relationships affect the movement to providing special education services in less restrictive learning environments. Third, there is little information about special education costs, outcomes, and the relationships between costs and outcomes.

Additional examination of how the movement to more inclusive models for delivering service education services to students with disabilities affects the costs of special education, more clarity about relationships between fiscal and programmatic policies and how these relationships affect the movement to providing special education services in less restrictive learning environments, and more information about special
education costs, outcomes, and the relationships between costs and outcomes will lead to the development and implementation of more effective service delivery models for providing special education services to students with disabilities.
CHAPTER 3

DESIGN OF THE STUDY AND METHODOLOGY

Introduction

In the Barnstable Public Schools, as well as in the state of Massachusetts, and in the nation, the number of students who receive special education services and the amounts of services they receive have increased. Concurrently, new special education service delivery models have been introduced in order to provide more of these services in less restrictive learning environments. The utilization of these models was intended to ensure that partnerships between regular and special educators were formed and the strengths of regular and special education programs were blended to educate disabled students with nondisabled students within the regular education classroom. Through the utilization of these models, the boundaries between regular and special education were to blur and the ownership of these students was to be transferred to general educators with support from special educators. As a result, more creative services were to be provided to students who have special needs (Will, 1986).

The increases in special education enrollments and amounts of service and the changes in service delivery models placed new demands on all educators and affected all of the constituencies of the educational system. Additionally, questions concerning comparisons between providing special education services through these new service delivery models being utilized in Barnstable and the previous service delivery models have been raised and need to be addressed.
More than 4 million children who comprise 11% of the enrollment of public schools throughout the country receive special education services in public schools (U.S. Department of Education, 1991). The number of students receiving special education services in Massachusetts and the amount of special education services they receive have increased considerably in recent years. During the ten-year period between the 1979-80 and 1988-89 school years, while total public school enrollment (headcount) in Massachusetts decreased 20.0%, enrollment (headcount) in special education programs increased 5.6%. The amount of time that students spent in special education programs also increased. During this same period of time, the pupils served (full-time equivalent) increased 52.7% (DiNucci, 1991, pp. 118-120). DiNucci also reported that during the 1980-81 school year 13.4% of the total student enrollment received special education services and during the 1989-90 school year this figure increased to 17.1% (1991, p. 20). These trends were expected to continue at least through the 1990s (DiNucci, 1991, p. 31).

Similar patterns have occurred in special education enrollments in the Barnstable Public Schools. During the 1979-80 school year 9.2% of the students in Barnstable received special education services. During the 1988-89 school year this increased to 15.8%. During this same time period, the total school enrollment increased 0.9% while the special education enrollment increased 73.5% (Barnstable, 1979, 1988).

This dissertation study examined the effectiveness of the new service delivery model—in which special education services are provided within the regular classroom—being utilized by a Massachusetts school district, the Barnstable Public Schools. The study investigated the impact of this inclusion model in three ways: (1)
its impact in delivering services to individual students; (2) its impact upon special education enrollment; and (3) its impact upon special education costs.

**Description of the District**

U. S. Census Bureau figures indicate that Barnstable, Massachusetts is a growing community. Its population increased from 30,898 in 1980 to 40,958 in 1990, an increase of 32.6%.

The per capita income in Barnstable was $17,376 in 1990, when the per capita income in Massachusetts was $17,224. The percent of families below the poverty level in Barnstable was 4.5% in 1990 as compared with 6.7% of the families in Massachusetts below the poverty level. For the 1993-94 school year, the per pupil expenditure for the district was $6,907 as compared with the average per pupil expenditure of $7,665 for the state (Massachusetts DOE, 1995).

The enrollment of the Barnstable Public Schools has continued to increase during the last six years. The enrollment was 5,717 (preschool to grade 12) on October 1, 1989. On October 1, 1995, the enrollment was 7,073 (preschool to grade 12), an increase of 23.7% (Barnstable, 1989, 1995). The students who are enrolled in the Barnstable schools have continued to have more diverse needs each year. More students require bilingual education services, more students are homeless, and more students qualify for Title I services (Barnstable, 1990, 1995).

The school district is comprised of thirteen schools: ten elementary schools, two middle schools, and a high school. Two of the elementary schools have preschool programs in the building; nine of the elementary schools house kindergarten through
grade 4 students. The Grade Five School is for all of the grade 5 students in the district, the middle schools for grades 6, 7, and 8, and the High School for grades 9 through 12.

On October 1, 1989, there were 815 students in special education programs, or 14.3% of the total school enrollment. On October 1, 1995, there were 1,058 students in special education programs, or 15.0% of the total school enrollment (Barnstable, 1989, 1995). Special education services are provided in all of the thirteen schools in the district.

History of Inclusion in Barnstable

At the beginning of the 1990-1991 school year, special education programs for students who had more substantial special needs were developed within the district and students who had been in out-of-district placements were returned to these programs. On October 1, 1990, there were 30 students in out-of-district placements and by October 1, 1991; this number decreased to 15 (Barnstable, 1990, 1991). At the beginning of the 1992-93 school year, a new service delivery model was initiated on the elementary level. Students having substantial to severe special needs who had previously received their special education services in elementary level substantially separate programs, including some students who had previously been in out-of-district placements, were placed in regular education classrooms. These students received all of their special education services through an inclusion model of service provision.

Students having less substantial disabilities continued to receive their special education services through resource room programs in each of the schools in the district during the 1992-93 school year. During the 1993-94 school year, an inclusion model of
service provision was implemented for students who had more substantial special needs at the middle school. Additionally, during the 1993-94 year the inclusion model was implemented for students having less severe special needs whose special education services had been provided in resource rooms at the elementary level. During the 1994-95 school year, a similar inclusion model for providing special education services for students who had more severe special needs was implemented at the high school level. During this same year this identical inclusion model was implemented for students having less severe special needs whose special education services had been provided in resource rooms at the sixth and seventh grade levels. During the 1995-96 school year, the inclusion model of service delivery was implemented for students whose special education services had been provided in resource rooms at the eighth grade and high school levels.

Additional Information about the District

During the 1995-96 school year, there were several extremely difficult situations that occurred in the Barnstable Public School district which may have had potential effects on the responses to survey items and interview questions in the special education program evaluation that was completed in 1996. These situations included:

1. A 2.5 million dollar deficit that caused much disruption within the system. This deficit was initially identified as having been caused by increases in special education service costs, although it became evident that increased costs in many programs in the district were involved in this deficit.

2. Because of this deficit, many employees, mostly special education teacher assistants, were threatened with the
possibility of being laid off or having their work hours reduced substantially. These threats continued for several months and had detrimental effects on these teacher assistants as well as on other regular education and Pupil Personnel Services staff members, administrators, and parents.

3. For twenty three years, Barnstable had experienced stability with the leadership of the same superintendent. However, the system experienced difficult times through the eighteen month tenure of the new superintendent who resigned under pressure. Subsequent to his departure, two interim superintendents managed the school system until a new superintendent began in October 1996.

4. There was no progress on contract negotiations for either teachers or teacher assistants during the 1995-96 school year.

5. Two principals left the district and their replacements assumed their duties in August 1996.

6. Controversy resulting from the implementation of a block schedule at the high school continued throughout the 1995-96 school year.

7. One of the elementary schools suffered substantial damage from a fire early in the school year. The entire school program was relocated to another facility in the community for several months before being returned to its building mid-year.

8. Planning for an almost seventy million dollar construction project including building a large addition to the high school as well as major renovations to the high school and one of the middle schools involved all staff members at these two buildings (Barnstable, 1996, pp.4-5).

Although it was impossible to determine the specific effects these situations may have had on the responses of the staff members, administrators, and parents to the surveys or who were interviewed, it is probable that these events affected some of these responses.
Design of the Study

The purpose of this study was to examine and evaluate the results of the Barnstable, Massachusetts school district’s decision to provide special education services in the regular classroom. This decision caused radical changes in how special education services were delivered to students who had wide-ranging special needs. The move to full inclusion occurred first with the students whose needs had previously been met in the most restricted programs within the district. This change was implemented within a short time span and with limited preparation beforehand.

This study examined the new service delivery model and determined whether the model was meeting the needs of the students receiving them, given their varied special needs. It determined whether the new service delivery model maximized the utilization of educational resources and examined the cost-effectiveness of providing special education services through the new service delivery models being utilized in Barnstable. It examined changes in special education costs and the relationship between the changes in regular education costs and enrollment increases. It determined whether there were trends in the costs and enrollment patterns.

The following research questions were investigated:

1. Were there changes in the perceptions of regular education and Pupil Personnel Services staff members, administrators, and parents concerning the effectiveness of special education services provided by utilizing the new service delivery model in meeting the needs of students who received them?
2. Were there changes in the costs of special education services as a result of the implementation of the new service delivery model?

3. Were there relationships between any changes that occurred in the perceptions concerning the effectiveness of the special education program and the costs of providing special education services as a result of the implementation of the new service delivery model?

4. Were there changes in enrollments in special education programs during the implementation of the new service delivery model?

5. Were there relationships between special education costs and enrollments?

6. Were there any trends in the patterns of the perceptions concerning the effectiveness of special education services provided by utilizing the new service delivery model in meeting the needs of students who receive them, the costs of special education services, and/or special education enrollments?

7. Did the inclusion model for the provision of special education services maximize the utilization of educational resources?

8. Was the inclusive model for the provision of special education services a cost-effective way to provide these services?
Methodology

Data were collected from two comprehensive special education program evaluations that were completed in 1993 and 1996, as well as from the district’s End-of-Year Pupil and Financial Reports for school years 1992-93 through 1995-96.

The comprehensive special education program evaluation reports included data from surveys completed by, and interviews of, regular education staff members, Pupil Personnel Services staff members, administrators, and parents. Data from these reports that were collected included data related to whether there were changes in the perceptions of regular education and Pupil Personnel Services staff members, administrators, and parents concerning the effectiveness of special education services provided by the utilization of the new service delivery model to meet the needs of students who receive them. These data were collected according to three categories examining the impact on students, on staff, and on the special education program.

Category I included data that examined the impact of the inclusion model on the students and included:

1. how the special education program met the needs of students who have disabilities;
2. whether the services that were necessary to meet the special needs of students were provided;
3. whether the scheduling of special education service time was flexible enough to meet the needs of the students;
4. whether appropriate materials and equipment were available for students who have special needs to use in the regular classroom;
5. whether work requirements were modified for students who have special needs in regular classes;

6. whether regular and special education personnel worked together to develop appropriate modifications for students who were on IEPs;

7. whether the special education staff monitored the progress of students who have special needs;

8. how the staff members' attitudes about working with special needs students changed as a result of their involvement with them;

9. whether the IEP was useful in planning for students who have special needs in the regular classroom;

10. whether students achieved the goals in their IEPs

11. whether the students who have disabilities viewed their special education services as positive factors in their learning experiences;

12. whether the special education program contributed to students who have special needs developing positive attitudes about themselves;

13. whether the special needs students who were in regular classrooms benefitted academically;

14. whether the special needs students who were in regular classrooms benefitted socially;

15. whether the quality of education was improved for students who have special needs when they were placed in regular classrooms;

16. whether the inclusion of students with special needs improved the quality of education for regular education students; and
17. what were the preferred ways for students who have special needs to receive special education services.

Category II included data that examined the impact of the inclusion model on the staff and included:

1. how the roles of staff members changed as a result of integration activities;
2. what were the levels of cooperation and joint planning between regular and special education staff;
3. what were the amounts, the models, and the effectiveness of co-teaching that occurred; and
4. what were needs for further staff development.

Category III included data that examined the impact of the inclusion model on the special education program and included:

1. what factors supported integration activities;
2. what factors impeded integration activities;
3. what were the strengths of the special education program;
4. what were the weaknesses of the special education program; and
5. what recommendations were made to improve the special education program.

Category IV included cost data from the End-of-Year Pupil and Financial Reports and examined whether there were changes in the costs of special education.
services as a result of the implementation of the new service delivery model. Category IV data included:

1. total expenditures for regular and special education programs;
2. total expenditures for instructional services for regular and special education programs;
3. expenditures for special education programs by prototype;
4. total expenditures for tuitions for out-of-district special education placements;
5. expenditures for tuitions for out-of-district special education placements by prototype;
6. full-time equivalent numbers of regular and special education teachers;
7. total expenditures for salaries of regular and special education teaching staff;
8. total expenditures for salaries of regular and special education teachers;
9. total expenditures for salaries of regular and special education paraprofessional staff members;
10. number of special education students who received special transportation;
11. total expenditures for regular and special education transportation; and
12. expenditures for special education transportation by prototype.
Category V included enrollment data from the End-of-Year Pupil and Financial Reports and examined whether there were changes in the enrollments in special education programs during the implementation of the new service delivery model. Category V data included:

1. total enrollment in regular education and special education programs by headcount;
2. full-time equivalent average membership in regular education and special education programs;
3. enrollment in special education programs by prototype by headcount;
4. full-time equivalent average membership in special education programs by prototype;
5. the number of new referrals for special education services;
6. the number of special education evaluations that resulted in placement in special education programs; and
7. the number of special education evaluations not resulting in placement in special education programs.

**Data Analysis**

Data were analyzed by making comparisons between the changes in the data in the two comprehensive special education program evaluations completed in 1993 and 1996. Comparisons were also made in the data from the district’s End-of-Year Pupil and Financial Reports for school years 1992-93 through 1995-96. Relationships in the findings from these two comprehensive special education program evaluations and the
four End-of-Year Pupil and Financial Reports from 1992-93 through 1995-96 school years were examined. Conclusions about the effectiveness of the inclusion model for delivering special education services implemented in Barnstable at the beginning of the 1993-94 school year, and its cost-effectiveness were drawn.
CHAPTER 4

PRESENTATION AND ANALYSIS OF THE DATA

Introduction

The purpose of this study was to examine and evaluate the results of one district's decision to provide special education services in the regular classroom so as to further research on the questions surrounding the practice known as inclusion. The school district that was examined is the Barnstable Public Schools which radically changed its delivery of special education services during the early 1990s.

The following research questions were investigated:

1. Were there changes in the perceptions of regular education and Pupil Personnel Services staff members, administrators, and parents concerning the effectiveness of special education services provided by utilizing the new service delivery model in meeting the needs of students who received them?

2. Were there changes in the costs of special education services as a result of the implementation of the new service delivery model?

3. Were there relationships between any changes that occurred in the perceptions concerning the effectiveness of the special education program and the costs of providing special education services as a result of the implementation of the new service delivery model?

4. Were there changes in enrollments in special education programs during the implementation of the new service delivery model?
5. Were there relationships between special education costs and enrollments?

6. Were there any trends in the patterns of the perceptions concerning the effectiveness of special education services provided by utilizing the new service delivery model, the costs of special education services, and/or special education enrollments?

7. Did the inclusion model for the provision of special education services maximize the utilization of educational resources?

8. Was the inclusive model for the provision of special education services a cost-effective way to provide these services?

Data from the comprehensive special education program evaluation reports completed in 1993 and 1996 included data from surveys completed by, and interviews of, regular education staff members, Pupil Personnel Services staff members, administrators, and parents. These data were related to the changes in their perceptions between 1993 and 1996 about the effectiveness of the special education services that were being provided by utilizing the new service model to meet the needs of the students who received them.

With some items on both the 1993 and 1996 surveys, respondents were provided with options of choosing the extent to which they agreed with statements that were provided. Their choices included (1) Strongly Agree; (2) Agree; (3) Disagree; (4) Strongly Disagree; or (5) Don’t Know. With other survey items, specific choice options were provided. Open ended questions were also included in these surveys, as well in the questions in the interviews that were conducted in both 1993 and 1996.
These data were examined to determine the changes in the perceptions of the participants in the special education program evaluation reports between 1993 and 1996 concerning the effectiveness of the special education services that were provided by utilizing the inclusion model of providing special education services within the regular classroom and its impact on students, on staff, and on the delivery of special education services. Comparisons between the 1993 and 1996 data were provided as they were discussed and an analysis of the inter-relationships among the data was presented.

The Impact of the Inclusion Model on Students

Category I included data that examined the impact of the inclusion model on the students and are reported in this section.

- The Special Needs Program is Meeting the Needs of Students Who Have Special Needs.

<table>
<thead>
<tr>
<th></th>
<th>1993 Agree or Strongly Agree</th>
<th>1996 Agree or Strongly Agree</th>
<th>Change</th>
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<tr>
<td>Reg. Ed. staff</td>
<td>69.6%</td>
<td>46.1%</td>
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<td>PPS staff</td>
<td>92.7%</td>
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<tr>
<td>Administrators</td>
<td>80.0%</td>
<td>94.2%</td>
<td>+14.2%</td>
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<tr>
<td>Parents</td>
<td>78.0%</td>
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Figure 1. How the Special Education Program Met the Needs of Students Who Have Special Needs. (Barnstable, 1996, p. 9; Barnstable, 1993, p. 9).

Analysis of the Figure 1 Data

From 1993 to 1996, the percentages of regular education staff members, PPS staff members, and parents who believed that the special education program was meeting the needs of students who had special needs decreased. In the case of regular
education and PPS staff members, this decrease was substantial. In 1996, 23.5% fewer regular education staff members and 32.9% fewer PPS staff members believed that the special education program was meeting the needs of students who had special needs. This decrease in their agreement was significant because these were the staff members who were providing the special education services through the utilization of the inclusion model. There were many reasons for their concern that the special education program was not meeting the needs of students who have disabilities as well it should have been doing in 1996. These reasons included not having enough time to work with each other, to plan together, and to adapt the curriculum. They also included not having enough resources, not feeling prepared to do what they have been asked to do, and having too many special education students in classes that were already too large. Additional data about these reasons will be examined throughout this study.

However, the percentage of administrators who believed that the needs of these students were being met by the special education program increased significantly between 1993 and 1996. In 1996, 14.2% more administrators believed that these needs were being met by the special education program. It is possible that because of the administrative difficulties the district was experiencing in 1996, these administrators were less involved with and less aware of what was happening within the classrooms with the students who have special needs. There was a slight decrease as 5.5% fewer parents believed that the special education program was meeting the needs of students who had special needs from 1993 to 1996.
Given the Assessment Data, Services that Meet Students’ Needs’ are Provided.

1993

|            | Agree or Strongly Agree | 1996
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<td>PPS staff</td>
<td>91.0%</td>
<td>87.0%</td>
</tr>
<tr>
<td>Administrators</td>
<td>*</td>
<td>*</td>
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<tr>
<td>Parents</td>
<td>*</td>
<td>*</td>
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</table>

* This statement was not on the administrator's or parent's survey in 1993 or 1996.

Figure 2. Whether the Services that Were Necessary to Meet the Special Needs of Students Were Provided. (Barnstable, 1993, p. 14; Barnstable, 1996, p. 13)

Analysis of the Figure 2 Data

From 1993 to 1996, there were only slight changes in the percentages of regular education staff members and PPS staff members who believed that given the assessment data, the services that meet students' needs were provided. In 1996, 3.7% more regular education staff members, and 4.0% fewer PPS staff members perceived that these services were being provided. It is interesting to note, that although the changes between 1993 and 1996 were relatively insignificant, that substantially more PPS staff members than regular education staff members continued to believe that these services were being provided. A reason for this difference may be that regular education staff members were less familiar with the assessment data than PPS staff members, and therefore, were not as aware whether these services were provided, given the assessment data. Another reason for this difference may be that PPS staff members were the people
who were responsible for overseeing and assuring that services that were stated in the IEPs, which were related to the assessment data, were provided.

- The Scheduling of Students’ Time for Special Education Services is Flexible Enough to Enable Specialists and Teachers to Meet Individual Student Needs

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<td>67.3%</td>
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<tr>
<td>Parents</td>
<td>72.7%</td>
<td>70.2%</td>
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Figure 3. Whether the Scheduling of Special Education Service Time was Flexible Enough to Meet the Needs of the Students. (Barnstable, 1993, p. 10; Barnstable, 1996, p. 10)

Analysis of the Figure 3 Data

From 1993 to 1996, fewer regular education staff members, PPS staff members, and parents believed that the scheduling of students’ time for special education services was flexible enough to enable specialists and teachers to meet individual student needs. It is significant that 20.5% fewer regular education staff members and 15.3% fewer PPS staff members believed that this was occurring than did in 1993 because these were the staff members who were primarily responsible for scheduling these services. Reasons for the belief that the scheduling of students’ time for special education services was not as flexible as it should be to enable specialists and teachers to meet individual student needs included not having enough special education staff, having too many students who have special needs in individual classrooms, and not having enough time for staff
members to plan together. Additional data about these reasons will be examined throughout this study.

- Appropriate Materials and Equipment are Available for Special Needs Students to Use in the Classroom.

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<th>1993 Agree or</th>
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<td>34.6%</td>
<td>-9.6%</td>
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<tr>
<td>Administrators</td>
<td>80.0%</td>
<td>94.1%</td>
<td>+14.1%</td>
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<tr>
<td>Parents</td>
<td>56.0%</td>
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</table>

Figure 4. Whether Appropriate Materials and Equipment Were Available for Students Who Have Special Needs to Use in the Regular Classroom. (Barnstable, 1993, p. 12; Barnstable, 1996, p. 12)

Analysis of the Figure 4 Data

From 1993 to 1996, the percentages of regular education and PPS staff members who believed that appropriate materials and equipment were available for students who have special needs to use in the classroom decreased slightly. In 1996, 9.6% fewer regular education staff members and 5.7% fewer PPS staff members believed this these were provided than did in 1993. One reason for these changes in the perceptions of regular and PPS staff members may be related to the need for increased materials and equipment as special education services were decentralized. Their perceptions that the additional materials and equipment that were provided were inadequate for the needs of the students in their classrooms as they work with these students on a daily basis. This concern about appropriate materials and equipment being available for students who have special needs was related to serious concerns about many resources being
inadequate because of the budget cuts in many areas during the 1995-96 school year and will be examined throughout this study.

However, the percentages of administrators who believed that appropriate materials and equipment were available for students who have special needs to use in the classroom increased significantly. In 1996, 14.1% more administrators believed that these were provided than did in 1993. The percentages of parents who believed that appropriate materials and equipment were available increased slightly in from 1993 to 1996, when 6.5% more parents believed that these were available for their children to use in their classrooms. Although these administrators and parents were aware that additional materials and equipment had been provided, they might not be knowledgeable about the adequacy of these additional materials and equipment in specific classrooms in which students with special needs had been placed.

- Work Requirements in the Regular Class are Modified for Students Who Have Special Needs.

<table>
<thead>
<tr>
<th></th>
<th>1993 Agree or Strongly Agree</th>
<th>1996 Agree or Strongly Agree</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reg. Ed. staff</td>
<td>81.5%</td>
<td>80.8%</td>
<td>-0.7%</td>
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<tr>
<td>PPS staff</td>
<td>81.8%</td>
<td>89.6%</td>
<td>+7.8%</td>
</tr>
<tr>
<td>Administrators</td>
<td>86.7%</td>
<td>88.2%</td>
<td>+1.5%</td>
</tr>
<tr>
<td>Parents</td>
<td>63.6%</td>
<td>61.8%</td>
<td>-1.8%</td>
</tr>
</tbody>
</table>

Figure 5. Whether Work Requirements were Modified for Students Who Have Special Needs in Regular Classes. (Barnstable, 1993, p. 13; Barnstable, 1996, p. 13)
Analysis of the Figure 5 Data

From 1993 to 1996, the percentages of PPS staff members and administrators who believed that the work requirements in the regular classes were modified for students who have special needs increased slightly, while the percentages of parents and regular education staff members decreased slightly. In 1996, 7.8% more PPS staff members and 1.5% more administrators believed that work requirements in the regular class were modified for students who have special needs than did in 1993, while 1.8% fewer parents and 0.7% fewer regular education staff members believed this had happened.

It is interesting to note that the largest increase in the belief that these work requirements were modified was with PPS staff members. The majority of these modifications were completed by PPS staff members, with the direction for these modifications usually being provided by special education teachers and the work requirement modifications usually being completed by the special education teacher assistants. Concerns about the ability of staff members to make appropriate modifications, the need for staff development in these areas, and the need for time for regular education and special education staff members to consult about these modifications will surface throughout this study and will be examined in subsequent sections.
• Regular Education and Special Education Personnel Work Together to Develop Appropriate Modifications for Students Who are on Individualized Educational Plans (IEPs).

<table>
<thead>
<tr>
<th></th>
<th>1993 Agree or Strongly Agree</th>
<th>1996 Agree or Strongly Agree</th>
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<td>Reg. Ed. staff</td>
<td>75.1%</td>
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<td>PPS staff</td>
<td>85.5%</td>
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</tr>
<tr>
<td>Administrators</td>
<td>93.3%</td>
<td>94.2%</td>
<td>+0.9%</td>
</tr>
<tr>
<td>Parents</td>
<td>83.3%</td>
<td>76.3%</td>
<td>-7.0%</td>
</tr>
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</table>

Figure 6. Whether Regular and Special Education Personnel Worked Together to Develop Appropriate Modifications for Students Who Were on IEPs. (Barnstable, 1993, p. 13; Barnstable, 1996, p. 12)

Analysis of the Figure 6 Data

Between 1993 and 1996, significantly fewer PPS staff members and parents of students who have special needs believed that regular education and special education personnel worked together to develop appropriate modifications for students who were on Individualized Educational Plans. In 1996, 11.5% fewer PPS staff members and 7.0% fewer parents perceived that this was happening than did in 1993. There were only slight changes in the perceptions of the regular education staff members and the administrators between 1993 and 1996. In 1996, 0.4% fewer regular education staff members and 0.9% more administrators believed that regular education and special education personnel worked together to develop appropriate modifications for students who have special needs.

Although there were differences in percentages of the changes in the perceptions of regular education staff members, PPS staff members, and parents from 1993 to 1996, in 1996, there was very little difference in their agreement that this was happening. In
1996, 74.7% of regular education staff members, 74.0% of the PPS staff members, and 76.3% of the parents believed that regular education and special education personnel were working together to develop appropriate modifications. This is interesting to note here, because in subsequent sections, significant concerns will be discussed about the ability of these staff to provide these modifications because of lack of time, the need for additional staff development, and the need for additional personnel to assist in making these modifications.

In both 1993 and 1996, higher percentages of administrators perceived that regular education and special education personnel worked together successfully to develop these modifications than did either of these two groups who were involved in this process. The reasons for the differences in the perceptions of the administrators was unclear. Again, perhaps, because of the administrative difficulties the district was experiencing in 1996, these administrators were less involved with and less aware of what was happening within the classrooms with the students who have special needs than others who were more directly involved with these students on a daily basis.

- The Special Needs Staff Closely Monitors Student Progress in the Regular Classroom Setting

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<td>Agree or Strongly Agree</td>
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<tr>
<td></td>
<td>61.8%</td>
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<tr>
<td>PPS staff</td>
<td>81.8%</td>
<td>75.4%</td>
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<td>Administrators</td>
<td>73.3%</td>
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<td>-2.8%</td>
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<tr>
<td>Parents</td>
<td>61.4%</td>
<td>63.4%</td>
<td>+2.0%</td>
</tr>
</tbody>
</table>

Figure 7. Whether the Special Education Staff Monitored the Progress of Students Who Have Special Needs. (Barnstable, 1993, p. 13; Barnstable, 1996, p. 13)
Analysis of the Figure 7 Data

Between 1993 and 1996, there were only slight changes in the percentages of respondents who believed that the special education staff closely monitored students progress in the regular classroom setting. In 1996, 6.4% fewer PPS staff, 2.8% fewer administrators, 2.0% more parents, and 0.3% more regular education staff members believed that this was happening than did in 1993.

What is significant is that in 1996, 6.4% fewer PPS staff members, which is largely special education staff members, believed that the special education staff monitored student progress in the regular classroom setting than did in 1993. That the percentages of those who were primarily responsible for monitoring the progress of students who have special needs who were in the regular classroom had decreased is a matter of concern. Additional concerns were raised about there being too many students with special needs in some classrooms, too few special education personnel, and insufficient time for regular and special education staff members to consult. These concerns will be discussed in subsequent sections about weaknesses of the special education program and recommendations to improve it.

Figure 8

In 1993, approximately one third of the regular education staff members, PPS staff members, and administrators indicated that their involvement with special needs students had changed their attitudes about working with them. Some regular education
How Has Your Involvement with Special Needs Students Changed Your Attitude About Working with Them?

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<th>1993 Attitudes Changed</th>
<th>1996 Attitudes Changed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reg. Ed. Staff</td>
<td>approx. 1/3</td>
<td>approx. 60%</td>
</tr>
<tr>
<td>PPS staff</td>
<td>approx. 1/3</td>
<td>approx. 60%</td>
</tr>
<tr>
<td>Administrators</td>
<td>approx. 1/3</td>
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</tr>
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</table>

(Barnstable, 1993, pp. 23-24; Barnstable, 1996, pp. 22-24)

<table>
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<th>1993 Attitudes More Positive</th>
<th>1996 Attitudes More Positive</th>
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<tr>
<td>Reg. Ed. Staff</td>
<td>some</td>
<td>approx. 40%</td>
</tr>
<tr>
<td>PPS staff</td>
<td>almost all</td>
<td>approx. 60%</td>
</tr>
<tr>
<td>Administrators</td>
<td>approx. 1/3</td>
<td>0%</td>
</tr>
</tbody>
</table>

(Barnstable, 1993, pp. 23-24; Barnstable, 1996, pp. 22-24)

Figure 8. How the Staff Members’ Attitudes About Working With Special Needs Students Changed as a Result of Their Involvement With Them.

staff members perceived their attitudes changed to more positive ones as they became more sensitive to the special needs of these students, and they became not only less afraid of working with them, but also more comfortable with them. They said they saw the social benefits of the movement to inclusion. Some regular education staff members, however, also perceived that they were feeling more frustrated. They didn’t feel they had the expertise to meet the needs of the students with disabilities and they were becoming more concerned about their ability to meet the needs of the other students in the classroom.
In 1993, almost all of the PPS staff members who perceived that their attitudes had changed, believed that they had become more comfortable and more positive about working with their students in the regular classroom. Administrators who perceived that their attitudes had changed, believed that they had become more positive about having these students included in the regular classrooms, but they did not indicate any reasons for these beliefs (Barnstable, 1993, pp. 23-24).

From 1993 to 1996, approximately forty percent of the regular education staff members, forty percent of the PPS staff members, and all of the administrators believed that their attitudes had not changed at all. These respondents believed that they had always had positive attitudes about working with special needs students in the regular classrooms.

However, in 1996, approximately sixty percent of the regular education staff and PPS staff members believed that their attitudes had changed. Approximately forty percent of the regular education staff members believed that their attitudes became more positive between 1993 and 1996. They believed that their more positive attitudes were related to their feelings that they had become better teachers because of their experiences working with students with more varied and diverse needs and that teaching had become more rewarding and more challenging for them. They also believed that their more positive attitudes were related to the benefits for the students who have special needs who were in their classrooms. They felt that these students were achieving more than they thought they were capable of, and that they were developing
important social skills. They also believed that their more positive feelings were related to the benefits they saw for the regular education students in their classes who they felt had become more compassionate.

Approximately twenty percent of the regular education staff members believed that their attitudes had changed to become more negative because they did not believe that they were able to meet the needs of the students with special needs as well as the needs of the other students in their classrooms. They felt frustrated because they did not have the time they needed to work with either group of students in their classes and they were feeling inadequate in their efforts because of the wide ranges of abilities of their students, their own expertise, and the resources they had with which they had to work.

Almost all of the approximately sixty percent of the PPS staff members who believed that their attitudes had changed, believed that they became more positive between 1993 and 1996. They believed that their more positive attitudes were related to the changes that they saw in their students who have special needs. They felt that not only were their students being more successful, they felt that they were achieving more, and that they were developing appropriate social skills and forming important bonds with other students in the classroom. These PPS staff members also believed that their more positive attitudes were related to their feelings that their work was more challenging and more rewarding. They were enjoying working in the regular classroom with students with different and varied academic needs (Barnstable, 1996, pp. 22-24).

Analysis of the Figure 8 Data

There were some important similarities in the changes in the perceptions of regular education staff members and PPS staff members about how their attitudes about
students who have special needs changed as a result of working with them in the regular classroom. In 1993, respondents from both of these groups believed that they were becoming more comfortable and feeling more positive about working in the regular classroom with students who have special needs. In 1996, respondents from both of these groups believed that teaching had become more challenging and more rewarding. Regular education and PPS staff members both perceived that there were benefits for students who have special needs. They believed that these students were achieving more and that they were developing important social skills. In 1993, regular education staff members saw the social benefits of inclusion for students who have special needs and in 1996, these staff members also saw the benefits for the regular education students who they felt had become more compassionate.

In 1993, some regular education staff members perceived that they were feeling more frustrated because they didn’t have the expertise they needed to meet the needs of the students with disabilities and they were becoming concerned about meeting the needs of the other students in their classrooms. In 1996, approximately twenty percent of the regular education staff members believed that their attitudes had changed to become more negative because of their feeling that they were unable to meet the needs of either the students who have disabilities or the students who do not. They believed that they did not have the time, the expertise, or the resources they needed to be successful in their efforts to meet the needs of all of the students in their classrooms because of the wide range of abilities of these students. Some reasons for these beliefs will be discussed again in sections that examine the needs for additional staff members, more time for consultation, additional staff development, and increased resources.
IEPS are Useful in Planning for the Special Needs Students in the Regular Classroom

<table>
<thead>
<tr>
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<th>1993 Agree or Strongly Agree</th>
<th>1996 Agree or Strongly Agree</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reg. Ed. staff</td>
<td>74.6%</td>
<td>74.7%</td>
<td>+0.1%</td>
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<tr>
<td>PPS staff</td>
<td>78.2%</td>
<td>88.3%</td>
<td>+10.1%</td>
</tr>
<tr>
<td>Administrators</td>
<td>66.7%</td>
<td>94.1%</td>
<td>+27.4%</td>
</tr>
<tr>
<td>Parents</td>
<td>77.3%</td>
<td>80.2%</td>
<td>+2.9%</td>
</tr>
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</table>

Figure 9. Whether the IEP Was Useful in Planning for Students Who Have Special Needs in the Regular Classroom. (Barnstable, 1993, p. 11; Barnstable, 1996, p. 11)

Analysis of the Figure 9 Data

From 1993 to 1996, more regular education staff members, PPS staff members, administrators, and parents believed that IEPs were useful in planning for the special needs students in the regular classroom. Although more of all of the respondent groups perceived these IEPs to be useful for planning in 1996, than did in 1993, the there were only slight increases for regular education members and parents. There were, however, significant increases for PPS staff members between 1993 and 1996 as 10.1% more of these staff members believed in the usefulness of the IEPs for planning.

The most substantial increase between 1993 and 1996 about the usefulness of the IEPs for planning for students who have special needs in the regular classroom, 27.4%, was from the administrators. It is interesting to note that among all of the respondent groups, administrators seemed to be the least likely to know how useful these IEPs were for planning for students who have special needs who were in the
regular classrooms because very few of them attended meetings where IEPs were discussed and developed.

- Students Who Have Special Needs Achieve the Goals Written in Their IEPs

<table>
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<tr>
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<th>1993 Agreed or Strongly Agree</th>
<th>1996 Agreed or Strongly Agree</th>
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<td>Reg. Ed. staff</td>
<td>38.2%</td>
<td>36.2%</td>
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<tr>
<td>PPS staff</td>
<td>78.2%</td>
<td>70.1%</td>
<td>-8.1%</td>
</tr>
<tr>
<td>Administrators</td>
<td>*</td>
<td>82.4%</td>
<td>+3.6%</td>
</tr>
<tr>
<td>Parents</td>
<td>71.2%</td>
<td>74.8%</td>
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</table>

*This statement was not on the administrator's survey in 1993.

Figure 10. Whether Students Achieved the Goals in Their IEPs. (Barnstable, 1993, p. 11; Barnstable, 1996, p. 11)

Analysis of the Figure 10 Data

From 1993 to 1996, the percentages of regular education staff members and PPS staff members who believed that students who have special needs achieved the goals written in their IEPs decreased. In 1996, 8.1% fewer PPS staff members and 2.0% fewer regular education staff members believed this was happening than did in 1993. However, the percentage of parents who believed that their children were achieving the goals written in their IEPs increased 3.6%, from 1993 to 1996. The beliefs that were expressed here differ significantly from others that will be discussed in subsequent sections. These beliefs concern whether there are the academic benefits for students who have special needs and whether the quality of their education improved when they were placed in regular classrooms. Other discussions about the weaknesses of the
special education program and recommendations to improve it will also be provided. Some of these weaknesses include feelings that special education program was not meeting the needs of students who have disabilities and these students did not receive the services they required to adequately meet their special needs.

The differences in the levels of agreement in the perceptions between the regular education staff members and those of PPS staff members and parents in both 1993 and 1996 was striking. Approximately twice as many PPS staff members and parents perceived that students who have special needs achieved the goals written in their IEPs than did regular education staff members in both 1993 and 1996. In 1996, more than twice as many administrators perceived that this was happening than did regular education staff members. One of the reasons for regular education staff members’ perceptions about whether students achieved the goals in their IEPs may be related to the frustrations that they feel about the demands that have been placed on them with the inclusion model. In subsequent sections, regular education staff members discuss their frustrations when they were asked asked to perform the duties of special education teachers for which they felt unprepared. They felt that they were continually asked to do more with fewer resources.

PPS staff members and parents were the respondent groups that would be most familiar with the goals in the IEPs and the progress in meeting those goals. It is interesting to note the similarity in their perceptions in both 1993 and 1996. This survey item was not included in the 1993 administrators’ survey because it was not expected that administrators would be aware of students’ specific goals and their achievement. It is unclear why, in 1996, the percentage of administrators who believed that students
who have special needs achieved the goals in their IEPs was the highest percentage of all respondent groups.

Between 1993 and 1996, more respondents believed that the IEPs were useful in planning for special needs students in regular classes, but fewer respondents believe that students who have special needs achieved the goals written in their IEPs. There didn’t seem to be a reason for the differences in these beliefs.

- Students View the Special Education Services They Receive as a Positive Factor in Their Learning Experience

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<th>1996 Agree or Strongly Agree</th>
<th>Change</th>
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<td>Reg. Ed. staff</td>
<td>76.0%</td>
<td>56.1%*</td>
<td>-19.9%</td>
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<td>PPS staff</td>
<td>89.1%</td>
<td>72.7%</td>
<td>-16.4%</td>
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<td>Administrators</td>
<td>93.3%</td>
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<td>-11.0%</td>
</tr>
<tr>
<td>Parents</td>
<td>75.0%</td>
<td>80.9%</td>
<td>+5.9%</td>
</tr>
</tbody>
</table>

*28.6% of the regular education staff members indicated a Don’t Know response.

Figure 11. Whether the Students Who Have Disabilities Viewed the Special Education Services They Received as a Positive Factor in Their Learning Experience. (Barnstable, 1993, p. 10; Barnstable, 1996, p. 10)

Analysis of the Figure 11 Data

From 1993 to 1996, the percentages of regular education staff members, PPS staff members, and administrators who believed that students who have special needs viewed the special education services as a positive factor in their learning experiences decreased significantly. In 1996, 19.9% fewer regular education staff members, 16.4% fewer PPS staff members, and 11.0% fewer administrators believed that the special
education services were viewed as a positive factor by the students who have special needs.

It is also significant that 28.6% of the regular education staff members felt that they didn’t know about this in 1996. Regular education staff members not knowing whether students who have special needs viewed the special education services as a positive factor in their learning experience might have been expected in 1993 when they had limited experience with these students, rather than after working with them in the classroom for the three years. It might be that with more experience working with students who have special needs in the classroom, the less sure they were about how these students view their special education services.

The perceptions of regular education staff members, PPS staff members, and administrators may be related to concerns that they raised in other sections about whether the special needs program contributed to students with special needs developing positive attitudes about themselves and also whether the needs of students who have disabilities were being met. These concerns and the reasons for them will be discussed in subsequent sections.

However, the percentage of parents who believed that the students who have special needs view the special education services as a positive factor in their learning experience increased slightly between 1993 and 1996. In 1996, 5.9% more parents believed that their children viewed these services as a positive factor. It might be that these parents were hearing about and observing positive responses in their children that weren’t being discussed with or observed by school personnel.
The Special Education Program Contributes to the Students' Development of Positive Attitudes About Themselves

<table>
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<th>1996 Agree or Strongly Agree</th>
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<td>Reg. Ed. staff</td>
<td>80.2%</td>
<td>69.3%</td>
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<tr>
<td>PPS staff</td>
<td>94.5%</td>
<td>87.0%</td>
<td>-7.5%</td>
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<tr>
<td>Administrators</td>
<td>93.4%</td>
<td>94.1%</td>
<td>+0.7%</td>
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<tr>
<td>Parents</td>
<td>79.5%</td>
<td>80.9%</td>
<td>+1.4%</td>
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</table>

Figure 12. Whether the Special Education Program Contributed to Students Who Have Special Needs Developing Positive Attitudes About Themselves. (Barnstable, 1993, p. 10; Barnstable, 1996, p. 9)

Analysis of the Figure 12 Data

From 1993 and 1996, the percentages of regular education staff members and PPS staff members who believed that the special education program contributed to the students' development of positive attitudes about themselves decreased somewhat. In 1996, 10.9% fewer regular education staff members and 7.5% fewer PPS staff members perceived this to be happening than did in 1993.

There were only slight changes in the perceptions of administrators and parents about whether the special education program contributed to students developing positive attitudes about themselves between 1993 and 1996. In 1996, 0.7% more administrators and 1.4% more parents perceived that this happened than did in 1993. It is interesting to note that the largest changes in the perceptions were the decreases that occurred with the regular education staff members and PPS staff members who were with the students in the classrooms on a daily basis. Fewer of these staff members also believed that the special education program met the needs of these students.
The Special Education Students Who are in Regular Classrooms Benefit Academically

<table>
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<td>67.0%</td>
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<tr>
<td>PPS staff</td>
<td>94.6%</td>
<td>66.3%</td>
<td>-28.3%</td>
</tr>
<tr>
<td>Administrators</td>
<td>86.7%</td>
<td>70.6%</td>
<td>-16.1%</td>
</tr>
<tr>
<td>Parents</td>
<td>74.2%</td>
<td>65.7%</td>
<td>-8.5%</td>
</tr>
</tbody>
</table>

Figure 13. Whether the Special Needs Students Who Were in Regular Classrooms Benefitted Academically. (Barnstable, 1993, p. 12; Barnstable, 1996, p. 20)

Analysis of the Figure 13 Data

From 1993 to 1996, the percentages of all of the respondent groups, regular education staff members, PPS staff members, administrators, and parents, who believed that the special education students who were in regular classrooms benefited academically decreased significantly. The most substantial decrease (28.3%) was in the perceptions of PPS staff members that there were academic benefits for these students. From 1993 to 1996, there were also significant decreases in the percentages of regular education staff members (18.7%), administrators (16.1%), and parents (8.5%) who believed that special education students who were in regular classrooms benefited academically. It would appear that substantially more members of each respondent group have concerns about the academic benefits for special education students who were receiving all of their special education services in the regular classrooms. There are many possible reasons for these concerns and they will be included in the subsequent discussion about weaknesses of the special education program. These reasons included that some staff members did not feel they were able to meet the needs
of the special education students within the regular classroom, that there were not enough staff to work with them, that the resources were inadequate, class sizes were too large, there were too many students who have special needs in these classes, and there was not enough time for regular education and special education staff members to work together to adapt the curriculum to meet the needs of these students.

- The Special Needs Students Who are Placed in the Regular Classroom Benefit Socially

<table>
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<th>1996 Agree or Strongly Agree</th>
<th>Change</th>
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<td>Reg. Ed. staff</td>
<td>66.1%</td>
<td>76.4%</td>
<td>+10.3%</td>
</tr>
<tr>
<td>PPS staff</td>
<td>80.0%</td>
<td>89.6%</td>
<td>+9.6%</td>
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<tr>
<td>Administrators</td>
<td>86.7%</td>
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<td>Parents</td>
<td>27.6%</td>
<td>74.0%</td>
<td>+46.4%</td>
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Figure 14. Whether the Special Needs Students Who Were in Regular Classrooms Benefitted Socially. (Barnstable, 1993, p. 22; Barnstable, 1996, p. 21)

Analysis of the Figure 14 Data

From 1993 and 1996, the percentages of all respondent groups, regular education staff members, PPS staff members, administrators, and parents who believed that the special needs students who were placed in the regular classrooms benefited socially increased. The percentage of parents who perceived there to be social benefits increased dramatically (46.4%) when compared times to the increases in the percentages of other respondent groups. From 1993 to 1996, 10.3% more regular education staff members, 9.6% more PPS staff members, and 13.3% more administrators believed that there were social benefits for students who have special needs who were placed in regular
classrooms. However, the percentages of parents who believed that there were social benefits was still lower than other respondent groups.

One possible reason for this difference between the changes in the perceptions of the parents and other respondent groups may be that parents, who in 1993 had the lowest percentage of agreement that there were social benefits for their children, were, in 1996, feeling that these social benefits were occurring. In 1993, these benefits may not have been apparent to them, but as the process of inclusion continued, social bonds and friendships were made and parents became more aware of the social benefits. These social benefits seem to have been perceived as occurring by school personnel, regular education staff members, PPS staff members, and administrators before they were perceived by parents. It is interesting to note that from 1993 to 1996, although so many more parents believed that there were social benefits for students who have special needs who were placed in regular classrooms, many of these parents believed that problems with peers impeded the integration process in their child’s school and this will be discussed more fully in subsequent sections.

Analysis of the Figure 15 Data

From 1993 and 1996, the percentages of parents who believed that the quality of education was improved for those students who have special needs who were placed in regular classrooms increased dramatically, while the percentages of regular education staff members, PPS staff members, and administrators decreased somewhat. From 1993 to 1996, 46.3% more parents believed that the quality of their children’s education was improved than did in 1993. In 1996, 12.6% fewer regular education staff members,
The Quality of Education is Improved for Those Students Who Have Special Needs Who are Now Placed in the Regular Classroom

<table>
<thead>
<tr>
<th></th>
<th>1993 Agree or Strongly Agree</th>
<th>1996 Agree or Strongly Agree</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reg. Ed. staff</td>
<td>47.7%</td>
<td>35.1%</td>
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<tr>
<td>PPS staff</td>
<td>69.0%</td>
<td>58.5%</td>
<td>-10.5%</td>
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<tr>
<td>Administrators</td>
<td>66.6%</td>
<td>58.8%</td>
<td>-7.8%</td>
</tr>
<tr>
<td>Parents</td>
<td>23.9%</td>
<td>70.2%</td>
<td>+46.3%</td>
</tr>
</tbody>
</table>

Figure 15. Whether the Quality of Education Improved for Students Who Have Special Needs When They Were Placed in Regular Classrooms. (Barnstable, 1993, p. 22; Barnstable, 1996, p. 21)

10.5% fewer PPS staff members, and 7.8% fewer administrators perceived that this was occurring than did in 1993.

It is possible that when considering the quality of education, the perceptions of regular education staff members, PPS staff members, and administrators may have been more limited to academic benefits, while parents may have considered the broader scope of education for their children, which included the social aspects as well.

It is also possible that fewer regular education staff members, PPS staff members, and administrators believed that the quality of education was improved for those students who have special needs who were placed in regular classrooms. This might be because of their concerns that their needs were not being met, they were not achieving the goals in their IEPs, and their regular and special education teachers did not have the time to work together modify and adapt the curriculum to meet their needs, many of which were substantially different from those of their classmates. These concerns and the reasons for them will be examined and discussed later in this study.
The Inclusion of All Students Improves the Quality of Education for Regular Education Students

<table>
<thead>
<tr>
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<th>1993</th>
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<td></td>
<td>Agree or</td>
<td>Agree or</td>
<td></td>
</tr>
<tr>
<td></td>
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<td>Strongly Agree</td>
<td></td>
</tr>
<tr>
<td>Reg. Ed. staff</td>
<td>36.5%*</td>
<td>23.6%</td>
<td>-12.9%</td>
</tr>
<tr>
<td>PPS staff</td>
<td>60.0%*</td>
<td>52.0%</td>
<td>-8.0%</td>
</tr>
<tr>
<td>Administrators</td>
<td>66.6%*</td>
<td>64.7%</td>
<td>-1.9%</td>
</tr>
<tr>
<td>Parents</td>
<td>23.2%*</td>
<td>62.6%</td>
<td>+39.4%</td>
</tr>
</tbody>
</table>

*There were a substantial number of Don't Know responses in 1993: regular education staff (23.2%); PPS staff (34.5%); administrators (26.7%); and parents (73.9%). In 1996, fewer than 20% of any respondent group indicted a Don’t Know response.

Analysis of the Figure 16 Data

From 1993 and 1996, substantially more parents of students who have special needs believed that inclusion improved the quality of education for regular education students. From 1993 to 1996, 39.4% more parents perceived this to be happening than did in 1993, while 12.9% fewer regular education staff members, 8.0% fewer PPS staff members, and 1.9% fewer administrators believed that the inclusion of all students improved the quality of education for regular education students.

One reason for this substantial increase in the percentages of parents who perceived the quality of education for regular education students was improved because of inclusion was that in 1993, 73.9% indicated that they didn’t know whether this was happening and in 1996, 62.6% of the respondents in this group believed that this was happening. It is interesting to note that these respondents were parents of students who
have special needs. They may be parents of regular education students as well, and they may be basing their perceptions on the comments of their other children, or perhaps, on comments from regular education students or their parents.

In subsequent sections, regular education staff members, and administrators raise concerns about their ability to meet the needs of regular education students because of the numbers of special education students who have very diverse needs who are in the regular classrooms and because of the limited support from special education staff members and the limited resources available to them. These concerns will be discussed in later sections.

**Analysis of the Figure 17 Data**

In 1996, the overwhelming response from regular education staff members, PPS staff members, administrators, and parents was that they preferred that special education services be delivered through a combination of in the regular class as well as through pull-out programs. This was an option that was selected by 73.6% of the regular education staff members, 77.9% of the PPS staff members, 64.7% of the administrators, and 56.0% of the parents in 1996. This was not an option on the 1993 survey.

It seemed that most of the respondents believed that some changes should be made in how students who have special needs received their special education services. From 1993 to 1996, substantially fewer percentages of each respondent groups preferred that these services be provided within the regular class. In 1996, 28.3% fewer regular education staff members, 64.4% fewer PPS staff members, 43.2% fewer administrators and 23.2% fewer parents indicated this preference.
What is Your Preferred Way for Children Who Have Special Needs to Receive Special Education Services?

### Regular Class

<table>
<thead>
<tr>
<th></th>
<th>1993</th>
<th>1996</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reg. Ed. staff</td>
<td>38.7%</td>
<td>10.4%</td>
<td>-28.3%</td>
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<tr>
<td>PPS staff</td>
<td>80.0%</td>
<td>15.6%</td>
<td>-64.4%</td>
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<tr>
<td>Administrators</td>
<td>66.7%</td>
<td>23.5%</td>
<td>-43.2%</td>
</tr>
<tr>
<td>Parents</td>
<td>49.3%</td>
<td>26.1%</td>
<td>-23.2%</td>
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</table>

### Pull-out Program

<table>
<thead>
<tr>
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<th>1996</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Reg. Ed. staff</td>
<td>41.2%</td>
<td>6.0%</td>
<td>-35.2%</td>
</tr>
<tr>
<td>PPS staff</td>
<td>10.9%</td>
<td>1.3%</td>
<td>-9.6%</td>
</tr>
<tr>
<td>Administrators</td>
<td>6.7%</td>
<td>11.8%</td>
<td>+5.1%</td>
</tr>
<tr>
<td>Parents</td>
<td>34.0%</td>
<td>10.4%</td>
<td>-23.6%</td>
</tr>
</tbody>
</table>

### Separate Program

<table>
<thead>
<tr>
<th></th>
<th>1993</th>
<th>1996</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reg. Ed. staff</td>
<td>12.0%</td>
<td>7.7%</td>
<td>-4.3%</td>
</tr>
<tr>
<td>PPS staff</td>
<td>3.6%</td>
<td>1.3%</td>
<td>-2.3%</td>
</tr>
<tr>
<td>Administrators</td>
<td>13.3%</td>
<td>0.0%</td>
<td>-13.3%</td>
</tr>
<tr>
<td>Parents</td>
<td>13.2%</td>
<td>7.5%</td>
<td>-5.7%</td>
</tr>
</tbody>
</table>

### Other (1993 only)*

<p>| | |</p>
<table>
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<tbody>
<tr>
<td>Reg. Ed. staff</td>
<td>8.1%</td>
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<tr>
<td>PPS staff</td>
<td>5.5%</td>
</tr>
<tr>
<td>Administrators</td>
<td>13.3%</td>
</tr>
<tr>
<td>Parents</td>
<td>3.5%</td>
</tr>
</tbody>
</table>

*If other was selected, respondents were asked to specify what that other way would be. Parents were the only ones to specify other choices and most of these were for more one-on-one services and for programs that combined pull-out and inclass services.

Figure 17. Preferred Ways for Students Who Have Special Needs to Receive Special Education Services. (Barnstable, 1993, p. 21; Barnstable, 1996, p. 20)

Continued, next page.
Figure 17, continued:

**Combination of Regular Classroom & Pull-out Program**

*(1996 only)*

<table>
<thead>
<tr>
<th>Group</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>Reg. Ed. staff</td>
<td>73.6%</td>
</tr>
<tr>
<td>PPS staff</td>
<td>77.9%</td>
</tr>
<tr>
<td>Administrators</td>
<td>64.7%</td>
</tr>
<tr>
<td>Parents</td>
<td>56.0%</td>
</tr>
</tbody>
</table>

From 1993 to 1996, substantially fewer percentages of regular education staff members and parents preferred that special education services be provided through pull-out programs. In 1996, 35.2% fewer regular education staff members and 23.6% fewer parents indicated this preference. From 1993 to 1996, 9.6% fewer PPS staff members also preferred the utilization of a pull-out program as a way to provide special education services. However, from 1993 to 1996, 5.1% more administrators expressed a preference for services to be provided through pull-out programs than did in 1993. Administrators were the one respondent group to indicate an increased preference for this service delivery model in 1996.

From 1993 to 1996, while fewer regular education staff members, PPS staff members, and parents preferred that special education services be provided in separate programs, no administrator preferred this way to provide special education services, while in 1993, 13.3% of these administrators had indicated this preference. From 1993 to 1996, 4.3% fewer regular education staff members, 2.3% fewer PPS staff members, and 5.7% fewer parents preferred that special education services be provided in separate programs.
It appears that while members of all respondent groups were recognizing that there were benefits for students who have special needs to receive special education services in the regular classroom, they also seem to recognizing that there were some disadvantages in the exclusive utilization of the inclusion model. It seems that with these recognitions, there were preferences to combine the advantages of providing special education services both in the regular classroom, when this is appropriate and advantageous for students who have special needs, and in the resource room when this is a better model for the provision of some of these services. Additional discussions about special education services being delivered in both the regular classroom and the resource room will be provided in subsequent sections.

Discussion of Category I Data

Data were analyzed by making comparisons between the changes in perceptions between 1993 and 1996 about the effectiveness of the special education services that were provided by utilizing the inclusion model of providing special education services within the regular classroom and its impact on the students. Data were analyzed to compare changes in the perceptions of regular education staff members, PPS staff members, administrators, and parents.

From 1993 to 1996, there was one area relating to the social benefits of inclusion in which the changes in the perceptions of all of the respondent groups became more positive. The percentages of all respondent groups, regular education staff members, PPS staff members, administrators, and parents who believed that the special needs students who were placed in the regular classrooms benefitted socially. The most
dramatic increase from 1993 to 1996 was with parents as the percentages of parents who perceived these social benefits increased most substantially.

There were also some positive changes in the perceptions of the regular education staff members and PPS staff members about how their attitudes about working with special needs students changed as a result of their involvement with them. Although many regular education staff members and PPS staff members believed that their attitudes had not changed between 1993 and 1996, and that they had always been positive, many other regular education staff members and PPS staff members believed that their attitudes had changed to become more positive.

Many of these regular education staff members believed that their attitudes had changed because of the benefits they were seeing for the students who have special needs who were in the classrooms. They felt that these students were developing important social skills. They also believed that there were benefits for the regular education students who they felt were becoming more compassionate.

Many of the PPS staff members believed that their attitudes had become more positive because of the changes they saw in their students who have special needs. They felt that these students developed important social skills and formed important bonds with other students in the classrooms.

The Massachusetts Board of Education (1992) discussed the development of peer relationships as one of the most enriching aspects of providing special education services in the regular classroom and contended that “friendships that begin within the classroom setting often extend outside of the school environment and facilitate integration in the larger community” (p. 6). Gerrard (1994) contended that students who
are educated in inclusive settings will form social attachments that can extend beyond
the classroom (p. 65). This seemed to be happening as students with special needs were
placed in regular classrooms and received their special education services through the
utilization of the inclusion model in Barnstable from 1993 to 1996.

From 1993 to 1996, many regular education staff members and PPS staff
members believed that their attitudes about students who have special needs changed to
become more positive as a result of having worked with them. Many of these staff
members believed that teaching had become more challenging and more rewarding.
However, in contrast to these positive changes some regular education staff members
and PPS staff members perceived their attitudes about working with special needs
students had changed to become more negative because they did not believe that they
were able to meet the needs of the students with special needs. They felt inadequate in
their efforts because of the wide range of abilities of the students in their classes, their
own lack of expertise, and the limited resources with which they had to work.

There was another area in which there were similar changes in the perceptions of
all of the respondent groups. From 1993 to 1996, fewer percentages of regular
education staff members, PPS staff members, administrators, and parents believed that
the special education students who were in regular classrooms benefitted academically.

In many other areas there were more similarities between the changes in the
perceptions of regular education staff members and PPS staff members than between
either of these groups and administrators or parents. In most of these areas, the
perceptions of regular education staff members and PPS staff members became more
negative from 1993 to 1996. From 1993 to 1996, fewer regular education staff
members and PPS staff members believed that the special education program was meeting the needs of students who had special needs, fewer believed that the quality of education was improved for students who have special needs when they were placed in the regular classrooms, fewer believed that students who have special needs achieve the goals in their IEPs, fewer believed that the scheduling of students’ time for special education services was flexible enough to enable specialists and teachers to meet individual needs, and fewer believed that appropriate materials and equipment were available for students who have special needs to use in the classroom than.

From 1993 to 1996, fewer regular education staff members and fewer PPS staff members believed that the students who have special needs viewed the special education services they received as a positive factor in the learning experiences, and fewer regular education staff members and fewer PPS staff members believed that the special education program contributed to the students who have special needs developing positive attitudes about themselves. From 1993 to 1996, fewer regular education staff members and fewer PPS staff members believed that the quality of education for regular education students was improved with the inclusion of special needs students.

One of the first critics of the of the movement to inclusion, Kauffman (1989) expressed concern that combining general and special education services would result in decreased services to students who have special needs (p. 266). McKinney and Hocutt (1988) also expressed concern about the capabilities of regular educators to provide services to students who have disabilities who are in their classes. They discussed their concern about “the extent to which effective special education practices can be
implemented effectively in the regular class settings given the constraints of those settings” (p. 20). These concerns were expressed in special education program evaluations completed in Barnstable in both 1993 and 1996 by members of all of the respondent groups.

Schumm and Vaughn (1995) discussed their concern that many general education teachers “lack the knowledge, skills, and confidence they need to plan and make instructional adaptations for students with disabilities” (p. 172). They indicated that they felt that there were reasons including teachers’ workloads, time constraints, and class size (p. 174) which were impeding regular education teachers from being successful in the utilization of an inclusion model of delivering special education services. Additional concerns about these issues will continue to be discussed in subsequent sections.

McKinney and Hocutt (1988) also expressed their concerns about the preparation of regular educators to teach increased numbers of students who have disabilities in the regular classroom and the negative impact there would be “on the classroom performance and academic outcomes for normal students” (p. 20). Kauffman discussed his concern that providing special education services in the regular classroom would lead to “allocating more time to the least capable learners to narrow the variance among students, which inevitably sacrifices achievement of the students who learn most easily” (p. 266).

Kauffman continued with his contention that the inclusion model of delivering special education services “will compound the difficulties now experienced by general education in meeting the needs of an extremely diverse student body” (p. 270). Martin
(1995) expressed concern that the delivery of special education services in the regular classroom provides fewer services to students who have disabilities who need more intensive instruction than can be provided through the utilization of the inclusion model (p. 198).

A study by McIntosh, Vaughn, Schumm, Haager, and Lee (1993) found that many students with special needs are treated like other, non-disabled students, by their general education teachers. McIntosh, Vaughn, Schumm, Haager, and Lee said that there were both positive and negative aspects to this finding. On the positive side, they said, these students are accepted and treated fairly and impartially by their teachers (p. 257), but on the negative side, these students’ instruction is not differentiated to meet their needs because of their disabilities and few adaptations are provided (p. 259).

Gartner and Lipsky (1987) maintained that providing special education services in the regular classroom will result in changes in attitudes and all educators will have higher expectations for students who have disabilities and that these expectations will result in improved student achievement and educational outcomes (p. 376). Others contended that the quality of education is improved for all students, those who have disabilities and those who do not, when special education and regular education are merged into a unified system in which the needs of all students can be met within the regular classroom (Gartner & Lipsky, 1987, p. 370; Gerrard, 1994, p. 66; Stainback, Stainback, and Bunch 1989, p. 23).

The responses from regular education staff members, PPS staff members, administrators, and parents did not support the contentions of Gartner & Lipsky,
Gerrard, and Stainback, Stainback, and Bunch. From 1993 to 1996, more of the respondents in the special education program evaluation in Barnstable expressed concerns that the needs of all students were not being met as effectively and that the quality of education had not improved for all students.

When these respondents were asked what their preferred way for students who have special needs to receive their special education services, the overwhelming response was for a combination of having some services provided in the regular classroom through the utilization of an inclusion model of service delivery as well as having some services provided in the resource room through the utilization of a pull-out model of service delivery.

Roberts and Mather (1995) expressed concern that some proponents of full inclusion interpret the term least restrictive environment as federal support for full inclusion. Roberts and Mather conclude that the least restrictive environment "refers to the education of individuals in programs that address the unique needs while promoting individual freedom as much as possible" (p. 47). The fear that this misinterpretation will lead to a denial of important rights for students with disabilities. They discussed three mandatory requirements of the least restrictive environment specified in the law. "Of the six requirements of the LRE specified in the law (CFR 34 S300.552), three are mandatory... (a) the availability of a full continuum of alternative placements, (b) the consideration of possible harmful effects of a placement decision on either the child or
the quality of services, and (c) annual determination of the Individualized Educational Plan (IEP) and placement decisions” (p. 47). Roberts and Mather are concerned that assumptions about what full inclusion means may lead to unclear assumptions about the quality of programs and services that will meet the needs of students with different kinds of disabilities who are in the regular education classroom (p. 51).

Barnstable utilized the inclusion model to provide all special education services in the regular classrooms and a full continuum of alternative placements was not available from 1993 to 1996. Additionally, from 1993 to 1996, fewer percentages of the respondents believed that the special education program contributed to the students’ development of positive attitudes about themselves, and fewer believed that students who have disabilities viewed the special education services as a positive factor in their learning experiences.

From 1993 to 1996, there were many areas in which the perceptions of regular education staff members, PPS staff members, administrators, and parents changed in ways that indicated their concern about the impact of the utilization of the inclusion model of delivering special education services on students. These respondents indicated that they had more concerns about the needs of students with disabilities being able to be met when all special education services were provided in the regular classrooms. However, regular education staff members, PPS staff members, administrators, and parents all indicated that they felt that there were social benefits for students who have special needs when they were placed in the regular classroom.
The changes in the perceptions about how the utilization of the inclusion model impacted students will be discussed again as Category II data which examined the impact on the staff and Category III data which examined the impact on the special education program are analyzed, and as the research questions are answered.

**The Impact of the Inclusion Model on Staff**

Category II included data that examined the impact of the inclusion model on the staff and are reported here.

**Figure 18**

In 1993, approximately twenty percent of the regular education staff perceived their role to have changed as a result of the utilization of the in-class model. The most significant change that they perceived to have occurred was that they had become a co-teacher. They also perceived that they were performing more duties that were similar to those that had been performed by special education staff members, such as working with students who have special needs, completing more paperwork, and attending more meetings. They perceived that these duties were preventing them from doing some of their regular duties as a classroom teacher.

In 1993, more than fifty percent of the PPS staff members perceived that their roles had changed. These staff members also believed that the most significant change that occurred was that they had become a co-teacher. They felt that they were working less with students who have special needs than they had in the past. Approximately ten
percent of the administrators believed that their roles had changed and they perceived that change to involve providing more support for special education staff members and

- How Has Your Role Changed as a Result of the Utilization of the In-Class Model in Your School (Regular Education Staff, PPS Staff, and Administrators)?

<table>
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<tr>
<th>Roles Changed to Become</th>
<th>1993</th>
<th>1996</th>
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</thead>
<tbody>
<tr>
<td>Reg. Ed. staff</td>
<td>co-teacher</td>
<td>part of team supervising assistant more like special ed. teacher</td>
</tr>
<tr>
<td>PPS staff</td>
<td>co-teacher</td>
<td>more consulting and less teaching supervising assistant more like regular education teacher</td>
</tr>
<tr>
<td>Administrators</td>
<td>more support for special education break down resistance to inclusion</td>
<td>mediate between regular and special educators mediate between staff and parents/advocates</td>
</tr>
</tbody>
</table>

(Barnstable, 1993, p. 24; Barnstable, 1996, pp. 24-25)

Figure 18. How the Roles of Staff Members Changed as a Result of Integration Activities.
also breaking down resistance to having special education services being provided in the classrooms (Barnstable, 1993, p. 24).

In 1996, approximately two thirds of the regular education staff members perceived that their roles had changed since 1993. In 1996, the changes that they believed occurred included that they were part of a team, they were supervising a teacher assistant, and that their roles were now more multi-faceted, including functioning more like a remedial or special education teacher, as well as a classroom teacher. They felt unprepared for their new roles and uncomfortable with them and wanted to return to their previous roles. They felt that these new duties were preventing them from completing some of their responsibilities as a classroom teacher.

In 1996, all of the PPS staff members perceived that their roles had changed. The changes that they believed occurred were that they were consulting more and teaching less, they were supervising teacher assistants, and they felt they were becoming more of a regular class teacher than a special needs teacher. They, too, felt unprepared for their new roles and uncomfortable with them. They wanted to spend more time working with their students with special needs.

In 1996, about a third of the administrators perceived that their roles had changed and now included being a mediator between regular and special education teachers as problems arose as they worked together. They also perceived that they were called upon to mediate between staff members and parents and advocates when disputes occurred (Barnstable, 1996, pp. 24-25).
Analysis of the Figure 18 Data

From 1993 to 1996, both regular education and PPS staff members perceived that their roles had changed to include being a co-teacher. Regular education staff members believed that they were performing more special education duties for which they felt unprepared. Conversely, PPS staff members felt that they were working less with students who have special needs than they had in the past and they were functioning more like a regular education teacher. These PPS staff members also felt that they were consulting with other staff members more, and they were spending more time with regular education students than they thought they should. In 1996, both regular education staff members and PPS staff members perceived that their roles had changed to include the supervision of teacher assistants. Regular education staff members perceived that they were becoming more of a special education teacher than a classroom teacher, and PPS staff members perceived that they we becoming more of a regular class teacher than a special needs teacher.

Clearly, between 1993 and 1996, there was more blending of the roles of regular education and special education staff members and this seemed to be causing considerable concern for both groups of staff members. They felt that they were unprepared for their new roles, that they were uncomfortable with them, and each wanted to spend more time working with the students they felt prepared to teach.

From 1993 to 1996, administrators perceived that there were more disagreements between regular education and special education staff members and that their roles included mediating differences between them. Other perceptions about these
changing roles, the preparation for them, and recommendations to improve the special education program will be discussed as further data are presented and examined.

Figure 19

In 1993, the vast majority of regular education staff members, PPS staff members, and administrators described the level of cooperation between regular and special education staff as good or very good. However, almost all members of each of these respondent groups described the level of joint planning as limited, poor, or nonexistent, and attributed this lack of joint planning to time constraints. Regular education staff members and PPS staff members indicated that they wanted to become more involved in joint planning if time could be provided for this.

In 1996, almost every regular education staff member, about half of the PPS staff members, and about three quarters of the administrators described the level of cooperation between regular and special education staff as excellent or very good. Regular education staff members indicated that they appreciated the efforts of the special education staff members who they felt tried to do as much as they could to assist regular education staff members. PPS staff members said that they felt that although the level of cooperation varied from person to person within their buildings, generally regular education staff members tried to do as much as they could to work cooperatively with them.

In 1996, almost every regular education staff member and PPS staff member responded that there was little or no joint planning and indicated the reason for this was time constraints. Some regular education staff members said there was not enough time
How Would You Describe the Level of Cooperation and Joint Planning that Exists Between Regular and Special Education Staff?

**Level of Cooperation**

<table>
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<tr>
<th></th>
<th>1993</th>
<th>1996</th>
</tr>
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<tbody>
<tr>
<td></td>
<td>Good or Very Good</td>
<td>Excellent or Very Good</td>
</tr>
<tr>
<td>Reg. Ed. Staff</td>
<td>vast majority</td>
<td>almost all</td>
</tr>
<tr>
<td>PPS Staff</td>
<td>vast majority</td>
<td>approx. 1/2</td>
</tr>
<tr>
<td>Administrators</td>
<td>vast majority</td>
<td>approx. 3/4</td>
</tr>
</tbody>
</table>

(Barnstable, 1993, pp. 34-35, p. 52; Barnstable, 1996, pp. 30-31, pp. 61-63)

**Level of Joint Planning**

<table>
<thead>
<tr>
<th></th>
<th>1993</th>
<th>1996</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Limited, Poor or Nonexistent</td>
<td>Little or None</td>
</tr>
<tr>
<td>Reg. Ed. Staff</td>
<td>almost all</td>
<td>almost all</td>
</tr>
<tr>
<td>PPS Staff</td>
<td>almost all</td>
<td>almost all</td>
</tr>
<tr>
<td>Administrators</td>
<td>almost all</td>
<td>almost all</td>
</tr>
</tbody>
</table>

(Barnstable, 1993, pp. 23-24; Barnstable, 1996, pp. 22-24)

Figure 19. What Were the Levels of Cooperation and Joint Planning Between Regular and Special Education Staff?

because the special education teachers’ caseloads were too high and they were too busy testing and attending meetings to keep their commitments for joint planning. Some regular education staff members expressed their frustration with the lack of time for joint planning with special education staff members and perceived this to be another example of them being expected to do more with fewer resources.

Regular education staff members felt that whatever time they had with the special education staff was used productively, but it was spent on planning for the
students who had more substantial special needs and there was not enough time to plan for students who had less substantial needs. Some felt that planning for students with less substantial special needs was left to the regular education staff and they felt unprepared to do this. Most of the regular education staff members indicated that they would like to have more time together for joint planning and felt that they could do so much more for their students if they did.

Most of the PPS staff members said that the recent budget cuts in many areas had severely hampered their cooperative efforts. They expressed their frustration about not being able to do, not only what they knew had to be done, but what they had been able to do in the past when substitutes were hired so that staff members had time to plan. They felt that it was crucial to have weekly consultation and planning time with the regular education staff members with whom they worked and expressed frustration about not being able to support the regular education staff.

About a third of the administrators said that there was little or no joint planning because of time constraints and about two thirds of the administrators said that regular education and special education staff members needed more time for joint planning. They said that finding sufficient time for joint planning must become a priority in the future if the inclusion efforts in their buildings were to be successful (Barnstable, 1993, pp. 34-35; p. 52; Barnstable, 1996, pp. 30-31; pp. 61-63).

Analysis of the Figure 19 Data

From 1993 to 1996, the perceptions of regular education staff members and administrators about the level of cooperation between regular and special education staff
became more positive. These perceptions, held by the vast majority of regular education staff members and administrators, were that the level of cooperation that was described as good or very good in 1993, was described as excellent or very good in 1996. However, the perceptions held by the vast majority of PPS staff members in 1993, that the level of cooperation was good or very good, changed in 1996, when only about half of these PPS members believed the level of cooperation to be excellent or very good.

In both 1993 and 1996, almost all regular education staff members, PPS staff members and administrators believed that the level of joint planning was limited, poor, or nonexistent because of time constraints. From 1993 to 1996, there was more frustration about the lack of joint planning that was expressed by regular staff and PPS staff members. Regular education staff members perceived this to be another example of them being expected to do more with fewer resources. PPS staff members felt that they were not able to do what they knew had to be done in order to meet the needs of students who have disabilities and also to support the regular classroom teachers.

The administrators felt that the inclusion efforts in their buildings would not be successful if finding sufficient time for joint planning did not become a priority in the future.

During the 1994-95 school year, some substitutes were provided so that regular and special educators could plan together, and additional money for this had been provided in the 1995-96 school budget. However, with the serious deficit that was encountered early in the school year, money for substitutes was cut and none were hired for planning or to replace special education staff members when they were not in school. Throughout the 1995-96 school year, there were several occasions when special
education teacher assistants were told that either their hours would be substantially reduced or that their position would be cut completely. This had a devastating effect on not only these teacher assistants, but also regular education staff members, other PPS staff members, administrators, and parents.

Figure 20

In 1993, approximately forty percent of both the regular education staff and the PPS staff indicated that they were co-teaching. About half of each group of these staff members who were co-teaching indicated that their model of co-teaching involved the regular education teacher teaching the lesson and the special education teacher supporting the regular education teacher. Fewer than a quarter of each respondent group indicated that the regular education and special education teacher took turns teaching the whole class.

In 1996, more regular education and special education staff members responded that they were co-teaching. Approximately sixty percent of the regular education staff members and seventy percent of the PPS staff members indicated that they were co-teaching. About two thirds of each group of these staff members who were co-teaching, described their co-teaching model as one in which the regular teacher taught the lesson and the special education teacher supported the regular education teacher. Approximately a quarter of each respondent group indicated that the regular education and special education teacher shared responsibility for whole class lessons (Barnstable, 1993 p. 31; Barnstable, 1996, pp. 28-29).
• If You Are Co-Teaching, Describe Your Co-Teaching Model and Discuss its Effectiveness

**Amount of Co-Teaching**

<table>
<thead>
<tr>
<th></th>
<th>1993 Co-Teaching</th>
<th>1996 Co-Teaching</th>
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</thead>
<tbody>
<tr>
<td>Reg. Ed. Staff</td>
<td>approx. 40%</td>
<td>approx. 60%</td>
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<tr>
<td>PPS Staff</td>
<td>approx. 40%</td>
<td>approx. 70%</td>
</tr>
<tr>
<td>Administrators</td>
<td>-</td>
<td>-</td>
</tr>
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</table>

(Barnstable, 1993, p. 31; Barnstable, 1996, pp. 28-29)

**Model of Co-Teaching:**
Regular Education Teacher Teaches Class and Special Education Teacher Supports

<table>
<thead>
<tr>
<th></th>
<th>1993</th>
<th>1996</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reg. Ed. Staff</td>
<td>about 1/2</td>
<td>about 2/3</td>
</tr>
<tr>
<td>PPS Staff</td>
<td>about 1/2</td>
<td>about 2/3</td>
</tr>
<tr>
<td>Administrators</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

(Barnstable, 1993, p. 31; Barnstable, 1996, p. 28-29)

**Effectiveness of Co-Teaching**

<table>
<thead>
<tr>
<th></th>
<th>1993</th>
<th>1996</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reg Ed. Staff</td>
<td>vast majority</td>
<td>majority</td>
</tr>
<tr>
<td>PPS Staff</td>
<td>vast majority</td>
<td>approx. 3/4</td>
</tr>
<tr>
<td>Administrators</td>
<td>almost all*</td>
<td>almost all**</td>
</tr>
</tbody>
</table>

* very effective, or it varied
**effective or very effective

(Barnstable, 1993, pp. 32-33; Barnstable, 1996, pp. 29-30)

Figure 20. What Were the Amounts, the Models, and the Effectiveness of Co-Teaching that Occurred?
In 1993, the vast majority of regular education staff members and PPS staff members felt that their co-teaching was very effective. They attributed its effectiveness to the additional support that was provided to all of the students in the regular classrooms, to the support, sharing, and feedback that the two teachers provided to each other, and to experiences that all students had working with teachers who had different teaching styles.

Regular education staff members who felt that their co-teaching was not very effective attributed this limited effectiveness to personality difficulties, unresolved differences in goals and role definitions, having too many students who have special needs in their classrooms, not enough time for the co-teachers to plan and work together, and inconsistencies in the special education teachers’ ability to be in the classroom when they were scheduled to be there. These regular education staff members also expressed their concerns about the expectations that they would co-teach with special education teaching assistants who lacked the necessary training or experience for co-teaching.

PPS staff members who felt that their co-teaching was not very effective attributed this to the inability of the regular classroom teacher to share responsibilities with their co-teacher and the regular classroom teachers using the co-teacher as an aide.

In 1996, the majority of regular education staff members and approximately three quarters of the PPS staff members described their co-teaching as very effective. Both of these groups attributed its effectiveness to the improved teacher-to-student ratios as well as their ability to provide additional support and individualized assistance.
to all of the students in their classes. They felt that their co-teaching could be even more effective if they had more time for joint planning.

Both regular education and PPS staff members who felt that their co-teaching was not very effective attributed this to having no time to plan together and to the inability of the special education teacher to co-teach on a regular basis because they had too many other responsibilities.

In 1993, when administrators were asked about the effectiveness of the co-teaching in their buildings, they replied that they felt that it was very effective or that it varied depending on the individuals who were involved. They felt that its effectiveness could be improved if there could be more time for collaboration and planning, and more staff development about co-teaching. They also felt that co-teaching would become more effective as staff members had more experience co-teaching.

In 1996, almost all of the administrators described the co-teaching in their buildings as being very effective or effective, but many of these administrators felt that there was less co-teaching occurring in 1996 than there had been previously. However, they did not indicate reasons for their perceptions (Barnstable, pp. 32-33; Barnstable, 1996, pp. 29-30).

Analysis of the Figure 20 Data

From 1993 to 1996, regular education staff and PPS staff indicated that more co-teaching was occurring. However, in 1996, administrators perceived there to be less co-teaching occurring than there had been previously, without indicating reasons for their perceptions. Perhaps they were so involved in the administrative problems in the
district in 1996, they were less aware of the co-teaching that was taking place in their building.

From 1993 to 1996, more regular education staff members and PPS staff members who were co-teaching described the utilization of a model of co-teaching in which the regular education teacher taught the lesson and the special education teacher supported the regular education teacher. This is not surprising because, without adequate time for planning together and without special education teachers being available to co-teach on a consistent basis, the teaching of the class remained the responsibility of the regular education teacher. During this time only approximately a quarter of these respondents indicated that the regular education and special education teacher took turns teaching the whole class. If there had been adequate time for planning together, and if the special education teachers could be in the classrooms on a more consistent basis, more of this model of co-teaching would probably have occurred.

From 1993 to 1996, fewer regular education teachers described their co-teaching as very effective, while more PPS staff members described their co-teaching as very effective. The majority of both regular education staff members and PPS staff members felt that their co-teaching was effective because of the additional support and individualized assistance they could provide to all students in their classrooms.

From 1993 to 1996, those regular education staff members and PPS staff members who felt that their co-teaching was not very effective attributed this to not having enough time to plan and to work together. Substitutes were not hired during the 1995-96 school year, as they had been during the previous year, because of the budget deficit and there were fewer opportunities for regular and special education teachers to
plan together during the 1995-96 school year. They also felt that their co-teaching was not very effective because of the inconsistencies in the special education teachers’ ability to be in the classroom when scheduled because of other commitments and because they had to cover too many classrooms.

In 1993, administrators felt that the effectiveness of the co-teaching in their buildings could be improved if there could be more time for collaboration and planning. However, in 1996, they didn’t include any comments about how co-teaching might be improved. Again, because of the extreme administrative problems within the district, improving the effectiveness of the co-teaching in their buildings was probably not a priority of theirs at this time.

Between 1993 and 1996, despite all of the difficulties they encountered because of lack of time to plan and work together, both regular education staff members and PPS staff members saw benefits for all of the students from the utilization of co-teaching. Members of both of these groups of staff members felt that if they had more time for co-planning and for working together more consistently to increase the effectiveness of their co-teaching, there would be additional benefits for all students.

**Figure 21**

In 1993, a majority of the regular education staff members replied that they wanted to learn more about the needs of specific students, especially those who had multiple disabilities, who had been placed in their classrooms. They wanted more training about how to make modifications in specific curriculum areas, as well as in behavior modification and classroom management techniques. They also wanted to
What are the Needs for Further Staff Development that Would be Helpful as Special Education Services are Provided in the Regular Classroom?

<table>
<thead>
<tr>
<th></th>
<th>1993</th>
<th>1996</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reg. Ed. Staff</td>
<td>needs of specific students</td>
<td>how to modify curriculum and assessments</td>
</tr>
<tr>
<td></td>
<td>how to modify curriculum</td>
<td>specialized technology</td>
</tr>
<tr>
<td></td>
<td>behavior modification</td>
<td>needs of specific students</td>
</tr>
<tr>
<td>PPS Staff</td>
<td>how to modify curriculum</td>
<td>specific disabilities</td>
</tr>
<tr>
<td></td>
<td>behavior modification</td>
<td>how to modify curriculum</td>
</tr>
<tr>
<td></td>
<td>co-teaching</td>
<td>specific techniques to teach specific subjects</td>
</tr>
<tr>
<td></td>
<td>legal issues</td>
<td></td>
</tr>
<tr>
<td>Administrators</td>
<td>behavior management</td>
<td>modifying curriculum and grading</td>
</tr>
<tr>
<td></td>
<td>co-teaching</td>
<td>behavior modification</td>
</tr>
<tr>
<td></td>
<td>how to modify curriculum</td>
<td>strategies for inclusion</td>
</tr>
<tr>
<td></td>
<td></td>
<td>improving collaboration</td>
</tr>
</tbody>
</table>

(Barnstable, 1993, pp. 30-32, 52-53; Barnstable, 1996, pp. 33-34, 60-61)

Figure 21. What Were the Needs for Further Staff Development?

learn more about how to continue to meet the needs of the other students in class as well as the students who have special needs who were also in their classrooms.

In 1996, approximately two thirds of the regular education staff members expressed many of the same needs for staff development as they did in 1993. They wanted staff development in the areas of modifying curriculum and assessment for students who have special needs and also for specific programs to teach subjects within the regular classroom to students who have severe disabilities. Many of these staff members wanted to learn more about the utilization of specialized technology that would be appropriate for their students who have special needs.
Almost half of these regular education staff members said that they needed additional special education staff members and additional opportunities to meet with special education staff members more than they needed staff development activities. This was, most likely, a reaction to the financial difficulties the district was experiencing and the effects they these difficulties were having on their ability to work effectively with special education staff members. During the 1995-96 school year, the regular education staff members were very frustrated because substitutes were not hired to provide opportunities for regular and special education staff members to work together, and because of the threatened layoffs of the special education teacher assistants.

Many regular education staff members also expressed a need for specific information about the children who were going to be in their classrooms, especially those with more severe disabilities and they wanted opportunities to observe the students and meet with the previous classroom teacher. They wanted to be able to benefit from the experiences of the students’ past year and be able to start the new year as successfully as possible.

Approximately one third of the regular education staff expressed their frustration with the in-class model and wanted to spend some inservice education time to explore whether inclusion was working, whether it was educationally sound, and whether the needs of regular education and special education students were being met. Some of these regular education staff members said that felt that they were being asked to be special education teachers and they weren’t prepared to assume that role. Some said that they needed inservice education on how to handle the stress of managing an ever
increasing job with fewer resources, while others said that they wanted to learn about their rights and their responsibilities as they were being required to teach regular and special education students with more diverse learning needs within their classrooms.

In 1993, a majority of the PPS staff members expressed a need for staff development in how to modify the curriculum to meet the needs of the students who have severe special needs who have been placed in the regular classrooms, and to learn more about inclusion. Substantial numbers of these staff members wanted to learn more about behavior modification, co-teaching, and legal issues in special education.

In 1996, approximately half of the PPS staff members expressed many of the same needs for staff development as they did in 1993. They wanted to learn more about the specific disabilities of their students, especially those with more substantial special needs. Many of these staff members wanted to learn how to modify the grade level curriculum substantially and learn specific techniques to teach reading, writing, and mathematics to these students who were now placed in regular classrooms. Many said they wanted to know about the educational expectations for skill development for these students and how these would be assessed.

About a third of these staff members wanted to see inservice education programs related to behavior management strategies and restraint training. Other PPS staff members wanted to have more information and training on assessment of learning problems, especially in the area of reading. Many PPS staff members wanted staff development activities about how to make inclusion work better and about cooperative learning and multiple intelligences.
In 1993, many administrators expressed a need for their staff members to have staff development in the areas of behavioral management, co-teaching, making modifications for specific students who are integrated into classrooms in their buildings, and legal issues in special education. In 1996, most of the administrators indicated that staff development activities were needed in many of the same areas that they identified in 1993. These areas were modifying and adapting the curriculum and grading, behavior modification and classroom management, classroom strategies for inclusive classrooms, and how to improve collaboration.

About a quarter of these administrators used this opportunity to express their frustration about what they perceived to be unreasonable demands that were being placed on regular education staff members. Again, because of the serious financial problems in the district during the 1995-96 school year, it was very difficult for regular education staff members to count on the support of the special education staff as they were not consistently available. Substitutes were not hired when special education staff members were out of school and special education teachers were not available consistently because of testing responsibilities and attending meetings (Barnstable, 1993, pp. 30-31; pp. 52-53; Barnstable, 1996, pp. 33-34; pp. 60-61).

Analysis of the Figure 21 Data

In 1996, regular education staff members had many of the same requests for staff development that they had in 1993. Many of their requests for what they felt they needed in order to be successful in their efforts to participate in the movement to provided special education services in their classrooms were either not provided
sufficiently or were needed on an ongoing basis. They wanted to learn about the needs of the students who have disabilities who were in their classrooms and how to modify the curriculum to meet their needs. They wanted to be prepared for managing behaviors that they anticipated might occur and they wanted to know how to balance the needs of the students with special needs and the needs of the other students in their classes. It seemed like they had a positive attitude about their involvement with the inclusion process, although, it seemed like, even in 1993, they had some concerns about how to meet the needs of all of their students.

In 1996, the tone of the responses of regular education staff members was different than it had been in 1993. They seemed to feel frustrated and angry. While they were still asking to learn about the needs of the students who have disabilities who were going to be in their classrooms and how to modify the curriculum to meet their needs, they were also now asking to learn how to teach specific subjects to students whose needs were very different from those of their classmates. Regular education staff members were also asking about how to modify assessments and what their rights and responsibilities were as they related to the learning of the students who have diverse special needs as well as the other students in the classroom. They were, clearly, still feeling unprepared for what they were being asked to do.

They expressed their frustration about the lack of support they were receiving with the inclusion model. They felt that they needed to continue to have substitutes provided so that they could have time to meet with special education staff members and receive more assistance from them. They were left without adequate support in their classrooms when special education staff members were out and no substitutes were
provided. They felt that they were unprepared to do what was expected of them and they didn’t have the support or resources they needed. They questioned whether inclusion was working for students with disabilities or for other students in their classes.

From 1993 to 1996, PPS staff members also had many of the same requests for staff development for what they felt they needed in order to be successful in their efforts to provide special education services within the regular classroom. They wanted to learn how to modify the grade level curriculum for students who have severe special needs. They wanted to learn about co-teaching and behavior management. Staff development in these areas was either not provided sufficiently or was needed on an ongoing basis.

Although they, like their regular education counterparts, seemed to have a positive attitude about their involvement with the inclusion process, they seemed to have more concerns. These concerns seemed to center about the severity of the needs of their students, their students’ abilities to make academic progress within the curriculum areas, and their responsibilities for students making effective progress in meeting the goals and objectives in their IEPs.

In 1996, the tone of the responses of the PPS staff members, most of whom were special education staff, was even more concerned than it was in 1993. They wanted to learn about their students’ specific disabilities, some of which were more severe than they had encountered in the past. They wanted to learn about how to modify the grade level curriculum more substantially and how to teach the basic subjects of reading, writing, and mathematics to students whose classmates’ mastery of these was
significantly more advanced than theirs. They wanted to learn about cooperative learning and multiple intelligences.

These PPS staff members wanted their students to learn, but they also wanted to know what the expectations for skill development were going to be for their students, given the severity of some of their disabilities, and they wanted to know how these expectations were going to be measured. They wanted to know how to manage the behaviors of their students, and they wanted this training to include restraint training so that they were prepared if some students might need to be restrained within the regular classroom. PPS staff members, like their regular education counterparts were, clearly, still feeling unprepared for what they were being asked to do.

Despite their many concerns and the frustrations created by the financial difficulties the district was experiencing, especially the possible layoffs of the special education teacher assistants, these staff members still wanted to learn how to make inclusion work better. They seemed to be more committed to this goal than the regular education staff members with whom they worked.

From 1993 to 1996, administrators saw many of the same needs for staff development that they had in 1993. In 1993, the administrators' agreed with their regular education staff members about the needs they felt for staff development in the areas of behavior management and in modifying the curriculum for students who have special needs. They agreed with the PPS staff members about the needs they felt for staff development about co-teaching and about legal issues in special education. Their agreement might indicate that they, too, had a positive attitude about the involvement of
their staff with the inclusion process, as well as some concerns about how to meet the needs of all of the students in their buildings.

In 1996, these administrators still felt the need for their staff members to learn more about modifying and adapting curriculum, and more about behavior modification and classroom management. However, the tone of at least one quarter of these administrators changed as they expressed more frustration about what they perceived to be unreasonable demands being made on their regular education staff members and the lack of support that was created by the financial difficulties the district was experiencing.

Clearly, in 1993, the tone of the responses of regular education staff members, PPS staff members, and administrators was more positive about the making the inclusion process work. In 1996, however, their concerns and frustrations seemed to become heightened about what they perceived to be the severity of the needs of the students who have disabilities who were in the regular classrooms, the gap between the needs of these students and the expectations of the curriculum, and the more serious limitations in the levels of support and resources that were available to support the inclusion process because of the financial crisis in the district.

Discussion of Category II Data

Data were analyzed by making comparisons between the changes in perceptions between 1993 and 1996 about the effectiveness of the special education services that were provided by utilizing the inclusion model of providing special education services within the regular classroom and its impact on the staff. Data were analyzed to compare
changes in the perceptions of regular education staff members, PPS staff members, and administrators. There were, again, more similarities between the perceptions of the regular education staff members and PPS staff members than there were with either group and the administrators.

Although there were differences in the numbers of regular education staff members, PPS staff members, and administrators who said that their roles had changed as a result of the integration activities in their schools, there were similarities between the regular education and PPS staff members about how their roles had changed. In 1996, all of the PPS staff members, approximately two thirds of the regular education staff members, and about a third of the administrators indicated that their roles had changed as a result of the integration activities.

Both regular education and PPS staff members said that these changes in roles included: (1) being part of a team who worked together, (2) supervising a teacher assistant, and (3) having more multi-faceted roles. Regular education staff members felt that these roles included that of a teacher of multi-grade levels, and remedial and/or special needs teachers. PPS staff members and that they felt that they were becoming more of a regular class teacher than a special needs teacher. PPS staff members also said that they were spending less time teaching. As the roles of the regular education and PPS staff members are blending, it seems that each group wants to be doing more of what they were doing before their roles changes, indicating some frustration with their new roles, and what they perceived to be a lack of preparation for these new roles.

About a third of the administrators indicated that their roles now included mediation between regular and special educators as problems arose between them as
they worked together as well as between parents and their advocates and the staff. The opinions of these administrators seem to indicate that there was some degree of acrimony between these groups of people involved in the special education process.

When asked to describe the levels of cooperation and joint planning in 1993, only comments about levels of cooperation were made by the respondents. There was little difference in the responses of regular education and PPS staff members and administrators who described many positive experiences and described levels of cooperation as excellent, very good, or good. In 1996, descriptions about the levels of cooperation were similar to those made in 1993. The need for additional time for regular and special education staff members to work together and to plan together was identified as a significant need in both 1993 and 1996. Frustrations about their ability to work together because of time constraints created by the discontinuance of hiring substitutes, and increasing workloads were expressed repeatedly by both regular education staff members and PPS staff members.

In 1996, there were many responses from regular education and PPS staff members and administrators about the levels of joint planning which were described as limited or non-existent because of time constraints. Their discussion of a need for additional time for regular and special educators to work cooperatively and to plan together was intense and indicated more frustrations about the time constraints. There were, however, other frustrations that were expressed by regular education and PPS staff members. Regular education staff members indicated that they were frustrated because they were expected to do more with fewer resources and less support from special education staff. PPS staff members indicated that they were frustrated because they
were not able to meet their commitments to be in the regular education classrooms because of other responsibilities and because substitutes were not hired for them, or for special education teacher assistants, when they were out of school.

The discussions of levels of cooperation and joint planning must again include the conclusions of Fuchs and Fuchs (1994) about the essential nature of the partnership between regular and special educators so that can meet the needs of students with varying disabilities. They concluded that a partnership between regular and special educators is essential before they can provide the modifications and services that will meet the needs of students with varying disabilities. They contended that there must be a productive alliance between regular and special educators so the two can work together to provide a continuum of services for special education students (p. 525).

Schumm and Vaughn (1995) reported that one of the major issues to emerge in their research is that, even after working with special educators in integrated settings, many regular education teachers “lack the knowledge, skills, and confidence they need to plan and make instructional adaptations for students with disabilities” (p. 172).

The Massachusetts Board of Education (1992), on the other hand, concluded that when regular and special educators work together in integrated programs, teacher collaboration is fostered and they can work together to make the accommodations for students who have differing learning needs (p. 5). Will (1986) contended that regular and special educators would form partnerships in which they would share knowledge and learn from each other and blend their strengths in ways that would provide better educational services for all students (p. 12).
Regular and special educators in Barnstable described their working relationships as cooperative and expressed their needs and desires to have more time to plan and work together. They also saw the benefits of the inclusion model of providing special education services. Given additional time and opportunities for collaboration, they felt that they could work together to strengthen their partnership and make the accommodations that were needed for students who have differing learning abilities to be successful in the regular classrooms.

In 1996, substantially more regular education and PPS staff members indicated that they were co-teaching. The way in which these staff members described their co-teaching was very similar from 1993 to 1996. These staff members described their model of co-teaching as one in which the regular education staff member taught the lesson and the special education teacher supported what was being taught. There was slightly more utilization of a model in which both the regular education teacher and special education teacher shared responsibility for whole class lessons in 1996 than there was in 1993.

There were some differences in how regular education and PPS staff members described the effectiveness of their co-teaching in 1993 and in 1996. In 1993, more regular education staff members described their co-teaching as very effective than did in 1996. Conversely, in 1996, more PPS staff members described their co-teaching as very effective than did in 1993. In 1996, both regular education and PPS staff members indicated a need for more planning time together and expressed frustration that special education teachers were not able to co-teach on a more consistent basis because of their workload.
In 1996, more administrators described the co-teaching that was taking place in their buildings as very effective than did in 1993. They, however, felt that less co-teaching was taking place in 1996 than did in the past, without indicating a reason for this. This is significant to note because, in 1996, more both regular education staff members and PPS staff members indicated that they were co-teaching more than they did in 1993. One reason for these apparent differences in perceptions may be that regular education and PPS staff members have differing definitions of co-teaching than the administrators.

It is probable that the limited utilization of the model in which these two teachers share responsibility for whole class lessons was related to some of the issues that Schumm and Vaughn (1995) discuss in their research. These issues include: (1) regular education teachers lack “the knowledge, skills, and confidence” to work with students with disabilities (p. 172); (2) the “human resources”, special education teachers, are not available to work with regular education staff members on a regular basis because of their caseloads, the lack of planning time, and the lack of a plan for collaboration (p. 174); (3) the workload of the regular education teachers increases without additional supports (p. 175), and regular education teachers perceive that adaptations for special education students demand too much of their time and are not their responsibility (p. 175); and (4) these adaptations are not part of an overall plan for individual students in their classes.

Therefore, the model that was utilized in Barnstable from 1993 to 1996 was one in which the regular education staff member taught the lesson and the special education teacher supported what was being taught. Regular education teachers who felt the
responsibility for classroom lessons was theirs, were more comfortable with this model and knew they could continue with the lesson if the support they were expecting was not provided. When they were planning to co-teach and expecting support which was not provided, it was the students with disabilities whose needs were not being met and this was frustrating for these regular education teachers.

From 1993 to 1996, more regular education and PPS staff members described a model of co-teaching as one in which the special education teacher taught the special needs students in the regular classroom. This would indicate, that in 1996, it was perceived that fewer responsibilities for teaching special needs students in the regular classroom were being assumed by the regular education teachers. With the utilization of this model, special education staff members continued to assume the responsibility of the students who have special needs, even though these services are provided in the regular education classroom.

There were some significant similarities between and among regular education staff members, PPS staff members, and administrators about the needs for staff development. In both 1993 and 1996, each respondent group indicated a need for staff development in modifying the curriculum for students who have special needs and learning about the needs of the students who have disabilities who were in their classes. However, in 1996, these areas were again indicated as needs for staff development. It seemed that either these areas were not sufficiently provided for staff members or that they needed to be provided on an ongoing basis. In 1996, regular education and PPS staff members were also requesting staff development on modifying assessments, on the
expectations for achievements of students who had substantial special needs, and on how these would be measured.

These are important areas in which regular education and PPS staff members want and need staff development. Fuchs and Fuchs (1995) contend that inclusive programs cannot meet the needs of all students with disabilities because of the inability of the general educator to make instructional adaptations that are necessary for these students to be successful (p. 528). Schumm and Vaughn (1995) indicate that the need for general educators to be prepared to make adaptations for students with disabilities is crucial for their special needs to be met (p. 172).

McKinney and Hocutt (1988) anticipated that regular educators will be concerned by “the need to show accountability for handicapped as well as normally achieving students” (p. 20). Martin (1995) indicated his concern that inclusive programs are being enthusiastically adopted on a widespread basis with little evidence of any evaluation of academic and social outcomes (p. 193) and stressed the need for “more careful evaluation of the outcomes of (inclusive) special education programs, both academically and socially” (p. 198). It seems that each respondent group in Barnstable is expressing similar concerns that were expressed by both McKinney and Hocutt (1988) and Martin (1995).

Another area in which there were also significant similarities between and among regular education staff members, PPS staff members, and administrators in both 1993 and 1996 was behavior management. In 1993, the need for behavior management was discussed in relationship to a need for information about classroom management. In 1996, however, the need for behavior management was linked more specifically to
restraint training. A possible reason for this was their concern about the severity of the needs of the students who were now in inclusive classrooms.

In 1996, there were indications there was some concern about how inclusion was working from the perspectives of each respondent group. Regular education staff members expressed their frustration with the inclusion model and discussed a need for additional special education assistance. They suggested staff development topics such as how to handle the stress of having increasing demands placed on them at a time when they had fewer resources, and their rights as regular education teachers. They expressed a desire to explore whether inclusion was working, whether it was educationally sound, and whether the needs of students, both those who have special needs and those who do not, were being met.

In 1996, PPS staff members expressed a desire for staff development activities about how to make inclusion work better and about specific ways to teach subjects to students who have special needs who were in the regular classroom. In 1996, administrators expressed frustration about the unreasonable demands that were being placed on regular education staff members.

The concerns about how inclusion was working included the frustration with the inclusion model that was expressed by regular education staff members and administrators, and the desire to make inclusion work better that was expressed by PPS staff members. It is significant to note that these concerns were expressed in 1996 after each respondent group worked with the inclusion model for three years. These concerns seemed to indicate that the respondents felt that inclusion was not working as well as they anticipated it would.
The changes in the perceptions about how the utilization of the inclusion model impacted staff will be discussed again as Category III data which examined the impact on the special education program are analyzed, and as the research questions are answered.

The Impact of the Inclusion Model on the Special Education Program

Category III included data that examined the impact of the inclusion model on the special education program and are reported here.

Figure 22

In 1993, approximately forty percent of the regular education staff members felt that the most important factors supporting integration activities in their schools were: (1) collaborative working relations with other teachers; (2) flexibility of other professionals; (3) accommodations in scheduling; (4) administrative commitment; and (5) staff expertise.

In 1993, approximately fifty percent of the PPS staff members felt that the most important factors supporting integration activities in their schools were: (1) collaborative working relations with other teachers; (2) flexibility of other professionals; (3) accommodations in scheduling; (4) administrative commitment; (5) release time for planning; and (6) staff expertise.

In 1993, approximately fifty percent of the administrators felt that the most important factors supporting integration activities in their schools were: (1)
What Factors Support Integration Activities in Your School?

<table>
<thead>
<tr>
<th></th>
<th>1993</th>
<th>1996</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reg. Ed. Staff</td>
<td>collaborative working relations</td>
<td>teacher assistant in class</td>
</tr>
<tr>
<td></td>
<td>flexibility</td>
<td>collaborative working relations</td>
</tr>
<tr>
<td></td>
<td>accommodations in scheduling</td>
<td>flexibility</td>
</tr>
<tr>
<td></td>
<td>staff expertise</td>
<td>administrative commitment</td>
</tr>
<tr>
<td></td>
<td></td>
<td>staff expertise</td>
</tr>
<tr>
<td>PPS Staff</td>
<td>collaborative working relations</td>
<td>teacher assistant in class</td>
</tr>
<tr>
<td></td>
<td>flexibility</td>
<td>collaborative working relations</td>
</tr>
<tr>
<td></td>
<td>accommodations in scheduling</td>
<td>flexibility</td>
</tr>
<tr>
<td></td>
<td>release planning time</td>
<td>administrative commitment</td>
</tr>
<tr>
<td></td>
<td>staff expertise</td>
<td>staff expertise</td>
</tr>
<tr>
<td>Administrators</td>
<td>collaborative working relations</td>
<td>teacher assistant in class</td>
</tr>
<tr>
<td></td>
<td>flexibility</td>
<td>collaborative working relations</td>
</tr>
<tr>
<td></td>
<td>summer planning time</td>
<td>flexibility</td>
</tr>
<tr>
<td></td>
<td>administrative commitment</td>
<td>administrative commitment</td>
</tr>
<tr>
<td></td>
<td>staff expertise</td>
<td>staff expertise</td>
</tr>
<tr>
<td>Parents</td>
<td>positive attitude</td>
<td>teacher assistant in class</td>
</tr>
<tr>
<td></td>
<td>extra teacher in room</td>
<td>collaborative working relations</td>
</tr>
<tr>
<td></td>
<td>staff commitment</td>
<td>flexibility</td>
</tr>
<tr>
<td></td>
<td>good communication</td>
<td>administrative commitment</td>
</tr>
<tr>
<td></td>
<td></td>
<td>staff expertise</td>
</tr>
</tbody>
</table>

(Barnstable, 1993, pp. 25-26; Barnstable, 1996, pp. 25-26)

Figure 22. What Factors Supported Integration Activities?

collaborative working relations with other teachers; (2) flexibility of other professionals;
(3) paid summer planning time; (4) administrative commitment; and (5) staff expertise.
In 1993, very few parents seemed to be aware of what supported integration activities. These few felt that integration activities were supported by: (1) positive attitude; (2) having an extra teacher in the room; (3) staff who are committed to integration; and (4) good communication (Barnstable, 1993, pp. 25-26).

In 1996, almost two thirds of the regular education staff members, almost three quarters of the PPS staff members and administrators, and more than half of the parents felt that the having a teacher assistant in the classroom was the most important factor supporting integration activities in their schools. This factor had not been on the list provided on the 1993 survey, but was included on the 1996 survey because of the increased numbers of special education teacher assistants who were hired between 1993 and 1996. Other factors that had been felt to be supporting integration activities in 1993, especially collaborative working relations with other teachers, flexibility of other professionals, administrative commitment, and staff expertise were also felt to be supporting integration activities in 1996 (Barnstable, 1996, pp. 25-26).

Analysis of the Figure 22 Data

In 1993 and in 1996, regular education staff members, PPS staff members, and administrators all identified collaborative working relations with other teachers, flexibility of other professionals, administrative commitment, and staff expertise as factors that supported integration activities.

From 1993 to 1996 substantial numbers of special education teacher assistants were hired to work in the regular education classroom and in 1996, when regular education staff members, PPS staff members, administrators, and parents were asked to
indicate which factors supported integration activities in their schools, the clear choice of more than two thirds of all of the regular education staff members, PPS staff members, and administrators, and more than half of the parents was having a teacher assistant in classroom.

**Figure 23**

In 1993, approximately forty to sixty percent of the regular education staff members felt that the most common factors impeding integration activities in their schools were: (1) large class size; (2) lack of common planning time; (3) lack of professional development; and (4) lack of personnel. Also in 1993, forty to sixty percent of the PPS staff members felt that the most common factors impeding integration activities in their schools were: (1) negative teacher attitudes; (2) large class size; and (3) lack of professional development.

In 1993, approximately forty to fifty percent of the administrators felt that the most common factors impeding integration activities in their schools were: (1) lack of professional development; (2) lack of common planning time; and (3) large class size.

In 1993, very few parents seemed to be aware of what impeded integration activities. These parents felt that integration activities were impeded by not having enough special needs help (Barnstable, 1993, pp. 27-28).

In 1996, approximately sixty to eighty percent of the regular education staff members felt that the most common factors impeding integration activities in their schools were: (1) the needs of the other children in the class; (2) lack of common planning time; (3) not enough time; (4) lack of money; and (5) large class size.
In 1996, fifty to sixty percent of the PPS staff members felt that the most common factors impeding integration activities in their schools were: (1) lack of common planning time; (2) not enough time; and (3) lack of money.

- What Factors Impede Integration Activities in Your School?

<table>
<thead>
<tr>
<th></th>
<th>1993</th>
<th>1996</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reg. Ed. Staff</td>
<td>large class size</td>
<td>needs of other children</td>
</tr>
<tr>
<td></td>
<td>lack of common planning time</td>
<td>lack of common planning</td>
</tr>
<tr>
<td></td>
<td>lack of professional development</td>
<td>time</td>
</tr>
<tr>
<td></td>
<td>lack of personnel</td>
<td>not enough time</td>
</tr>
<tr>
<td>PPS Staff</td>
<td>negative teacher attitudes</td>
<td>lack of common planning</td>
</tr>
<tr>
<td></td>
<td>large class size</td>
<td>time</td>
</tr>
<tr>
<td></td>
<td>lack of professional development</td>
<td>not enough time</td>
</tr>
<tr>
<td></td>
<td>not enough time</td>
<td>lack of money</td>
</tr>
<tr>
<td>Administrators</td>
<td>lack of professional development</td>
<td>needs of other children</td>
</tr>
<tr>
<td></td>
<td>lack of common planning time</td>
<td>lack of common planning</td>
</tr>
<tr>
<td></td>
<td>large class size</td>
<td>time</td>
</tr>
<tr>
<td></td>
<td>not enough time</td>
<td>not enough time</td>
</tr>
<tr>
<td>Parents</td>
<td>not enough special needs help</td>
<td>problems with peers</td>
</tr>
<tr>
<td></td>
<td></td>
<td>large class size</td>
</tr>
<tr>
<td></td>
<td></td>
<td>not enough special needs</td>
</tr>
<tr>
<td></td>
<td></td>
<td>staff</td>
</tr>
<tr>
<td></td>
<td></td>
<td>lack of curriculum adaptations</td>
</tr>
</tbody>
</table>

(Barnstable, 1993, pp. 27-28; Barnstable, 1996, pp. 27-28).

Figure 23. What Factors Impeded Integration Activities?
In 1996, approximately sixty percent of the administrators felt that the most common factors impeding integration activities in their schools were: (1) needs of the other children in the class; (2) lack of common planning time; and (3) not enough time.

In 1996, however, about half of the parents identified factors that they perceived to impede integration activities as: (1) problems with peers; (2) classes being too large; (3) not enough special education staff; and (4) the lack of curriculum adaptations (Barnstable, 1996, pp. 27-28).

**Analysis of the Figure 23 Data**

In 1993, regular education staff members, PPS staff members, and administrators all identified large class size and lack of professional development as factors that impeded integration activities. Regular education staff members and administrators also identified lack of common planning time, and regular education staff members and parents also identified lack of personnel as factors that impeded integration activities. The PPS staff members were the only group to indicate that they felt that negative teacher attitudes impeded integration activities and this was their most frequent response.

In 1996, both the regular education staff members and the administrators identified the needs of the other children in the class as the most important factor impeding integration activities. Regular education staff members, PPS staff members, and administrators continued to believe that lack of common planning time and lack of time were also important factors that impeded integration activities. Regular education staff members and PPS staff members also identified lack of money asimpeding
integration activities. Parents felt that problems with peers impeded integration activities.

In 1996, the importance of having common planning time and money for needed resources was identified by regular education staff members and PPS staff members. The importance of these factors was highlighted by the problems that resulted from major budget cuts in many areas during the 1995-1996 school year because of the deficit. These are factors that continued to be identified by all respondent groups as problems that would have to be overcome if the inclusion efforts were to become more successful.

It is interesting to note, that with all of the areas of staff development that regular education staff members, PPS staff members, and administrators identified in 1996 as being needed for them to be more successful, their needs for staff development activities were not believed to be factors that impeded integration activities in 1996. It may be that they perceive staff development activities to factors that would enhance integration activities if they were provided rather than impeding them.

It is also interesting to note that although there was a dramatic increase in the numbers of parents who from 1993 to 1996 believed that there were social benefits of inclusion for their children, parents believed that problems with peers were impeding integration activities for their children. It is possible that as their children became more involved with their classmates, they experienced more of the positive and negative aspects of students’ relationships with their peers.
In 1993, almost every regular education staff member felt that the strength of the special education program was the special education staff. They said that this was because of the strong support and cooperation they received from the special education staff, their assistance in adapting curriculum and making modifications, and their positive attitudes.

- What do You See as Strengths of the Special Education Program?

<table>
<thead>
<tr>
<th></th>
<th>1993</th>
<th>1996</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reg. Ed. Staff</td>
<td>special education staff</td>
<td>special education staff</td>
</tr>
<tr>
<td></td>
<td></td>
<td>social and educational benefits to students</td>
</tr>
<tr>
<td>PPS Staff</td>
<td>support and cooperation from classroom teachers</td>
<td>regular education staff</td>
</tr>
<tr>
<td></td>
<td></td>
<td>teacher assistants</td>
</tr>
<tr>
<td>Administrators</td>
<td>special education staff support services to students with special needs</td>
<td>regular education staff</td>
</tr>
<tr>
<td></td>
<td></td>
<td>special education staff</td>
</tr>
<tr>
<td></td>
<td></td>
<td>benefits to students</td>
</tr>
<tr>
<td>Parents</td>
<td>special education staff support services to students with special needs</td>
<td>regular education staff</td>
</tr>
<tr>
<td></td>
<td></td>
<td>special education staff</td>
</tr>
<tr>
<td></td>
<td></td>
<td>progress of his/her child</td>
</tr>
</tbody>
</table>

(Barnstable, 1993, pp. 46-47; Barnstable, 1996, pp. 52-53)

Similarly, in 1993, most of PPS staff members felt that the most positive part of the special education program was the support and cooperation they received from
classroom teachers. They said that this was because of the classroom teachers' willingness to work together with special education staff, to provide materials, and to work with them to develop modifications and adaptations. Most of the PPS staff members also said that a very positive part of the special education program was the expertise of the special education teacher assistants.

In 1993, most of the administrators attributed the strength of the special education program to the quality of the special education staff and the support services that they provided to students who have special needs.

In 1993, almost every parent said that the strength of the special education program was the quality of the special education staff and the services that they provided to their children (Barnstable, 1993, pp. 46-47).

In 1996, again, every regular education staff member felt that the special education staff was a strength of the special education program. They attributed this to their knowledge, their willingness to work with classroom teachers, and their dedication and commitment to their students. These regular education staff members also said that the social and educational benefits to students who have special needs was also a strength of the special education program.
In 1996, again, almost all of the PPS staff members felt that the regular education staff and special education teacher assistants were the strengths of the special education program. Almost all of these PPS staff members said that the social and educational benefits to the students who have special needs were also strengths of the program.

In 1996, every administrator felt that the regular education and special education staff members were strengths of the special education program because of their competency, flexibility, dedication, sensitivity, cooperation, and collaboration. Some of these administrators also said that the benefits to students who have special needs was a strength of the program as their complex special needs were being met in the regular classroom.

In 1996, almost every parent said that the regular education and special education staff members who worked with his/her child were strengths of the program because of their help, cooperation, sensitivity, support, dedication, and patience. Many of these parents also said that his/her child’s progress was a strength of the special education program (Barnstable, 1996, pp. 52-53).

Analysis of the Figure 24 Data

In both 1993 and in 1996, both the regular education staff members and the PPS staff members saw each other as strengths of the special education program. In 1996, the administrators and the parents identified both the regular education staff and the special education staff as strengths of the program. The perceptions of regular education staff members, PPS staff members, and administrators were similar to those
expressed when they discussed the level of cooperation between regular education and special education staff members. Despite all of the difficulties they encountered, regular and special educators still believed the other to be a strength of the program.

In 1996, regular education staff members, PPS staff members, administrators, and parents all identified the social and educational benefits to the students who have special needs as an important strength of the special education program. From 1993 to 1996, more regular education staff members, PPS staff members, administrators, and parents believed that the special needs students who were placed in the regular classrooms benefitted socially. When regular education staff members, PPS staff members, and administrators were asked how their attitudes about working with special needs students changed as a result of their involvement with them, many of these respondents felt that their attitudes had become more positive because they could see the social benefits for these students.

However, although regular education staff members, PPS staff members, administrators, and parents all identified the educational benefits to the students who have special needs as an important strength of the special education program, there were some differences about this in other sections of the evaluations. From 1993 to 1996, the percentages of regular education staff members and PPS staff members who believed that the special education program was meeting the needs of students with special needs decreased substantially. From 1993 to 1996, the percentages of all of the respondent groups, regular education staff members, PPS staff members, administrators, and parents, who believed that the special education students who were in regular classrooms benefitted academically also decreased significantly from 1993 to 1996.
In 1996, when regular education staff members, PPS staff members, administrators, and parents all identified the educational benefits to the students who have special needs as an important strength of the special education program, they did not specify what these educational benefits were. It is difficult, therefore, to determine reasons for what appear to be discrepancies in their perceptions.

Figure 25

In 1993, the most frequent response about weaknesses of the special education program from regular education staff members was that they had too many students who have very severe special needs in their classrooms. They also said that their class size was too large, that there were not enough special education staff members, and there was not enough time to plan and work with them.

In 1993, the most frequent response from PPS staff members was that they didn’t have enough time to work with their students who have special needs. They felt that there were not enough special education teachers and assistants to assist these students. They also said that they needed additional time for planning and consultation with regular education staff members and that too much of their time was spent testing or attending meetings. Many PPS staff members also felt that there was not enough support and assistance for students who have behavioral problems who were in the regular classrooms.

In 1993, the administrators felt that the needs of students who have more severe behavioral problems who were in regular classrooms were not being met. They felt that
What do You See as Weaknesses of the Special Education Program?

<table>
<thead>
<tr>
<th>1993</th>
<th>1996</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Reg. Ed. Staff</strong></td>
<td><strong>inability of program to meet students’ needs</strong></td>
</tr>
<tr>
<td>too many students with severe needs in classes</td>
<td>IEP goals not addressed</td>
</tr>
<tr>
<td>class size too large</td>
<td>too many services from assistants</td>
</tr>
<tr>
<td>not enough special education staff</td>
<td>inadequate reading instruction</td>
</tr>
<tr>
<td>not enough time to work together</td>
<td>need for more pull-out services</td>
</tr>
<tr>
<td></td>
<td>not enough special education staff</td>
</tr>
<tr>
<td></td>
<td>not enough time</td>
</tr>
<tr>
<td></td>
<td>class size too large</td>
</tr>
<tr>
<td></td>
<td>too many students with special needs in classes</td>
</tr>
<tr>
<td><strong>PPS Staff</strong></td>
<td><strong>not enough time to plan, consult, provide services</strong></td>
</tr>
<tr>
<td>not enough time to work with students</td>
<td>needs of students not being met</td>
</tr>
<tr>
<td>not enough special education staff</td>
<td>not enough staff</td>
</tr>
<tr>
<td>not enough time to plan and consult</td>
<td>not enough money for supplies and equipment</td>
</tr>
<tr>
<td>not enough support for students with behavioral problems</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Administrators</strong></td>
</tr>
<tr>
<td>needs of students with behavioral problems not being met</td>
<td>lack of training for staff to work with students with behavioral needs</td>
</tr>
<tr>
<td>not enough staff</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Parents</strong></td>
</tr>
<tr>
<td>communication problems with teachers</td>
<td>his/her child’s needs not being met</td>
</tr>
<tr>
<td>communication problems between teachers</td>
<td>too many services in classroom</td>
</tr>
<tr>
<td>referral process too long</td>
<td>class size too large</td>
</tr>
<tr>
<td></td>
<td>too many students with special needs in classes</td>
</tr>
<tr>
<td></td>
<td>not enough staff</td>
</tr>
</tbody>
</table>

(Barnstable, 1993, pp. 47-48; Barnstable, 1996, pp. 54-55)

Figure 25. What Were the Weaknesses of the Special Education Program?
additional staff members would have to be provided to address the needs of these students.

In 1993, the parents felt that there were problems with the communication between them and their children's teachers as well as between regular and special education teachers. Some parents felt that the referral process was a weakness of the special education program and that it took too long for their children, especially those who have behavioral problems, to be provided with special education services (Barnstable, 1993, pp. 47-48).

In 1996, approximately eighty percent of the regular education staff felt that a weakness of the special education program was the inability of the program to meet some of the needs of some students with disabilities. They said that the goals in students' IEPs were not being addressed, that students were receiving too many of their services from teacher assistants and not from special needs teachers, and that reading instruction was inadequate for the students who were reading significantly below grade level. They felt that students needed more pull-out services than were being provided.

About another sixty percent of the regular education staff members said that not having enough special education staff to service the increasing numbers of students who have special needs was a weakness of the program. They cited the administrative and financial problems in the district during the 1995-96 school year that led to budget cuts in many areas as a reason for not having sufficient staff to provide these services.

About forty percent of these staff members said that the lack of time to do all that has to be done, to consult with each other, and to modify and adapt the curriculum was also a weakness of the program. Approximately forty percent of the regular education staff
members said that class sizes were too large and there were too many students with special needs in these classes, creating problems for both students who have special needs and those who do not.

In 1996, more than half of the PPS staff members said that not having enough time for planning and consultation, and for providing direct services to students was a weakness of the program. More than half of these staff members said another weakness of the program was that the needs of some students who have special needs were not being fully met.

About forty percent of these PPS staff members said that not having enough staff to work with students who have special needs was a weakness of the program. They said that while the number of students with special needs had increased, the number of staff members who work with these students had not. Money for supplies and equipment that was needed has not been available because of the financial problems in the district.

Almost every administrator expressed frustration with Chapter 766 because of what they feel are problems related to parents rights, the paperwork involved, and its costliness. About sixty percent of these administrators said that a weakness of the program was the lack of training that both special education and regular education staff members needed to have to work more effectively with students who have behavioral needs.

In 1996, about forty percent of the parents said that a weakness of the special education program was that his/her child’s special needs were not being met. Many felt that this was because of the nature of the child’s disability, but others felt that too many
services were being provided in the regular classroom when some pull-out services would be more beneficial. About forty percent of these parents felt that class sizes were too large and there were too many students with special needs in some classes. They attributed this weakness to the need for additional staff (Barnstable, 1996, pp. 54-55).

Analysis of the Figure 25 Data

Almost all of the weaknesses that were identified in 1993 by regular education staff members and PPS staff members, were again identified as weaknesses in 1996 by these same groups. These weaknesses included having too many students who have severe special needs in their classrooms, not having enough special education staff, class sizes being too large, and not having enough time for planning and consultation, for working together, and for working with the students who have special needs. Parents and administrators were also concerned that the needs of students with behavioral needs who were in the regular classrooms were not being met.

In 1996, additional weaknesses were identified. These included the inability of the special education program to meet the needs of its students. Some staff members felt that IEP goals were not being addressed and that there were inadequate resources for students on IEPs. Others said that reading instruction was inadequate for students who were reading significantly below grade level. Some attributed these weaknesses to the recent budget cuts and some to their beliefs that some services would be more effectively provided in out-of-class settings.

These weaknesses were also identified in other sections of the evaluations. From 1993 to 1996, there were decreases in the percentages of regular education staff
members, PPS staff members, and parents who believed that the special education program was meeting the needs of students who had special needs. There were decreases in the percentages of regular education staff members and PPS staff who believed that appropriate materials and equipment were available for students who have special needs to use in the classroom, and that students who have special needs did achieve the goals written in their IEPs. There were decreases in the percentages of all of the respondent groups, regular education staff members, PPS staff members, administrators, and parents, who believed that the special education students who were in regular classrooms benefitted academically.

Regular education staff members, PPS staff members, administrators, and parents repeated said that they believed that there were too many students who have special needs in some classrooms, that class sizes were too large, and that there were not enough special education staff members to provide services that were needed as the special education program was decentralized. They said that there was not enough time for regular education and special education staff members to plan and work together, to consult, to co-teach, and to provide the services that were necessary to meet the special needs of students who have disabilities.

Clearly, there were frustrations that were felt by members of all of the respondent groups because areas that they identified as weaknesses in 1993, were again identified as weaknesses in 1996. Not only did they feel that little progress had been made in the areas they identified in 1993, but they felt that, in 1996, there were additional areas of weaknesses as well. Many of these frustrations were related to the
serious administrative and financial problems that the district experienced during the 1995-96 school year.

Figure 26

In 1993, most recommendations made by regular education staff members and PPS staff members were very similar. They recommended increasing and improving communication between regular and special educators, providing more inservice education, and providing increased special education staff and additional resources.

Both regular education staff members and PPS staff members recommended having more communication between them so that they could share information, plan together, solve problems that occurred, and do more co-teaching. They indicated a need for more inservice education about co-teaching, inclusion, the specific needs of their students, and modifying the curriculum. They recommended hiring additional special education teachers and assistants, as well as substitutes for those times when special education staff members are not available to work with their students. There was a lot of concern about the amount of special education service time that students with special needs missed when special education teacher had to test or attend meetings.

They also recommended having computers and computer programs available for students who have disabilities to use in their classrooms. PPS staff members also recommended having more support from administrators especially in matters related to regular education teachers making modifications and also during the pre-referral process.
• What Recommendations Would You Make to Improve the Special Needs Program?

<table>
<thead>
<tr>
<th></th>
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</thead>
<tbody>
<tr>
<td></td>
<td>increase and improve communication between regular and special education</td>
<td>more special education staff alternative service delivery models more time to work together</td>
</tr>
<tr>
<td></td>
<td>provide more inservice</td>
<td>provide additional resources</td>
</tr>
<tr>
<td></td>
<td>provide more special education staff</td>
<td></td>
</tr>
<tr>
<td>PPS Staff</td>
<td>increase and improve communication between regular and special education</td>
<td>more special education staff alternative service delivery models more time to work together</td>
</tr>
<tr>
<td></td>
<td>provide more inservice</td>
<td>provide additional resources (computers)</td>
</tr>
<tr>
<td></td>
<td>provide more special education staff</td>
<td>more support from administrators</td>
</tr>
<tr>
<td>Administrators</td>
<td>provide more inservice</td>
<td>more support for inclusion</td>
</tr>
<tr>
<td></td>
<td>increase staff</td>
<td>more teacher assistants</td>
</tr>
<tr>
<td></td>
<td>more time for regular and special educators to work together</td>
<td>coverage for teachers when testing or meeting</td>
</tr>
<tr>
<td></td>
<td></td>
<td>more even distribution of special education students</td>
</tr>
<tr>
<td>Parents</td>
<td>increase communication between teachers and parents</td>
<td>increase communication between teachers and parents</td>
</tr>
<tr>
<td></td>
<td>increase resource room time</td>
<td>increase communication between regular and special education</td>
</tr>
<tr>
<td></td>
<td>more one-to-one assistance</td>
<td>increase resource room time</td>
</tr>
<tr>
<td></td>
<td>more access to computers</td>
<td>more one-to-one assistance</td>
</tr>
<tr>
<td></td>
<td></td>
<td>more special education staff</td>
</tr>
</tbody>
</table>

(Barnstable, 1993, pp. 14-17; 48-49; Barnstable, 1996, pp. 16-18, 55-57)

Figure 26. What Recommendations Were Made to Improve the Special Education Program?
In 1993, administrators recommended that more inservice education be provided, that increased staff, especially special education teacher assistants, be hired, and that there be more time set aside for ongoing dialogue and planning between regular and special education staff members.

In 1993, parents recommended that there be increased and improved communication between teachers and parents on a regular scheduled basis, that their children receive increased resource time and one-to-one assistance, and more access to computers (Barnstable, 1993, pp. 14-17; pp. 48-49).

In 1996, again, the recommendations from regular education staff members and PPS staff members were very similar. These recommendations were for more special education staff members, for alternative service delivery models, and for additional time for joint planning, co-teaching, and consultation.

Both regular and PPS staff members recommended having more special education staff to provide support for students who have special needs who were in the classrooms, especially those who have substantial delays in basic skills, and also to do more co-teaching. Both groups of staff members recommended alternative service delivery models, providing services both in the classroom and in resource rooms, developed for those students who have more substantial special needs so that instructional could be provided at their levels, in smaller groups, and with fewer distractions. Both groups recommended having more planning time so that they could work together more effectively and have more time for consultation.

In 1996, administrators recommended that adequate support for the inclusion model be provided. The support that they most frequently recommended was for more
special education teacher assistants to be hired to provide additional support for students who have more substantial special needs who were in the classrooms. They also recommended providing coverage for special education teachers when they have to test or attend meetings. Several expressed concern about the impact of students who have significant special needs on the other students in the regular classroom if adequate support was not provided.

These administrators also recommended that students who have special needs be distributed more evenly among several classrooms. The expressed concern that some regular education teachers repeatedly have classes with large numbers of students who have special needs.

In 1996, parents recommended that there be improved and increased communication between parents and teachers and between regular and special education staff members, that there be increased resource room time and more one-to-one assistance for their children, and that additional special education staff be provided.

Parents expressed a need for more regular and frequent communication between parents and teachers, as well as for better communication between regular and special education staff members about class requirements and modifications for their children. They also expressed a need for increased resource room time for their children, who they thought needed a smaller group setting and more one-to-one assistance, and for more emphasis on the development of life skills for their children. Parents also expressed a need for additional special education staff to provide support for their children when they were in the regular classroom (Barnstable, 1996, pp. 16-18; pp. 55-57).
Analysis of the Figure 26 Data

In both 1993 and 1996, regular education staff members, PPS staff members, and administrators recommended that more special education staff be provided and in 1996, parents also made this recommendation. In 1996, there were also recommendations that these students be provided with more service time than they were now getting because there were not enough staff to provide the services. There were recommendations that substitute staff be provided so that students who have special needs did not miss special education service time when the special education teacher had to test or attend meetings.

Although the need for additional special education staff has been discussed here as well as in several other sections of the evaluations, other perceptions that seem to differ have also been discussed. In 1996, slightly higher percentages of regular education staff members and PPS staff members perceived that the services that were necessary to meet the special needs of students were provided than did in 1993. It is unclear why so many regular and special education staff members thought that these students should be provided with more service time when more of them indicated that the service time that was necessary was being provided. However, a survey item about whether services that were necessary to meet the needs of special needs students was not on the administrator or parent surveys. There were also recommendations that students who have substantial delays be provided with additional services to improve their basic skills.

From 1993 to 1996, the percentages of regular education staff members and PPS staff members who believed that students who have special needs achieved the goals written in their IEPs decreased. From 1993 to 1996, the percentages of all of the
respondent groups, regular education staff members, PPS staff members, administrators, and parents, who believed that the special education students who were in regular classrooms benefitted academically decreased significantly. In addition, the percentages of regular education staff members, PPS staff members, and administrators who believed that the quality of education was improved for those students who have special needs who were placed in regular classrooms decreased from 1993 to 1996, although the percentage of parents who believed that this had occurred increased. Clearly, there were concerns that students with special needs, especially those with more substantial needs, were not making effective progress in improving their basic skills. The acquisition of these basic skills would have been included in many of the goals in their IEPs, and would have assisted in defining their academic progress and determining the quality of their education.

In 1993 and in 1996, there were recommendations from regular education staff members, PPS staff members, and parents that additional time be made available for increased communication between regular education and special education staff. This increased time for communication was recommended so that there could be more planning, more consultation, more co-teaching, and more communication with parents.

In 1996, there were recommendations for alternative service delivery models in which special education services would be provided both within the classroom and within the resource room. There were clear concerns that some students needed more intensive services than were being provided. Some students whose skill levels were substantially below grade level needed to learn basic skills and to develop life skills. Some students needed to work individually, in smaller groups, or with fewer
distractions than there were in the classroom. This recommendation corresponded with
the ways the respondents preferred special education services be provided. In 1996, the
overwhelming response from regular education staff members, PPS staff members,
administrators, and parents was that they preferred that special education services be
delivered through a combination of in the regular class as well as through pull-out
programs. This preference was made by 73.6% of the regular education staff members,
77.9% of the PPS staff members, 64.7% of the administrators, and 56.0% of the parents.

All of these recommendations have been discussed in other sections of the
evaluations as concerns were raised and weaknesses cited. There were some strong
indications, from these recommendations that were made, that in 1996, there was more
concern that students who have special needs were not receiving the services they
needed to make effective progress.

Discussion of Category III Data

Data were analyzed by making comparisons between the data in the two
comprehensive special education program evaluations completed in 1993 and 1996.
Category III data examined the impact of the inclusion model upon special education
program. These data have been analyzed to determine similarities and differences in the
perceptions of the four respondent groups: regular education staff members, Pupil
Personnel Services staff members, administrators, and parents.

There were, again, many similarities in the changes in the perceptions of regular
education staff and PPS staff. There were frequently similarities between the
perceptions of these two groups and those of administrators and parents. In 1996, there
seem to be more indications that there were serious concerns from all of the respondent groups about the utilization of the inclusion model to provide special education services than there were in 1993.

Between 1993 and 1996, thirty additional special education teacher assistants were hired and this was believed to be the factor that most supported integration activities in the schools by a majority of regular education staff members, PPS staff members, administrators, and parents. Other factors that were identified to have supported integration were collaborative working relations with other teachers, flexibility of other professionals, administrative commitment, and staff expertise.

From 1993 to 1996, regular education staff members and administrators believed that the needs of the other students in the classes was the factor that most impeded integration activities. Parents felt that problems with peers was the factor that most impeded integration activities. Many of the same factors that were identified in 1993, however, continued to be perceived as impeding integration activities by all of the respondent groups in 1996. These included lack of planning time, large class sizes, lack of professional development, and lack of personnel. Additional factors identified in 1996 were lack of money and problems with peers were also identified as factors.

In both 1993 and 1996, both regular education staff members and PPS staff members saw each other as strengths of the special education program because of the cooperation and support that they believed that they received from each other.

In 1996, regular education staff members, PPS staff members, administrators, and parents all identified the social and educational benefits to students who have
special needs as strengths of the special education program. Social benefits have consistently been identified as a benefit for students who have special needs.

In both 1993 to 1996, many of the same factors were identified as weaknesses of the special education program. These included large class sizes, having too many students who have severe special needs students in the classrooms, not having enough special education staff members to work with the students who have special needs, not having enough time for regular and special education staff members to plan and work together, to consult with each other, and to co-teach. Some additional weaknesses that were identified in 1996 included the inability of the special education program to meet the needs of the students with disabilities, to provide adequate resources, and to be able to substantially modify the curriculum for students whose abilities were different from their classmates. From 1993 to 1996, fewer regular education staff members and PPS staff members believed that the special education program was meeting the needs of students with disabilities, and fewer regular education staff members, PPS staff members, administrators, and parents believed that students with special needs in regular classrooms benefitted academically.

From 1993 to 1996, recommendations to improve the special education program included providing alternative service delivery models in which some services would continue to be provided in the classroom, while other services, especially for students whose skill levels were substantially below grade level, who needed to work in smaller groups, or with fewer distractions would be provided in the resource room. This was similar to the way the vast majority of all of the respondent groups indicated that they
preferred to have special education services provided, through a model that combines services in the regular classroom with services in the resource room.

Other recommendations about how to improve the special education included increasing and improving communication, and providing increased resources for special education, including computers. Providing additional inservice education including topics related to co-teaching and inclusion which would be attended by both regular and special educators, having smaller class sizes and a better distribution of special education students in regular classrooms were also recommended.

It is interesting to compare the perceptions of regular education staff members, PPS staff members, administrators, and parents about the impact of the inclusion model on the special education program with the contentions of both the opponents and proponents of the movement to providing special education services through the utilization of an inclusion model. Clearly, there is some agreement with the perceptions of the respondent groups in Barnstable with some of the contentions of the proponents as well as with those of the opponents.

There was agreement between the respondents in Barnstable and those who contended that partnerships would form between regular and special education staff members (Gartner & Lipsky, 1987; Gerrard, 1994; Lipsky & Gartner, 1989; Will, 1986). These partnerships did form and regular and special education staff members each felt that they worked cooperatively with each other, they perceived each other as a strength of the program, and that believed that they had become better teachers because they learned from each other. However, they did not have the time they needed to nurture
this partnership and they repeatedly articulated this throughout the special education program evaluations in both 1993 and 1996.

There were social benefits for students who have disabilities that the proponents of the movement to a more inclusive model of delivering special education services contended would occur (Gartner & Lipsky, 1987; Gerrard, 1994; Lipsky & Gartner, 1989; Massachusetts Board of Education, 1992). There was definite agreement from all of the respondent groups that this did occur in Barnstable between 1993 and 1996.

Where there was disagreement between the proponents of the movement to the utilization of an inclusion model of providing special education services and the respondents in Barnstable was about whether there were improved outcomes for all students. Proponents predicted that the quality of education for all students would be improved (Gartner & Lipsky, 1987; Gerrard, 1994; Lipsky & Gartner, 1989; 1994; Massachusetts Board of Education, 1992, National Association of State Boards of Education, 1992; Stainback, Stainback, & Bunch, 1989; Will, 1986). However, many of the respondents in Barnstable had serious concerns about whether the special education program was meeting the needs of students who have disabilities, whether they benefitted academically, and whether the quality of education was improved for either the students who have special needs or the regular education students. Their perceptions were more comparable to the fears of the opponents of this movement (Fuchs & Fuchs, 1994, 1995; Kauffman, 1989; Martin, 1995; McKinney & Hocutt, 1988; Schumm & Vaughn, 1995).

It is interesting that Will contended that it was better to educate mildly handicapped students with nonhandicapped students in the regular classroom (p. 12).
Barnstable, however, moved to the utilization of the inclusion model of providing special education services within the regular classroom with the students with the most substantial disabilities and quickly moved to providing these services to all students with special needs in the regular classroom. It is also interesting that Barnstable utilized this model exclusively, thus not providing a continuum of services. Roberts and Mather (1995) expressed concern that proponents of inclusion misinterpreted the term least restrictive environment to federal support for full inclusion without consideration of meeting the needs of students with disabilities (p. 47). Members of all respondent groups in Barnstable clearly indicated that their preferred way for special education services to be provided was through a model in which services would be provided both in the regular classroom and in the resource room.

It is likely that many of the factors that were perceived to be impeding integration activities and that were perceived to be weaknesses of the special education program in Barnstable would not have occurred if the movement to inclusion had been implemented with more extensive preparation. It is also likely that many of these impediments and weaknesses would have been avoided if the serious administrative and financial difficulties of the 1995-96 school year had not occurred.

The changes in the perceptions about how the utilization of the inclusion model impacted the special education program will be discussed again as the research questions are answered.
The Impact of the Inclusion Model on Special Education Costs

Category IV data included data that examined costs of regular special and special education. These data were collected from the End-of-Year Pupil and Financial Reports and included the following:

<table>
<thead>
<tr>
<th>Regular Education</th>
<th>Special Education</th>
</tr>
</thead>
<tbody>
<tr>
<td>1992-93</td>
<td>16,192,328</td>
</tr>
<tr>
<td>1993-94</td>
<td>18,804,004</td>
</tr>
<tr>
<td>1994-95</td>
<td>18,701,103</td>
</tr>
<tr>
<td>1995-96</td>
<td>21,900,262</td>
</tr>
</tbody>
</table>

(Massachusetts, 1992-1993 to 1995-1996)

Figure 27. Total Expenditures for Regular Education and Special Education Programs

Analysis of the Figure 27 Data

The total expenditures for regular education increased 35.3% between 1993 and 1996, while the total expenditures for special education increased 79.0% during that same time period.

<table>
<thead>
<tr>
<th>Regular Education</th>
<th>Special Education</th>
</tr>
</thead>
<tbody>
<tr>
<td>1992-93</td>
<td>14,198,467</td>
</tr>
<tr>
<td>1993-94</td>
<td>16,970,714</td>
</tr>
<tr>
<td>1994-95</td>
<td>16,795,235</td>
</tr>
<tr>
<td>1995-96</td>
<td>20,080,787</td>
</tr>
</tbody>
</table>

(Massachusetts, 1992-1993 to 1995-1996)

Figure 28. Total Expenditures for Instructional Services for Regular Education and Special Education Programs
Analysis of the Figure 28 Data

The total expenditures for instructional services for regular education programs increased 41.4% between 1993 and 1996. During this same period of time, the total expenditures for instructional services for special education programs increased 74.9%.

<table>
<thead>
<tr>
<th></th>
<th>502.1-502.4</th>
<th>502.5</th>
<th>502.6</th>
<th>502.8</th>
</tr>
</thead>
<tbody>
<tr>
<td>1992-93</td>
<td>2,079,792</td>
<td>318,314</td>
<td>254,143</td>
<td>189,072</td>
</tr>
<tr>
<td>1993-94</td>
<td>2,274,302</td>
<td>293,461</td>
<td>261,155</td>
<td>295,364</td>
</tr>
<tr>
<td>1994-95</td>
<td>2,607,416</td>
<td>396,129</td>
<td>448,490</td>
<td>338,625</td>
</tr>
<tr>
<td>1995-96</td>
<td>3,575,064</td>
<td>338,200</td>
<td>612,766</td>
<td>442,839</td>
</tr>
</tbody>
</table>

(Massachusetts, 1992-1993 to 1995-1996)

Figure 29. Expenditures for Special Education Programs by Prototype

Analysis of the Figure 29 Data

Between 1993 and 1996 there were increases in the expenditures for special education programs for all prototypes. However, there were substantial differences between the rates of increase for different prototype groups. The expenditures for 502.5 programs, out-of-district private day school programs, increased only 6.2% between 1993 and 1996, while expenditures for 502.1-502.4 programs within the public schools, increased 71.9%, expenditures for 502.8 programs, preschool programs, increased 134.2%, and expenditures for 502.6 programs, out-of-district private residential schools increased 141.1% between 1993 and 1996.
<table>
<thead>
<tr>
<th>Year</th>
<th>Expenditure</th>
</tr>
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<tr>
<td>1992-93</td>
<td>572,457</td>
</tr>
<tr>
<td>1993-94</td>
<td>554,616</td>
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<tr>
<td>1994-95</td>
<td>844,619</td>
</tr>
<tr>
<td>1995-96</td>
<td>950,966</td>
</tr>
</tbody>
</table>

(Massachusetts, 1992-1993 to 1995-1996)

Figure 30. Total Expenditures for Tuitions for Out-of-District Special Education Placements

Analysis of the Figure 30 Data

Between 1993 and 1996, the total expenditures for tuitions for out-of-district special education placements increased 66.1%.

<table>
<thead>
<tr>
<th></th>
<th>502.1-502.4</th>
<th>502.5</th>
<th>502.6</th>
<th>502.8</th>
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<td>318,314</td>
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<td>293,461</td>
<td>261,155</td>
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<td>1994-95</td>
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<td>396,129</td>
<td>448,490</td>
<td>0</td>
</tr>
<tr>
<td>1995-96</td>
<td>0</td>
<td>338,200</td>
<td>612,766</td>
<td>0</td>
</tr>
</tbody>
</table>

(Massachusetts, 1992-1993 to 1995-1996)

Figure 31. Expenditures for Tuitions for Out-of-District Special Education Placements by Prototype

Analysis of the Figure 31 Data

There were no expenditures for tuitions for out-of-district placements for special education placements for 502.1-502.4 prototype programs in other public schools or the 502.8 prototype programs, preschool programs. There were, however, expenditures which increased between 1993 and 1996 for the 502.5 prototype programs, private day schools, and the 502.6 prototype programs, private residential schools. Between 1993 and 1996, the expenditures for tuitions for 502.5 prototype programs increased 6.2%
while the expenditures for tuitions for 502.6 prototype programs increased 141.1% during this same time period.

<table>
<thead>
<tr>
<th></th>
<th>Regular Education</th>
<th>Special Education</th>
</tr>
</thead>
<tbody>
<tr>
<td>1992-93</td>
<td>327.5</td>
<td>53.0</td>
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<tr>
<td>1993-94</td>
<td>350.5</td>
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<tr>
<td>1994-95</td>
<td>412.1</td>
<td>34.5</td>
</tr>
<tr>
<td>1995-96</td>
<td>403.9</td>
<td>63.0</td>
</tr>
</tbody>
</table>

(Massachusetts, 1992-1993 to 1995-1996)

Figure 32. Full-Time Equivalent Numbers of Regular Education and Special Education Teachers

Analysis of the Figure 32 Data

The full-time equivalent numbers of regular education and special education teachers increased between 1993 and 1996. The numbers of regular education teachers increased 23.3% while the numbers of special education teachers increased only 18.9% during this time.

<table>
<thead>
<tr>
<th></th>
<th>Regular Education</th>
<th>Special Education</th>
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</thead>
<tbody>
<tr>
<td>1992-93</td>
<td>13,291,919</td>
<td>2,462,261</td>
</tr>
<tr>
<td>1993-94</td>
<td>16,029,287</td>
<td>2,789,010</td>
</tr>
<tr>
<td>1994-95</td>
<td>15,863,583</td>
<td>3,114,837</td>
</tr>
<tr>
<td>1995-96</td>
<td>18,800,423</td>
<td>4,029,142</td>
</tr>
</tbody>
</table>

(Massachusetts, 1992-1993 to 1995-1996)

Figure 33. Total Expenditures for Salaries of Regular Education and Special Education Teaching Staff
Analysis of the Figure 33 Data

Between 1993 and 1996, the total expenditures for salaries of regular education teaching staff increased 41.4% while the salaries of special education teaching staff increased 63.6%.

<table>
<thead>
<tr>
<th></th>
<th>Regular Education</th>
<th>Special Education</th>
</tr>
</thead>
<tbody>
<tr>
<td>1992-93</td>
<td>12,147,761</td>
<td>1,881,737</td>
</tr>
<tr>
<td>1993-94</td>
<td>13,648,202</td>
<td>1,964,337</td>
</tr>
<tr>
<td>1994-95</td>
<td>14,287,701</td>
<td>2,080,369</td>
</tr>
<tr>
<td>1995-96</td>
<td>17,358,291</td>
<td>2,735,506</td>
</tr>
</tbody>
</table>

(Massachusetts, 1992-1993 to 1995-1996)

Figure 34. Total Expenditures for Salaries of Regular Education and Special Education Teachers

Analysis of the Figure 34 Data

Total expenditures for salaries of regular education teachers increased 42.9% between 1993 and 1996, while the total expenditures for salaries of special education teachers increased 45.4% during this time.

<table>
<thead>
<tr>
<th></th>
<th>Regular Education</th>
<th>Special Education</th>
</tr>
</thead>
<tbody>
<tr>
<td>1992-93</td>
<td>300,902</td>
<td>541,857</td>
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<tr>
<td>1993-94</td>
<td>452,242</td>
<td>787,667</td>
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<td>1994-95</td>
<td>514,431</td>
<td>970,331</td>
</tr>
<tr>
<td>1995-96</td>
<td>559,104</td>
<td>1,250,088</td>
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</table>

(Massachusetts, 1992-1993 to 1995-1996)

Figure 35. Total Expenditures for Salaries for Regular Education and Special Education Paraprofessional Staff Members
Analysis of the Figure 35 Data

Between 1993 and 1996, the total expenditures for regular education paraprofessional staff members increased 85.8% and the total expenditures for special education paraprofessional staff members increased 130.7%.

<table>
<thead>
<tr>
<th>Year</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>1992-93</td>
<td>80</td>
</tr>
<tr>
<td>1993-94</td>
<td>52</td>
</tr>
<tr>
<td>1994-95</td>
<td>154</td>
</tr>
<tr>
<td>1995-96</td>
<td>139</td>
</tr>
</tbody>
</table>

(Massachusetts, 1992-1993 to 1995-1996)

Figure 36. Number of Special Education Students who Received Special Transportation

Analysis of the Figure 36 Data

There was a increase of 73.8% between 1993 and 1996 in the numbers of special education students who received special transportation.

<table>
<thead>
<tr>
<th>Year</th>
<th>Regular</th>
<th>Special Education</th>
</tr>
</thead>
<tbody>
<tr>
<td>1992-93</td>
<td>1,316,288</td>
<td>400,141</td>
</tr>
<tr>
<td>1993-94</td>
<td>1,126,475</td>
<td>795,799</td>
</tr>
<tr>
<td>1994-95</td>
<td>1,453,724</td>
<td>916,979</td>
</tr>
<tr>
<td>1995-96</td>
<td>1,336,812</td>
<td>1,153,549</td>
</tr>
</tbody>
</table>

(Massachusetts, 1992-1993 to 1995-1996)

Figure 37. Total Expenditures for Regular and Special Education Transportation
Analysis of the Figure 37 Data

Between 1993 and 1996, there was an increase of 1.6% in the total expenditures for regular education transportation and there was an increase of 188.3% in the total expenditures for special education transportation.

<table>
<thead>
<tr>
<th></th>
<th>502.1-502.4</th>
<th>502.5</th>
<th>502.6</th>
<th>502.8</th>
</tr>
</thead>
<tbody>
<tr>
<td>1992-93</td>
<td>114,792</td>
<td>0</td>
<td>16,378</td>
<td>141,802</td>
</tr>
<tr>
<td>1993-94</td>
<td>331,584</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>1994-95</td>
<td>430,517</td>
<td>0</td>
<td>0</td>
<td>34,318</td>
</tr>
<tr>
<td>1995-96</td>
<td>468,886</td>
<td>0</td>
<td>0</td>
<td>202,000</td>
</tr>
</tbody>
</table>

(Massachusetts, 1992-1993 to 1995-1996)

Figure 38. Expenditures for Special Education Transportation by Prototype

Analysis of the Figure 38 Data

There were significant differences in the expenditures for special education transportation for the program prototypes between 1993 and 1996. During this time, there was no change in the expenditures for the 502.5 prototype programs, private day programs, there was an increase of 42.5% for the 502.8 prototype programs, preschool programs, an increase of 308.5% in the 502.1-502.4 prototypes programs within the public schools, and a decrease of all costs for the 502.6 prototype programs, private residential programs.

Discussion of Category IV Data

Cost data were analyzed by making comparisons in the data from the district’s End-of-Year Pupil and Financial Reports for school years 1992-93 through 1995-96. There were significant and substantial differences in the changes in regular education
and special education expenditures between 1993 and 1996. Total expenditures for
special education programs and total expenditures for instructional services for special
education increased substantially more than these expenditures for regular education.
Total expenditures for special education programs increased from $3,471,429 in 1993 to
$6,215,444 in 1996, an increase of 79.0%. These expenditures for regular education
increased from $16,192,328 in 1993 to $21,900,262 in 1996, an increase of only 35.3%.

Total expenditures for instructional programs for special education also
increased more substantially than those for regular education. Total expenditures for
instructional programs for special education increased from $2,626,000 in 1993 to
$4,593,592 in 1996, an increase of 74.9%. Total expenditures for instructional
programs for regular education increased from $14,198,467 in 1993 to $20,080,787 in
1996, an increase of only 41.4% during this same time period.

The total expenditures for salaries of special education teaching staff, for salaries
of special education teachers, and for salaries of special education paraprofessional staff
members increased at a higher rate than these expenditures for regular education.
Between 1993 and 1996, the total expenditures for salaries of special education teaching
staff increased 63.6%, from $2,462,261 to $4,029,142, while the total expenditures for
regular education teaching staff increased 41.4%, from $13,291,919 to $18,800,423.

The total expenditures for salaries of special education teachers increased from
$1,881,737 in 1993 to $2,735,506 in 1996, an increase of 45.4% while the total
expenditures for salaries of regular education teachers increased 42.9%, from
$12,147,761 in 1993 to $17,358,291 in 1996.
It is interesting to note that the average salary for special education teachers in 1993 was $35,504 and in 1996, this average was $43,420, indicating an increase of 22.3%. The average salary for regular education teachers was $37,092 in 1993 and $42,977 in 1996, an increase of 15.9%. Since regular education and special education teachers are on the same salary scale with the same increases each year, it is interesting to speculate on what might account for this difference. It may be that special education teachers who were in the district received more advance degrees during this time than regular education teachers did. Or perhaps, those special education teachers who were hired during this period may have had more advanced degrees than regular education teachers in the district or those who were hired during this time. Fuchs and Fuchs (1995) stated that an important special education resource is the special educators who “tend to have more advance degrees” (p. 525) than their regular education counterparts. It also possible that another reason that might account for this difference may be errors in the data reported in the End-of-Year Pupil and Financial Reports.

The total expenditures for salaries for special education paraprofessional staff members increased 130.7% from $541,857 in 1993 to $1,250,088 in 1996 while the total expenditures for regular education paraprofessional staff members increased 85.8% from $300,902 in 1993 to $559,104 in 1996.

Between 1993 and 1996, the full-time equivalent numbers of special education teachers, however, increased at a lower rate than that of regular education teachers. During this time period, the full-time equivalent numbers of special education teachers increased 18.9%, from 53.0 in 1993 to 63.0 in 1996, while the full-time equivalent
numbers of regular education teachers increased 23.3%, from 327.5 in 1993 to 403.9 in 1996.

It is significant to note that the full-time equivalent numbers of special education teachers increased 18.9%, from 53.0 in 1993 to 63.0 in 1996, while the full-time equivalent numbers of special education paraprofessional staff members increased from 61.0 in 1993 to 91.5 in 1996, an increase of 50.0%.

It is also significant to note that there are no data about the number of full-time equivalent numbers of regular education or special education paraprofessional staff members in the Massachusetts End-of-Year Pupil and Financial Reports. When staff members in the district’s central office were questioned about the numbers of paraprofessional staff members, the response was that all of the special education paraprofessional staff members were teacher assistants, while regular education paraprofessional staff members included teacher assistants and teacher aides. Teacher assistants provide instructional assistance in the classroom while teacher aides provide assistance at lunch or on the playground and with the preparation of classroom materials. There were 61 full-time special education assistants in 1993 (61.0 FTE) and 91.5 (FTE) special education assistants in 1996. Because regular education teacher assistants and aides usually work only a few hours a day and the number of their hours each week may vary, the number people who work in these positions could not be provided for either 1993 or 1996.

There were significant changes in the expenditures for special education programs by prototype between 1993 and 1996. The expenditures for the public school special education programs that were provided within the district, the 502.1-502.4
programs, and the 502.8 programs, preschool programs, increased between 1993 and 1996. The expenditures for the 502.1-502.4 programs increased from $2,079,792 in 1993 to $3,575,064 in 1996, an increase of 71.9%. The expenditures for 502.8 programs increased from $189,072 in 1993 to $442,839 in 1996, an increase of 134.2%. A possible reason for the increase in the expenditures for these programs is the increase in the amounts of special education services that were provided in inclusive settings. As services that had previously been provided in resource rooms were decentralized, the need for additional personnel to provide these services increased.

There were also significant changes in the expenditures for special education programs that were provided though out-of-district programs between 1993 and 1996. The expenditures for 502.5 programs, private day programs, increased only 6.2%, from $318,314 in 1993 to $338,200 in 1996. The expenditures for 502.6 programs, private residential programs, increased 141.1%, from $254,143 in 1993 to $612,766 in 1996. During this time period, total expenditures for out-of-district special education placements increased from $572,457 in 1993 to $950,966 in 1996, an increase of 66.1%. These increased in expenditures for out-of-district 502.6 programs, private residential programs, is contrary to what might be expected as a district moves to provide more inclusive programs. It could be expected that some of the students in these residential programs might have been able to be provided with special education services in other programs within the district that had been eliminated during the moved to inclusion. The increases in the numbers of students in private residential programs will be discussed again when enrollment data are analyzed.
Total expenditures for special education transportation increased 188.3%, from $400,141 in 1993 to $1,153,549 in 1996. Total expenditures for regular education transportation increased only 1.6%, from $1,316,288 in 1993 to $1,336,812 in 1996. The number of special education students who received special transportation increased from 80 in 1993 to 139 in 1996, an increase of 73.8%.

There were significant differences in the expenditures for special education transportation by prototype. Expenditures for special education transportation for the 502.1-502.4 prototypes increased from $114,792 in 1993 to $468,886 in 1996, an increase of 308.5% Expenditures for the 502.8 prototype increased 42.5% from $141,802 in 1993 to $202,000 in 1996.

There were no transportation expenditures in the End-of-Year Pupil and Financial Reports in any year between 1993-94 and 1995-96 for the 502.5 prototype, private day schools, for which the district is required to transport students on a daily basis. Expenditures for the 502.6 prototype, residential programs, for which the district is required to transport students on a regular weekend and/or vacation schedule, decreased all costs between 1993 and 1996. When staff members in the district’s central office were questioned why there were no expenditures for 502.5 program and why there were expenditures for the 502.6 program for only one year, 1993-94, the only explanation that was provided was that these expenditures must have been charged to other transportation categories. This makes it impossible to have confidence in the analysis of any transportation expenditures because these data appear to be inaccurate.

Special education transportation is an area in which expenditures may be expected to be decreased as a result of the utilization of an inclusion model of providing
special education services (Gerrard, 1994, p. 64; Moscovitch, 1993, p. 21), but this appears to have not happened in this district. Total expenditures for special education transportation in this district increased 188.3%, from $400,141 in 1993 to $1,153,549 in 1996.

However, it is impossible to have confidence in the accuracy of the special education transportation data because of what appears to be inaccuracies in the data in the End-of-Year Pupil and Financial Reports and the inability of district personnel to clarify how some of these apparent discrepancies might have occurred. This also causes concern about other possible inaccuracies that may have occurred with other data in other expenditure categories and diminishes the levels of confidence with other data.

Chambers, Parrish, Lieberman, and Wolman (1998) contend that there are no comprehensive and accurate data relating to what public schools in the United States are spending on special education services. They further contend that the reasons for this are the inaccuracies in the data that are provided and “the inability of the states to provide the data related to these expenditures” (p. 1). Massachusetts utilizes these data in the End-of-Year Pupil and Financial Reports that they collect from each school district in the state. If there are inaccuracies within the district in their reporting, it is not surprising that as Chambers, Parrish, Lieberman, and Wolman (1998), there are so many difficulties in collecting these data. It is also not surprising that they contend that there are no comprehensive and accurate sources at either the national or state level (pp. 1-4).

Between 1993 and 1996, expenditures for special education services increased significantly more than those for regular education. Total expenditures for instructional
programs for special education increased 74.9% while those for regular education increased 41.4%. Total expenditures for salaries of special education teaching staff increased 63.6% while those for regular education increased 41.4%. Total expenditures for salaries for special education teachers increased 45.4% while total expenditures for salaries for regular education teachers increased 42.9% and total expenditures for salaries for paraprofessional staff members increased 130.7% while the same expenditures for regular education paraprofessional staff members increased 85.8%.

Between 1993 and 1996, the first three years of the movement to provide special education services through the utilization of a more inclusive model, the expenditures for special education services increased more substantially than the same expenditures for regular education services.

Recently, there has been much written about changes that may be expected to occur in special education costs as a district moves to a more inclusive model of providing special education services, but there has been little agreement. Some reports, such as the one written by The Massachusetts Board of Education (1992) contended that providing special education services in more inclusive settings “provides a financial benefit to school systems because it ultimately results in a more cost efficient system” (p. 6). Other reports, such as the one by The National Association of State Boards of Education (1992), said that as new models of service delivery are implemented, some costs may decrease, while other costs may increase. “Creating an inclusive system of educational services does not necessarily lead to reduced expenditures on special education services. Yet in most districts, inclusionary programs have not cost more” (p. 30).
McLaughlin and Warren (1994) discussed a study in which researchers at the University of Maryland interviewed administrators of 12 school districts and concluded that inclusion does cost more initially. Some new costs may entail expenditures for such things as the hiring instructional assistants, or reallocating funds that had been utilized for out-of-district placements to provide additional staff development for teachers who will now be working with students who are returning to their classrooms (p. 25). They contended that as districts become more involved in inclusion, inclusion can cost less (p. 25).

Gerrard (1994) contended that “the school system may actually incur savings through inclusion” (p. 64) because in-district placements would cost less than out-of-district placements and there would be savings in transportation costs (p. 64).

Kauffman (1989) feared that allocations for special education services would decrease as a result of the movement to more inclusive service delivery models (p. 266). He concluded that in the movement to more inclusive service delivery models, “fiscal constraints are a scarcity condition obviously motivating the attempts to combine programs into more efficient packages, regardless of the consequences” (p. 272). Kauffman contended that the movement to more inclusive programs was made to appeal to the financial savings that would be reaped, but he was concerned that these saving would be made to the detriment of students who have disabilities. He feared that as teachers are forced to utilize resources for those students who are more capable students and fewer resources would be utilized to students who have disabilities (pp. 266-67).

McLaughlin and Warren (1994) acknowledged the fear that inclusion is being implemented to save money and contended that there has been little examination of how
resource allocation changes as the movement to inclusion occurs. “There is also the fear that inclusion could be used as a means to save money at the expense of students in needs of specialized educational services” (p. 2). They continued, “While inclusion has been extensively discussed in the literature, information is notable absent regarding the allocation of resources or how these allocations change as a results of the moving to inclusion” (p. 3).

McCormick and First (1994) posed and answered a questions about the costs of inclusion. “Does inclusion schooling cost more or less that other approaches? The answer to this question will vary depending on many factors. Our point is that thorough analysis of necessary costs must be done in order to answer this question” (p. 35).

Total expenditures for both regular education and special education programs increased between 1993 and 1996 in Barnstable. However, total expenditures for special education programs increased 74.9% while total expenditures for regular education programs increased only 41.4%. It is interesting to speculate whether the increases in total expenditures for regular and special education would be more comparable if regular education services were given the same priority under the laws that are provided to special education services.

Moscovitch (1993), expressed concern about the competition between regular education and special education for limited funds for education. “As long as total school budgets are constrained, the laws that give absolute priority to special education expenditures inevitably do so at the expense of regular education programs (p. 3). He contended that as the money spent on special education has increased, the money spent on regular education has declined. He concluded that it is unrealistic to expect that a
district would save money because of starting inclusive programs. “It would be a mistake to expect a program of inclusion to produce significant savings in the early years” (p. 22). There might, however, he contended, be some savings in non-instructional areas, such as transportation (p. 21).

However, before decisions can be made about how the implementation of an inclusion model of providing special education services can be made, comprehensive and accurate data must be collected. Chambers, Parrish, Lieberman, and Wolman (1998) contend that at this “there are no comprehensive and accurate data sources that indicate what public schools in the U. S. are spending on special education services” (p. 1). They continue, “Clearly, more refined data are required to provide an accurate estimate of what is currently being spent on special education in the U. S.” (p. 4). They are concerned that there are “no current, uniform data sources that track expenditures for special education services at the federal or state level” (p. 4) at a time when it is most needed. They continue, “This “is particularly critical in a period that has seen a growth in interest among policymakers and educators in the implementation of more inclusive service delivery models for meeting the needs of students with disabilities” (p. 4).

During the 1995-96 school year, the district experienced enormous financial difficulties. “The 1995-96 school year was an extremely difficult one for the Barnstable Public Schools. The system experienced a 2.5 million dollar deficit that led to much disruption within the system. Increases in special education service costs were initially identified as the major source of the deficit, although it became evident than many (regular education) programs were involved in the final deficit figure” (Barnstable, 1996, p. 3). The costs of providing special education services through the utilization of
an inclusion model of service delivery will be discussed again as enrollment data are
analyzed, and as the research questions are answered. The relationships between and
among the changes in the perceptions of regular education staff members, PPS staff
members, administrators, and parents about the utilization of the inclusion model of
providing special education services, costs of providing these services and changes in
enrollments will be discussed as the research questions are answered.

The Impact of the Inclusion Model on Special Education Enrollment

Category V data included data that examined regular special and special
education enrollments. These data were collected from the End-of-Year Pupil and
Financial Reports and included the following:

<table>
<thead>
<tr>
<th></th>
<th>Regular Education</th>
<th>Special Education</th>
</tr>
</thead>
<tbody>
<tr>
<td>1992-93</td>
<td>6,732</td>
<td>1,191</td>
</tr>
<tr>
<td>1993-94</td>
<td>7,055</td>
<td>1,179</td>
</tr>
<tr>
<td>1994-95</td>
<td>7,523</td>
<td>1,200</td>
</tr>
<tr>
<td>1995-96</td>
<td>7,620</td>
<td>1,154</td>
</tr>
</tbody>
</table>

(Massachusetts, 1992-1993 to 1995-1996)

Figure 39. Total Enrollment in Regular Education and Special Education Programs by
Headcount

Analysis of the Figure 39 Data

Between 1993 and 1996, total enrollment in regular education increased 13.2%
and the total enrollment in special education decreased 3.1%.
<table>
<thead>
<tr>
<th></th>
<th>Regular Education</th>
<th>Special Education</th>
</tr>
</thead>
<tbody>
<tr>
<td>1992-93</td>
<td>6,222.5</td>
<td>191.7</td>
</tr>
<tr>
<td>1993-94</td>
<td>6,396.7</td>
<td>177.4</td>
</tr>
<tr>
<td>1994-95</td>
<td>6,728.9</td>
<td>180.6</td>
</tr>
<tr>
<td>1995-96</td>
<td>6,991.7</td>
<td>176.5</td>
</tr>
</tbody>
</table>

(Massachusetts, 1992-1993 to 1995-1996)

Figure 40. Full-Time Equivalent Average Membership in Regular Education and Special Education Programs

Analysis of the Figure 40 Data

The full-time equivalent average membership in regular education increased 12.4% between 1993 and 1996, while the full-time equivalent average membership in special education decreased 7.9% during this time.

<table>
<thead>
<tr>
<th></th>
<th>502.1-502.4</th>
<th>502.5</th>
<th>502.6</th>
<th>502.8</th>
</tr>
</thead>
<tbody>
<tr>
<td>1992-93</td>
<td>1,034</td>
<td>6</td>
<td>10</td>
<td>96</td>
</tr>
<tr>
<td>1993-94</td>
<td>1,018</td>
<td>2</td>
<td>13</td>
<td>113</td>
</tr>
<tr>
<td>1994-95</td>
<td>1,017</td>
<td>4</td>
<td>17</td>
<td>112</td>
</tr>
<tr>
<td>1995-96</td>
<td>1,010</td>
<td>8</td>
<td>11</td>
<td>74</td>
</tr>
</tbody>
</table>

(Massachusetts, 1992-1993 to 1995-1996)

Figure 41. Enrollment in Special Education Programs by Prototype by Headcount

Analysis of the Figure 41 Data

Between 1993 and 1996, there were some significant changes in the enrollment in special education programs by prototype by headcount. The enrollment by headcount increased 33.3% in the 502.5 prototype, private day programs, and increased 10.0% in the 502.6 prototype, private residential programs, and decreased by 2.3% in the
502.1-502.4 prototypes, programs within the public schools, and decreased by 22.9% in the 502.8 prototype, preschool programs.

<table>
<thead>
<tr>
<th>Year</th>
<th>502.1-502.4</th>
<th>502.5</th>
<th>502.6</th>
<th>502.8</th>
</tr>
</thead>
<tbody>
<tr>
<td>1992-93</td>
<td>143.5</td>
<td>6.0</td>
<td>10.0</td>
<td>15.9</td>
</tr>
<tr>
<td>1993-94</td>
<td>135.6</td>
<td>2.0</td>
<td>13.0</td>
<td>14.2</td>
</tr>
<tr>
<td>1994-95</td>
<td>129.0</td>
<td>4.0</td>
<td>17.0</td>
<td>12.3</td>
</tr>
<tr>
<td>1995-96</td>
<td>128.2</td>
<td>8.0</td>
<td>11.0</td>
<td>10.8</td>
</tr>
</tbody>
</table>

(Massachusetts, 1992-1993 to 1995-1996)

Figure 42. Full-Time Equivalent Average Membership in Special Education Programs by Prototype

Analysis of the Figure 42 Data

There were some significant changes in the full-time equivalent average membership in special education programs by prototype between 1993 and 1996. The full-time equivalent average membership increased 33.3% in the 502.5 prototype, private day programs, and increased 10.0% in the 502.6 prototype, private residential program. The full-time equivalent average membership decreased 10.7% in the 502.1-502.4 prototypes, programs within the public schools, and decreased 32.1% in the 502.8 prototype, preschool programs.

<table>
<thead>
<tr>
<th>Year</th>
<th>Referrals</th>
</tr>
</thead>
<tbody>
<tr>
<td>1992-93</td>
<td>323</td>
</tr>
<tr>
<td>1993-94</td>
<td>339</td>
</tr>
<tr>
<td>1994-95</td>
<td>*</td>
</tr>
<tr>
<td>1995-96</td>
<td>*</td>
</tr>
</tbody>
</table>

* no longer included in End-of-Year Pupil and Financial Reports

(Massachusetts, 1992-1993 to 1995-1996)

Figure 43. Number of New Referrals for Special Education Services
Analysis of the Figure 43 Data

It is impossible to make comparisons between the 1993 and 1996 data, because these data were no longer included in the End-of-Year Pupil and Financial Reports in 1994-95 and 1995-96. However, the number of new referrals for special education services increased 5.0% from 1993 to 1994.

<table>
<thead>
<tr>
<th>Year</th>
<th>Evaluations</th>
</tr>
</thead>
<tbody>
<tr>
<td>1992-93</td>
<td>202</td>
</tr>
<tr>
<td>1993-94</td>
<td>241</td>
</tr>
<tr>
<td>1994-95</td>
<td>*</td>
</tr>
<tr>
<td>1995-96</td>
<td>*</td>
</tr>
</tbody>
</table>


Figure 44. Number of Special Education Evaluations that Resulted in Placement in Special Education Programs

Analysis of the Figure 44 Data

It is impossible to make comparisons the 1993 and 1996 data, because these data were no longer included in the End-of-Year Pupil and Financial Reports in 1994-95 and 1995-96. However, the number of special education evaluations that resulted in placement in special education programs increased 19.3% from 1993 to 1994.
Year | Evaluations
---|---
1992-93 | 87 *
1993-94 | 100
1994-95 | *
1995-96 | *

* no longer included in End-of-Year Pupil and Financial Reports

(Massachusetts, 1992-1993 to 1995-1996)

Figure 45. Number of Special Education Evaluations that Resulted in No Placement

Analysis of the Figure 45 Data

It is impossible to make comparisons between the 1993 and 1996 data, because these data were no longer included in the End-of-Year Pupil and Financial Reports in 1994-95 and 1995-96. However, the number of special education evaluations that resulted in no placement increased 14.9% from 1993 to 1994.

Discussion of Category V Data

Enrollment data were analyzed by making comparisons in the data from the district’s End-of-Year Pupil and Financial Reports for school years 1992-93 through 1995-96. There were significant changes in regular education and special education enrollments between 1993 and 1996. Total enrollment in regular education increased from 6,732 in 1993 to 7,620 in 1996, an increase of 13.2% while the total enrollment in special education decreased from 1,191 in 1993 to 1,154 in 1996, a decrease of 3.1%. The full-time equivalent average membership in regular education increased 12.4%, from 6,222.5 in 1993 to 6,991.7 in 1996, while the full-time equivalent average
membership in special education decreased 7.9%, from 191.7 to 176.5 during this same period of time.

Moscovitch (1993) had expressed concern that special education enrollments could increase if more money was expended for special education programs than for regular education programs. He was concerned that if funding for special education exceeds that for regular education "more and more parents are tempted to put their children into special education programs. This is particularly true when we remember that the definition of who is and who is not a special education student is such an ambiguous one" (p.18). Special education enrollments actually decreased in Barnstable between 1993 and 1996, although expenditures increased during this time.

There were also significant changes in enrollment in special education programs by prototypes. The enrollment in special education programs by prototype by headcount decreased in the in-district programs. The headcount enrollment decreased 2.3%, from 1,034 in 1993 to 1,010 in 1996 in the 502.1-502.4 prototypes, and decreased from 96 in 1993 to 74 in 1996, a decrease of 22.9% in the 502.8 prototype, preschool programs. The headcount enrollment increased in the out-of-district programs between 1993 and 1996. The headcount enrollment increased 33.3%, from 6 in 1993 to 8 in 1996 in the 502.5 prototype, private day programs, and increased 10.0%, from 10 in 1993 to 11 in 1996 in the 502.6 prototype, private residential programs. There were comparable changes in full-time equivalent average membership in special education programs by prototypes between 1993 and 1996. The full-time equivalent average membership decreased from 143.5 in 1993 to 128.2 in 1996, a decrease of 10.7% in the 502.1-502.4 prototypes and decreased from 15.9 in 1993 to 10.8 in 1996, a decrease of
32.1% in the 502.8 prototype. The full-time equivalent average membership increased by 33.3%, from 6.0 in 1993 to 8.0 in 1996, in the 502.5 prototype and increased 10.0%, from 10.0 in 1993 to 11.0 in 1996, in the 502.6 prototype.

Between 1993 and 1996, there was little variation in the proportions of students who received special education services in the different program prototypes. In 1993, the special education enrollment was 1,191 and the vast majority of the special education students from kindergarten to grade 12, or 86.8%, received these services in in-district 502.1 to 502.4 programs. Ninety six (96), or 8.1% of these students received their special education services through in-district 502.8 preschool programs. Only six (6), or 0.5%, of these students received their special education services in out-of-district private day programs, and ten (10), or 0.8%, received these services in out-of-district private residential services.

In 1996, the special education enrollment was 1,154, and again the vast majority of the special education students from kindergarten to grade 12, or 87.5%, received these services in in-district 502.1 to 502.4 programs. Seventy four (74), or 6.4% these students received their special education services through in-district 502.8 preschool programs. Eight (8), or 0.7%, of these students received their special education services in out-of-district private day programs, and eleven (11), or 1.0%, received these services in out-of-district private residential services.

Gerrard (1994) compared enrollment in various special education categories in Massachusetts from 1974 to 1990 and found that during this period "the percentage of students placed outside the public schools in residential settings decreased by 78%" (p. 63). She said that these decreases in residential placements resulted in increased

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enrollments in in-district substantially separate programs. "Students enrolled in substantially separate classes within public schools increased 120% (p. 63). The increases in these residential placements between 1993 and 1996 might suggest that this trend is reversing with additional residential placements being made as there are fewer substantially separate classes resulting from the special education service delivery model becoming more inclusive.

Data related to the the number of new referrals for special education services, the number of special education evaluations that resulted in placement in special education programs, and the number of special education evaluations that resulted in no placement were collected in the 1992-93 and 1993-94 End-of-Year Pupil and Financial Reports, but these data were not collected in 1994-95 or 1995-96 in the End-of-Year Pupil and Financial Reports. Between 1993 and 1994, however, the number of new referrals for special education services increased from 323 to 339, an increase of 5.0%. The number of special education evaluations that resulted in placement in special education programs increased from 202 in 1993 to 241 in 1994, an increase of 19.3%. From 1993 to 1994, the number of special education evaluations that resulted in no placement also increased, from 87 in 1993 to 100 in 1994, an increase of 14.9%.

Gartner and Lipsky (1987), Lipsky and Gartner (1989), and Will (1986) contended that as the movement to inclusive models of providing special education services and quality educational services for all students within the regular classroom occurs, students will no longer have to be referred, assessed, and labeled as having special needs to receive the services they need to make effective progress. It would seem that the movement to a more inclusive model for the delivery of special education
services in Barnstable did not result in decreased referrals for special education services or the number of special education evaluations that resulted in placement in special education programs. It is interesting to speculate why the data related to the number of new referrals for special education services, the number of special education evaluations that resulted in placement in special education programs, and the number of special education evaluations that resulted in no placement were collected in the 1992-93 and 1993-94 End-of-Year Pupil and Financial Reports, but these data were not collected in 1994-95 or 1995-96 in the End-of-Year Pupil and Financial Reports. Perhaps these data did not result in the outcomes the Massachusetts Department of Education anticipated would occur with the movement to more inclusive programs.

These changes in enrollment data will be discussed again as the research questions are answered.

Research Questions

Data were analyzed by making comparisons between the data in the two comprehensive special education program evaluations that were completed in 1993 and 1996. Comparisons were also made in the data from the district’s End-of-Year Pupil and Financial Reports for school years 1992-93 through 1995-96. Relationships in the findings from these two comprehensive special education program evaluations and the four End-of-Year Pupil and Financial Reports from the 1992-93 through 1995-96 school years were examined. The following research questions were answered.

1. Were there changes in the perceptions of regular education and Pupil Personnel Services staff members, administrators, and parents
concerning the effectiveness of special education services provided by utilizing the new service delivery model in meeting the needs of students who receive them?

Although there were many changes in the perceptions of regular education staff members, PPS staff members, administrators, and parents concerning the effectiveness of the special education services that were provided through the utilization of the inclusion model of service delivery, there were four themes related to these changes. These themes were: (1) there were important social benefits for the students who have special needs who were in the regular classrooms; (2) the special needs program was not effectively meeting the needs of the students who have disabilities; (3) the reasons the respondents identified about why they believed the special education program was not meeting these needs; and (4) the respondent recommended changes that could be made to make service delivery model become more successful in meeting the needs of students with disabilities.

The first theme related to the changes in the perceptions that there were social benefits for students who have special needs who were in the regular classrooms. From 1993 to 1996 the percentages of regular education staff members, PPS staff members, administrators, and parents who believed that the special needs students who were in the regular classroom benefited socially increased. These beliefs were indicated on a survey item specifically related to this as well as in other areas. When regular and PPS staff members and administrators were asked how their attitudes had changed about working with these students as a result of their involvement with them, many of those
who responded that their attitudes had changed to become more positive because they 
saw the social benefits for these students when they were in the regular classroom. 

Additionally, when regular education staff members, PPS staff members, 
administrators, and parents were asked what they saw as strengths of the special 
education program, many members of each of these respondent groups believed that a 
strength of the special education program were the social benefits for students who have 
special needs. Clearly, members of all these groups indicated in several other sections 
of the special education program evaluation that they saw important social benefits for 
these students.

The second theme related to the changes in the perceptions of the respondents 
that the special education program was not effectively meeting the needs of students 
who have disabilities. There were numerous responses that indicated how the 
perceptions or regular education staff members, PPS staff members, administrators, and 
parents had changed in this area. There were more similarities between the changes of 
the regular education staff members and the PPS staff members, those who worked with 
these students most closely. There were many areas in which the changes in the 
perceptions of the administrators and parents were very similar to those of the regular 
education staff members and the PPS staff members.

One area in which the perceptions of all of the respondent groups changed from 
1993 to 1996 to become more negative was related to the academic benefits. The 
percentages of all of these respondents who believed that the special education students 
who were in regular classrooms benefited academically decreased significantly. From 
1993 to 1996, the percentages of regular education staff members, PPS staff members,
administrators, and parents who believed that the special education program was meeting the needs of students with disabilities decreased. The decrease for regular education staff members was also significant.

From 1993 to 1996, the percentages of regular education staff members, PPS staff members, and administrators who believed that the quality of education was improved for those students who have special needs who were placed in the regular classrooms decreased. From 1993 to 1996, fewer percentages of regular education staff members, PPS staff members, and parents believed that the scheduling of students' time for special education services was flexible enough to enable specialists and teachers to meet individual student needs. Fewer regular education staff members and PPS staff members believed that appropriate materials and equipment were available for students who have special needs to use in the classroom between 1993 and 1996.

Another area in which the perceptions of regular education staff members and PPS staff members changed was related to whether students who have special needs achieved the goals written in their IEPs. From 1993 to 1996, fewer regular education staff members and PPS staff members believed that this happened. When regular and PPS staff members were asked how their attitudes changed about working with special needs students as a result of their involvement with them, many of them responded that their attitudes had changed to become more negative because they felt that they were not able to meet the needs of these students when they were in the regular classroom.

When regular education staff members, PPS staff members, administrators, and parents were asked about what they perceived to be weaknesses of the special education program, many of them responded that the inability of the program to meet the needs of
students who have disabilities was an important weakness of the program. Clearly, there were indications that the perceptions of members of all of the respondent groups had changed from 1993 to 1996, and fewer of them believed that the special education program was effectively meeting the needs of the students with disabilities.

The third theme was related to the changes in the perceptions of the respondents concerning the reasons they identified as to why the special education program was not meeting the needs of students who have disabilities. The most predominant reason was the lack of time available for regular and special educators to plan, co-teach, and work together. Regular education staff members, PPS staff members, administrators, and parents all believed that there were extremely cooperative working relationships between regular and special educators and that they utilized whatever time they had effectively. However, there were strong feelings that were frequently repeated that they needed and wanted more time to work together. They felt that there was not enough time for them to work effectively to meet the needs of all of their students for several reasons.

They felt that the special education teachers’ caseloads were too high and that frequently they were too busy testing and attending meetings to keep their commitments to consult, plan, and work with regular education staff members. They felt that whatever time they had was usually spent on planning for those students whose needs were more substantial, leaving regular education staff members to plan for students with milder disabilities, a responsibility for which they felt unprepared. Both regular and special educators also wanted more time to co-teach more frequently and more effectively. They felt that if they had more time to plan, they could provide better
services for all students. Members of all of the respondent groups felt that lack of time was a major impediment to movement to inclusion.

During the 1994-95 school year substitutes had been hired so that teachers could be provided with opportunities to work together. Additional money had been budgeted for this for the 1995-96 school year. However, the district experienced a major budget deficit and funds for all substitutes, including those who would have been hired to replace special education staff members when they were not in school, were cut. The need for additional special education staff members was repeatedly perceived to be another reason that the special education program was not able to meet the needs of students with disabilities. The lack of availability of substitutes to provide coverage for planning time and for when special education staff members were not in school, the need for additional special education staff members, as well as the need for additional materials and equipment for special needs students to use in the classrooms, were all related to the financial crisis the district faced during the 1995-96 school year.

Another reason that members of the respondent groups felt that the special education program was not meeting the needs of students who have disabilities was because the roles of both regular education and special education teachers had changed with the utilization of the inclusion model, and neither group felt prepared to assume these new roles. Regular education staff members felt that their roles had changed to become those of a teacher of multi-grade levels, and remedial and/or special needs teachers while PPS staff members felt that their roles had changed to become more of a regular class teacher. As regular education and PPS staff members perceived that their roles were changing, it seemed that each group wanted to be doing more of what they
had been doing previously because they felt frustrated about their lack of preparation for their new roles.

In 1996, both regular education staff members and PPS staff members identified many of the same requests for staff development that they had in 1993. Many of their requests for what they felt they needed in order to be successful in their efforts to participate in the inclusion movement were either not provided sufficiently or were needed on an ongoing basis. They continued to want to learn about: (1) the needs of the students who have disabilities who were in their classrooms; (2) how to modify the grade level curriculum to meet their needs; (3) how to teach the basic subjects of reading, writing, and mathematics to students whose classmates’ mastery of these was significantly more advanced than theirs; (4) co-teaching, cooperative learning and multiple intelligences; (5) how to manage behaviors more effectively; and (6) how to balance the needs of the students with special needs and the needs of the other students in their classes.

Regular and special education staff members expressed their frustrations about large class sizes, and about having too many special education students in one classroom, especially those with more substantial needs. They also expressed their frustrations that they were continually being asked to do more with fewer resources. Regular education staff members were frustrated because they didn’t feel that they received the support they needed, and PPS staff members because they didn’t feel that could do what they needed to do to support regular education staff members and to provide services for their students. Administrators expressed frustration about what
they perceived to be unreasonable demands being placed on regular education staff members.

In 1996, respondents recommended that alternative service delivery models be developed which would provide services both in the classroom and in the resource room for students who have more substantial special needs so that instruction could be provided at their levels, in smaller groups, and with fewer distractions. When all of the respondents were asked to indicate their preferred way for children who have special needs to receive their special education service, having special education services delivered through a combination of in the regular class as well as pull-out programs was selected by the majority of the regular education staff members, PPS staff members, administrators, and parents.

The fourth theme was related to the changes in the perceptions of the respondents about the changes they recommended to make the service delivery model more successful in meeting the needs of students who have disabilities. These changes included: (1) hiring more special education staff; (2) providing more opportunities for regular and special educators to plan and work together, to consult with each other, and to co-teach; (3) providing substitutes when special education staff members are not in school, or are testing or attending meetings, so that students with disabilities do not miss their service time; (4) providing staff development opportunities that meet the needs expressed by staff members; (5) providing alternative service delivery models, especially for those students whose needs were more substantial.

It was clear to all of the respondents that there were social benefits for students who have special needs who were in the regular classrooms. If changes could be made
so that the educational needs of these students could be met more effectively in the regular classroom, or if the inclusion model of service delivery could be modified so that services would be provided in the most appropriate location, then students who have disabilities would reap both social and educational benefits.

These changes in the perceptions of regular education staff members, PPS staff members, administrators, and parents concerning the effectiveness of special education services provided by utilizing the new service delivery model in meeting the needs of students who receive them will be discussed again as other research questions are answered.

2. Were there changes in the costs of special education services as a result of the implementation of the new service delivery model?

There were significant and substantial changes in the costs of special education as the new special education service delivery model was being implemented. These changes in special education costs, when related to changes in regular education costs, provide comparisons between the differences in regular education and special education expenditures between 1993 and 1996.

Total expenditures for special education programs and total expenditures for instructional services for special education increased substantially more than total expenditures for regular education programs and total expenditures for instructional services for regular education. Total expenditures for special education programs increased 79.0% from 1993 to 1996. Total expenditures for regular education programs increased only 35.3% during this same time. Total expenditures for instructional programs for special education also increased more substantially than those for regular
education. Total expenditures for instructional programs for special education increased 74.9% while expenditures for instructional programs for regular education increased only 41.4% from 1993 to 1996.

The total expenditures for salaries of special education teaching staff, for salaries of special education teachers, and for salaries of special education paraprofessional staff members increased at a higher rate than total expenditures for salaries of regular education teaching staff, for salaries of regular education teachers, and for salaries of regular education paraprofessional staff members. Between 1993 and 1996, the total expenditures for salaries of special education teaching staff increased 63.6%, while the total expenditures for regular education teaching staff increased 41.4%.

The total expenditures for salaries of special education teachers increased 45.4% from 1993 to 1996, while the total expenditures for salaries of regular education teachers increased 42.9%, during this same time. The total expenditures for salaries for special education paraprofessional staff members increased 130.7%, while the total expenditures for regular education paraprofessional staff members increased 85.8% from 1993 to 1996.

There were significant changes in the expenditures for special education programs by prototype between 1993 and 1996. The expenditures for the public school special education programs that were provided within the district, the 502.1-502.4 programs and the 502.8 programs, preschool programs, increased between 1993 and 1996. The expenditures for the 502.1-502.4 programs increased 71.9%, and the expenditures for 502.8 programs increased from 134.2% from 1993 to 1996.
There were also significant changes in the expenditures for special education programs that were provided though out-of-district programs between 1993 and 1996. The expenditures for 502.5 programs, private day programs, increased only 6.2%, and the expenditures for 502.6 programs, private residential programs, increased 141.1% from 1993 to 1996. During this time period, total expenditures for out-of-district special education placements increased from 66.1%.

Total expenditures for special education transportation increased 188.3%, from 1993 to 1996, while total expenditures for regular education transportation increased only 1.6%. There were significant differences in the expenditures for special education transportation by prototype. Expenditures for special education transportation for the 502.1-502.4 prototypes increased 308.5%, and expenditures for the 502.8 prototype increased 42.5% from 1993 to 1996.

There were no transportation expenditures in the End-of-Year Pupil and Financial Reports in any year between 1993-94 and 1995-96 for the 502.5 prototype, private day schools, for which the district is required to transport students on a daily basis. Expenditures for the 502.6 prototype, residential programs, for which the district is required to transport students on a regular weekend and/or vacation schedule, were decreased to zero between 1993 and 1996. When staff members in the district’s central office were questioned why there were no expenditures for 502.5 program and why there were expenditures for the 502.6 program for only one year, 1993-94, the only explanation that was provided was that these expenditures must have been charged to other transportation categories. This makes it impossible to have confidence in the analysis of any transportation expenditures because these data appear to be inaccurate.
Between 1993 and 1996, the first three years of the movement to provide special education services through the utilization of a more inclusive model, the expenditures for special education services increased substantially more than the same expenditures for regular education services. However, the apparent inaccuracies in transportation cost data also raises concern about possible inaccuracies that may have occurred with data in other expenditure categories and certainly, diminishes the levels of confidence in these cost data. These changes in cost data as a result of the implementation of the new service delivery model will be discussed again as other research questions are answered.

3. Were there relationships between any changes that occurred in the perceptions concerning the effectiveness of the special education program and the costs of providing special education services as a result of the implementation of the new service delivery model?

There were several unexpected relationships between some of the changes in the perceptions concerning the effectiveness of the special education program and the costs of providing special education services utilizing the new service delivery model. Between 1993 and 1996, total expenditures for special education programs increased 79.0%, more than twice the increase of 35.3% for total expenditures for regular education programs. The total expenditures for instructional services for special education programs increased 74.9% during this time, slightly less than twice the increase of 41.1% for total expenditures for instructional services for regular education program.

Many of the changes in the perceptions of the regular education staff members, PPS members, administrators, and parents between 1993 and 1996 indicated that,
although there were important social benefits for the students who have special needs who were in the regular classrooms, the special needs program was not effectively meeting the educational needs of the students who have disabilities.

They identified specific areas in the special education program which they perceived were not meeting the needs of students as effectively as they had done. Specifically, fewer of them believed that: (1) the special education program was meeting the needs of students who have special needs; (2) the special education students who were in regular classrooms benefited academically; (3) the quality of education was improved for those students who have special needs who were placed in the regular classrooms; (4) the scheduling of students’ time for special education services was flexible enough to enable specialists and teachers to meet individual students needs; (5) appropriate materials and equipment were available for students who have special needs to use in the classroom; (6) students who have special needs achieved the goals written in their IEPs.

These changes in perceptions of regular education staff members, PPS staff members, administrators, and parents concerning the effectiveness of special education services provided by utilizing the new service delivery model and the costs related to this new service delivery model will be discussed again as other research questions are answered.

4. Were there changes in enrollments in special education programs during the implementation of the new service delivery model?

There were significant changes in special education enrollments during the implementation of the new service delivery model of providing special education
services. When compared to changes in regular education enrollments during this same period of time between 1993 and 1996, these changes were substantial. Total enrollment in special education decreased 3.1%, while regular education enrollment increased 13.2% from 1993 to 1996. The full-time equivalent average membership in special education decreased 7.9% while the full-time equivalent average membership in regular education increased 12.4% during this same period of time.

There were also significant changes in headcount enrollment in special education programs by prototypes in both in-district and out-of-district programs. The headcount enrollment decreased 2.3% in the within district 502.1-502.4 prototypes and decreased 22.9% in the 502.8 prototype, preschool programs from 1993 to 1996. The headcount enrollment increased in the out-of-district programs between 1993 and 1996. The headcount enrollment increased 33.3% in the 502.5 prototype, private day programs, and increased 10.0% in the 502.6 prototype, private residential programs.

There were comparable changes in full-time equivalent average membership in special education programs by prototypes between 1993 and 1996. The full-time equivalent average membership decreased 10.7% in the 502.1-502.4 prototypes and decreased 32.1% in the 502.8 prototype. The full-time equivalent average membership increased by 33.3% in the 502.5 prototype and increased 10.0% in the 502.6 prototype during this same time.

These changes in the enrollment data will be discussed again as other research questions are answered.
5. Were there relationships between special education costs and enrollments?

Between 1993 and 1996, the relationships between special education costs and enrollments were disproportionate. Total expenditures for special education programs increased 79.0% between 1993 and 1996 and total expenditures for instructional services for special education programs increased 74.9% during this time, while the total enrollment in special education decreased 3.1% and the full-time average membership in special education programs decreased 7.9%.

Total expenditures for salaries of special education teaching staff increased 63.6% between 1993 and 1996, and the full-time equivalent number of special education teachers increased 18.9% during this time. The full-time equivalent numbers of special education paraprofessional staff members increased 50.0% between 1993 and 1996.

Between 1993 and 1996, expenditures for 502.1 to 502.4 programs increased 71.9% while the enrollment in these programs decreased 2.3%; expenditures for 502.8 programs increased 134.2% while the enrollment in these programs decreased 22.9%; expenditures for 502.5 program increased only 6.2% while the enrollment in these programs increased 33.3%; and expenditures in 502.6 programs increased 141.1% while the enrollment in these programs increased 10.0%. These relationships between cost and enrollment data will be discussed again as other research questions are answered.

6. Were there any trends in the patterns of the perceptions concerning the effectiveness of special education services provided by utilizing the new service delivery model in meeting the needs of the students who receive
them, the costs of special education services, and/or special education enrollments?

There were some definite trends that emerged in the perceptions about the effectiveness of the special education services provided through the utilization of the new service delivery model in meeting the needs of the students who received them. These trends became obvious as the changes in the responses related to the impact of the inclusion model of providing special education services in the regular education classroom upon students, staff members, and the special education program were analyzed.

The first trend was the concern that was expressed repeatedly that the special education services that were being provided to students who have special needs in the regular classroom through the utilization of the inclusion model from 1993 to 1996 were not adequate to meet their needs. Fewer of the respondents believed that: (1) the special education program was meeting the needs of students who have special needs; (2) the special education students who were in regular classrooms benefited academically; (3) the quality of education was improved for those students who have special needs who were placed in the regular classrooms; (4) the scheduling of students' time for special education services was flexible enough to enable specialists and teachers to meet individual students needs; (5) appropriate materials and equipment were available for students who have special needs to use in the classroom; (6) students who have special needs achieved the goals written in their IEPs. The respondents, did believe that there were increased social benefits for students who have disabilities who received their special education services through the utilization of the inclusion model.
The second trend concerned the increased costs of special education services between 1993 and 1996. Total expenditures for special education programs increased 79.0%, more than twice the increase of 35.3% for total expenditures for regular education programs. The total expenditures for instructional services for special education programs increased 74.9% during this time, almost twice the increase of 41.1% for total expenditures for instructional services for regular education program from 1993 to 1996.

Total expenditures for salaries of special education teaching staff increased 63.6% between 1993 and 1996, and the full-time equivalent number of special education teachers increased 18.9% during this time. The full-time equivalent numbers of special education paraprofessional staff members increased 50.0% between 1993 and 1996.

The third trend was that there was decreased enrollment in special education programs from 1993 to 1996. The total enrollment in special education decreased 3.1% and the full-time average membership in special education programs decreased 7.9% during this time.

In summary, between 1993 and 1996 there were decreased positive perceptions about the effectiveness of the utilization of the inclusion model to provide special education services, there were increased costs to provide these services, and there were decreased numbers of students who received these services. These were interesting trends in perceptions about the effectiveness of special education programs, the costs of special education services, and special education enrollment patterns.
These data will be discussed again as other research questions are answered.

7. Did the inclusion model for the provision of special education services maximize the utilization of educational resources?

The inclusion model for the provision of special education services did not appear to maximize the utilization of educational resources between 1993 and 1996. The utilization of the new service delivery model, in which special education services were provided in the regular classrooms, decentralized special education services. Resources, including special education staff members, materials and equipment, and time had to be utilized in many different ways in many areas in schools, rather than being confined to specific ways or in specific areas for utilization.

From 1993 to 1996, although more regular education staff, PPS staff, administrators, and parents believed that there were important social benefits for the students who have special needs who were in the regular classrooms, fewer of these respondents believed that the special education program was effectively meeting the needs of students with disabilities. Many of these perceptions were related to the utilization of one of the most important resources, the teaching staff.

There were significant numbers of regular education staff members, PPS staff members, administrators, and parents who expressed some concerns about the utilization of the teaching staff, their new roles, and their unpreparedness for these new roles. They expressed concern about their ability to provide special education service to students who have diverse special needs in the regular classroom.

Although there were increases in the numbers of regular education and special education staff members in the district between 1993 and 1996, especially the 30
additional special education teacher assistants who were hired between 1993 and 1996, there were many responses from members of each of the respondent groups about the need to have more special education staff members. There were also responses that indicated the need for there to be lower class sizes in regular classes, which would necessitate having more regular education staff members, so that the diverse educational needs of the students with whom they were now working could be met.

The utilization of time was another resource for which there were comments from substantial numbers of respondents. Lack of time was a prominent factor that was perceived as impeding the ability of regular education and PPS staff members to work together more frequently, to plan together more effectively, and to co-teach more often.

The decentralization of resources that occurred as the inclusion model was implemented has important implications for the utilization of educational resources. Special education staff members who had provided services to students from several classrooms in one resource room provided these same services to students within several classrooms. Materials and equipment had been available for students from several classrooms to use in the resource room were needed within the classrooms where these students were now receiving their special education services. Additional time was needed to coordinate these efforts to decentralize services. There were concerns that additional special education staff members, additional materials and equipment, and more time were needed with the implementation of the inclusion model.

There were also concerns that educational resources were not being utilized as effectively as possible to meet the needs of students who were in inclusive classrooms. In 1996, many members of each of the respondent groups expressed their concerns that
the needs of all the students in these classrooms were not being fully met because of the more diverse needs of all students. There were substantial comments from members of each respondent group about ways in which they preferred special education services to be delivered. The majority of members of each of these respondent groups indicated that they preferred that these services be delivered through a combination of in the regular class as well as pull-out programs. The possible implementation of this modified model of providing special education services both within the classroom and in resource rooms and how that might maximize the benefits for students and the utilization of educational resources will be discussed again in the next section which explores whether the inclusion model is a cost-effective way to provide special education services to students who have special needs.

8. Is the inclusive model for the provision of special education services a cost-effective way to provide these services?

It did not appear that the inclusion model of providing special education services to students who have special needs was a cost-effective way to provide these services. However, there were two reasons that make it difficult to accurately formulate this determination. First, there were what seem to be some inaccuracies with some of the financial data. Second, there were many difficult situations that occurred within the district during the 1995-96 school year that might have affected some of the perceptions of the respondents.

There are inherent difficulties in the collection of special education financial data. Chambers, Parrish, Lieberman, and Wolman (1998) contend that there are no comprehensive and accurate data relating to what public schools in the United States are
spending on special education services. They further contend that the reasons for this are the inaccuracies in the data that are provided and "the inability of the states to provide the data related to these expenditures" (p. 1). Massachusetts utilizes these data in the End-of-Year Pupil and Financial Reports that they collect from each school district in the state. If there are inaccuracies within the district in their reporting, there are potential difficulties in collecting these state-wide data.

During the 1995-96 school year, the district experienced enormous financial difficulties. "The 1995-96 school year was an extremely difficult one for the Barnstable Public Schools. The system experienced a 2.5 million dollar deficit that led to much disruption within the system. Increases in special education service costs were initially identified as the major source of the deficit, although it became evident than many (regular education) programs were involved in the final deficit figure" (Barnstable, 1996, p. 3). It is possible that these situations might have affected some of the perceptions of the regular education staff members, PPS staff members, administrators, and parents whose responses were included in the district’s special education program evaluation in 1996.

However, there were some implications about whether the inclusion model of providing special education services to students who have special needs was a cost-effective way to provide these services. Based on the data that were provided, it did not seem that the inclusion model was a cost-effective way to provide these services in the Barnstable Public Schools between 1993 and 1996. From 1993 to 1996, there were substantial increases in the costs of providing these services to fewer students and there were perceptions from all of the respondent groups that the services that were
provided were not as effective in meeting the special needs of the students who received these services as they had been.

Between 1993 and 1996, total expenditures for special education programs and total expenditures for instructional services for special education increased substantially more than total expenditures for regular education programs and total expenditures for instructional services for regular education. Total expenditures for special education programs increased 79.0%, while total expenditures for regular education programs increased only 35.3%. Total expenditures for instructional programs for special education increased 74.9%, while total expenditures for instructional programs for regular education increased only 41.4%.

Between 1993 and 1996, there were significant changes in special education enrollments as the new service delivery model of providing special education services was being implemented. When compared to changes in regular education enrollments during this same period of time, these changes are substantial. Total enrollment in special education decreased 3.1%, while regular education enrollment increased 13.2%. The full-time equivalent average membership in special education decreased 7.9% while the full-time equivalent average membership in regular education increased 12.4% during this same period of time.

Between 1993 and 1996, there were significant changes in the perceptions of regular education staff members, PPS staff members, administrators, and parents about the effectiveness of the special education program as the new service delivery model of providing special education services was being implemented. Some of these changes in perceptions were related to the impact of the inclusion model in providing special
education services in the regular education classroom upon students, staff members, and the special education program.

First, there were concerns that the special education program was not meeting the needs of students who have disabilities who were being provided with special education services in the regular classroom through the utilization of the inclusion model. Specific areas were identified in which the program was not meeting the needs of students as effectively as they had done were. Fewer of the respondents believed that: (1) the special education program was meeting the needs of students who have special needs; (2) the special education students who were in regular classrooms benefited academically; (3) the quality of education was improved for those students who have special needs who were placed in the regular classrooms; (4) the scheduling of students’ time for special education services was flexible enough to enable specialists and teachers to meet individual students needs; (5) appropriate materials and equipment were available for students who have special needs to use in the classroom; (6) students who have special needs achieved the goals written in their IEPs. The respondents, did, however, believe that there were increased social benefits for students who have disabilities who received their special education services through the utilization of the inclusion model.

Even with what seem to be inaccuracies with some of the financial data and the many trying situations that occurred within the district during the 1995-96 school year that might have affected the perceptions of the respondents, the data did not indicate that the inclusion model of providing special education services to students who have special needs is a cost-effective way to provide these services. There were substantial
increases in the costs of providing these services to fewer students and the perceptions of members of all of the respondent groups were that the special education services that were being provided to students with disabilities, through the utilization of the inclusion model, were not meeting their needs. Therefore, it did not appear that inclusion model was a cost-effective way to provide these services in the Barnstable Public Schools between 1993 and 1996.
Summary

This study examined and evaluated the results of the Barnstable, Massachusetts school district’s decision to provide special education services in the regular classroom through the implementation of a model of service delivery commonly called inclusion. This was a complex issue because this decision caused radical changes in how special education services were delivered to students who had wide-ranging special needs. The move to full inclusion occurred first with the students whose needs had previously been met in the most restricted programs within the district. This change was implemented within a short time span and with limited preparation beforehand.

This study examined the new service delivery model and determined whether the model was meeting the needs of the students receiving them, given their varied special needs. It analyzed whether the new service delivery model maximized the utilization of educational resources and examined the cost-effectiveness of providing special education services through the new service delivery models being utilized in Barnstable.

Data were analyzed by making comparisons between data in the two comprehensive special education program evaluations completed in 1993 and 1996. Comparisons were also made between data from the district’s End-of-Year Pupil and Financial Reports for school years 1992-93 through 1995-96. Relationships in the findings from these two comprehensive special education program evaluations and the
four End-of-Year Pupil and Financial Reports from 1992-93 through 1995-96 school years were examined.

Conclusions

There are some conclusions that can be presented about the changes in the perceptions of the respondents concerning the effectiveness of providing special education services through the utilization of an inclusion model, the changes in the costs of these services, and the enrollments of special education students. There are also some conclusions that can be presented about whether the utilization of this service delivery model maximized the utilization of educational resource and whether it was a cost-effective way to provide these services.

First, the perceptions of the respondents about the effectiveness of the special education services provided through the utilization of the new service delivery model indicated that it did not meet the needs of the students who received them. Fewer of these respondents believed that: (1) the special education program was meeting the needs of students who have special needs; (2) the special education students who were in regular classrooms benefitted academically; (3) the quality of education was improved for those students who have special needs who were placed in the regular classrooms; (4) the scheduling of students’ time for special education services was flexible enough to enable specialists and teachers to meet individual students needs; (5) appropriate materials and equipment were available for students who have special needs to use in the classroom; (6) students who have special needs achieved the goals written in their IEPs. The respondents did, however, believe that there were increased social
benefits for students who have disabilities who received their special education services through the utilization of the inclusion model.

There were increases in the costs of providing special education services between 1993 and 1996 that were substantially higher than the comparable costs for providing regular education services. Total expenditures for special education programs increased 79.0%, total expenditures for instructional services for special education programs increased 74.9%, and the total expenditures for salaries of special education teaching staff increased 63.6%. From 1993 to 1996, the full-time equivalent number of special education teachers increased 18.9%, and the full-time equivalent numbers of special education paraprofessional staff members increased 50.0%.

There were decreases in the enrollments in special education programs while, conversely, there were increases in the enrollments of regular education programs from 1993 to 1996. The total enrollment in special education decreased 3.1% and the full-time average membership in special education programs decreased 7.9% during this time.

In summary, between 1993 and 1996, the perceptions of the respondents about the effectiveness of the special education services provided through the utilization of the new service delivery model indicated that it did not meet the needs of the students who received them. There were increases in the costs of providing special education services between 1993 and 1996 that were substantially higher for comparable costs for providing regular education services. There were decreases in the enrollments in special education programs while there were increases in the enrollments of regular education programs from 1993 to 1996.
There are also some conclusions that can be presented about whether the utilization of this service delivery model maximized the utilization of educational resources. Because the provision of special education services was decentralized, resources, including special education staff members, materials and equipment, and time had to be utilized in many different ways. The decentralization of resources that occurred as the inclusion model was implemented had important implications for the utilization of educational resources. Special education staff members who had provided services to students from several classrooms in one resource room were now providing these same services to students within several classrooms. Materials and equipment that were available for students from several classrooms to use in the resource room were now needed within the classrooms where these students were receiving their special education services. Additional time was needed to coordinate these efforts to decentralized services. There were concerns that additional special education staff members, additional materials and equipment, and more time were needed with the implementation of the inclusion model. It did not seem that the inclusion model of providing special education services maximized the utilization of educational resources.

It also did not appear that the inclusion model of providing special education services to students who have special needs was a cost-effective way to provide these services. The data that were examined and analyzed did not indicate that the inclusion model of providing special education services to students who have special needs is a cost-effective way to provide these services. There were substantial increases in the costs of providing these services to fewer students and the perceptions of members of all of the respondent groups were that the special education services that were being
provided to students with disabilities, through the utilization of the inclusion model, were not meeting their needs. Therefore, it did not appear that inclusion model was a cost-effective way to provide these services in the Barnstable Public Schools between 1993 and 1996.

**Recommendations for Further Study**

Some recommendation for further study include:

1. Replicating this study in Barnstable after the completion of the 1999 special education program evaluation.

2. Replicating this study in Barnstable with the inclusion of the perceptions of parents of regular education students, and both regular education students and students who have disabilities.

3. Replicating this study in a similar district that first implemented the inclusion model with students who had milder disabilities.

4. Replicating this study in a similar district that implemented a different model of providing more inclusive special education services.

Additional study in this area would further enhance the knowledge about the practice known as inclusion, a model of providing special education services within the regular classroom to students who have wide ranges of disabilities.
APPENDIX A

1993 TEACHER SURVEY
This survey should be returned to your principal by Friday, March 5, 1993.

Please indicate below in the Scantron form whether you are a regular education staff member (Classroom teacher; music, art, physical education, home economics, industrial arts, or foreign language teacher; reading or Chapter I teacher; librarian) or a member of the Pupil Personnel Services staff (special education or adaptive physical education teacher; speech and language, occupational, or physical therapist; nurse; counselor).

Regular education staff member __________

Pupil Personnel Services staff member __________

Please mark the Scantron form in the appropriate space to indicate the extent to which you agree with each statement about the special education program and services in Barnstable.

A - Strongly Agree   B - Agree   C - Disagree   D - Strong Disagree   E - Don’t Know

1. In general, the special education service time given to students is adequate for their needs.

2. In my opinion, the special education program has been helpful to the students in my building.

3. I understand the pre-referral (Child Study Team) process by which a student is referred for special education evaluation.

4. I understand the eligibility criteria/guidelines for special education services.

5. Regular education and special education personnel work together during the pre-referral process to develop adaptations for students who are being considered for special education evaluations.

6. Regular education and special education personnel work together to develop appropriate modifications for students who are on Individualized Educational Plans (IEPs).
7. I understand what criteria are used for determining a student’s dismissal from special education services.

8. Work requirements in the regular class are modified for students who are on an Individualized Educational Plan (IEP).

9. The scheduling of students’ time for special education services is flexible enough to enable specialists and teachers to meet individual student needs.

10. The school facilities made available for special education programs in your school are adequate.

11. Appropriate materials and equipment are available for special needs students to use in the classroom.

12. In service education offerings on special education topics in the past three years have been relevant to my needs.

13. The records of students who have special needs are easily accessible.

14. The special education program contributes to the students’ development of positive attitudes about themselves.

15. The special education students who are in regular classrooms benefit academically.

16. Given the assessment data, services that meet students’ needs are provided.

17. In my opinion, students view the special education services they receive as a positive factor in their learning experience.

18. There is agreement between my supervisor and me about the philosophy of special education programs.

19. Regular education and special education personnel in my building agree about the philosophy of special education programs.

20. Pre-referral (Child Study Team) meetings provide effective alternatives which allow students to become more successful in regular education.

21. The Child Study Team provides assistance in initiating referrals, when this becomes necessary.

22. Assessment data are useful in planning for special needs students in the regular classroom.
23. IEPs are useful in planning for special needs students in the regular classroom.

24. The special needs staff closely monitors student progress in the regular classroom setting.

25. Regular education staff attempt alternative strategies/adaptations prior to referring students for evaluations.

26. Information supplied by parents is considered in the decision-making process.

27. Parents participate in the decision-making process.

28. In general, the special needs program in your building is meeting the needs of students who have special needs.

29. Students who have special needs achieve the goals written in their IEPs.

30. Special education record keeping is completed in a timely fashion in my building.

31. Procedures outlined in the special education handbook are followed.

32. The computerized goals and objectives of the IEP clearly state the needs of individual students.

To what extent do you feel the following student populations can be successfully integrated into regular classrooms?

A - Very Successfully    B - Successfully    C - Unsuccessfully
D - Very Unsuccessfully  E - Uncertain

33. Students who have severe behavior problems
34. Mentally retarded students
35. Learning disabled students
36. Physically disabled students
37. Hearing impaired students
38. Visually impaired students
39. If you are co-teaching, which of the following teaching models best describes your co-teaching situation?

A. two teachers taking turns teaching whole class  
B. regular education teacher teaches lesson and special education teacher supports  
C. special education teacher teaches lesson and regular education teacher supports  
D. special education teacher teaches special needs students in the regular classroom  
E. not co-teaching

40. What is your preferred way for children who have special needs to receive special education services?

A. in the regular classroom  
B. through a pull-out program  
C. in a separate program

For the following questions, please mark your answers on this sheet.

41. If you are involved in co-teaching, how effective do you feel your situation is?

42. I receive adequate support related to special education from: (check all that apply)

_____ the building principal  
_____ regular education teachers  
_____ assistants  
_____ the director of special education  
_____ specialists  
_____ the students’ parents

43. How would you describe the level of cooperation and joint planning that exist between regular and special education staff?
44. If you have suggestions on how the special needs program in your building might be improved, what are they?

45. If there are constraints to cooperative planning between regular and special needs staff, what are they?

46. Estimate how your time is actually spent each week. (Use percentages to total 100%)

- instruction of children
- duties associated with IEP and Team meetings (meetings, related assessments, records)
- other consultation with parents, teachers, or staff regarding resource room students
- record keeping, program planning, assessments, etc., not associated with IEP meetings
- travel
- school duties not associated with special education
- other (specify)
47. Estimate what you think the best use of your time would be. (Use percentages to total 100%)

- instruction of children
- duties associated with IEP and Team meetings (meetings, related assessments, records)
- other consultation with parents, teachers, or staff regarding resource room students
- record keeping, program planning, assessments, etc., not associated with IEP meetings
- travel
- school duties not associated with special education
- other (specify) ________________________________

If there are students in your school who have previously been in self-contained special education programs and who are now included in a regular classroom, please respond to the following statements.

48. The special needs students who are placed in the regular classroom benefit from being with peers.

- Strongly Agree
- Agree
- Disagree
- Strongly Disagree
- Don’t Know

49. The inclusion of all students improves the quality of education for regular education students.

- Strongly Agree
- Agree
- Disagree
- Strongly Disagree
- Don’t Know
50. The quality of education is improved for those students who are now placed in the regular classroom.

   ______   Strongly Agree
   ______   Agree
   ______   Disagree
   ______   Strongly Disagree
   ______   Don't Know

51. Has your involvement with special needs students changed your attitude about working with them?

   ______   Yes
   ______   No

   If so, how has it changed?

52. Has your role changed as a result of the integration activities in your school?

   ______   Yes
   ______   No

   If so, how has it changed?

53. What are your needs for further staff development that would be helpful to you in the integration process?
54. What kind of support from your supervisor would help you in the integration process?

55. Which of the following impede integration activities in your school: (check all that apply)

- lack of money
- negative teacher attitudes
- large class size
- negative administrative attitude
- lack of common planning time
- inadequate facilities
- lack of personnel
- negative parental attitude
- lack of professional development
- other ________________________________

56. Which of the following support integration activities in your school: (check all that apply)

- money for additional teaching materials
- flexibility of other professionals
- accommodations in scheduling
- administrative commitment
- release time for planning
- release time for training
- paid summer planning time
- paid summer training time
- staff expertise
- collaborative working relations with other teachers
- other ________________________________

THANK YOU FOR TAKING THE TIME TO COMPLETE THIS SURVEY.
BARNSTABLE PUBLIC SCHOOLS

SPECIAL EDUCATION PROGRAM EVALUATION

Administrator Survey

This survey should be returned to the Pupil Personnel Services Office by April 16, 1993.

Please use the Scantron form to record your answers to the questions in this first section. Mark the Scantron form in the appropriate space to indicate the extent to which you agree with each statement about the special education program and services in Barnstable.

A - Strongly Agree       B - Agree       C - Disagree       D - Strongly Disagree       E - Don’t Know

1. In general, the special education service time given to students is adequate for their needs.

2. In my opinion, the special education program has been helpful to the students in my building.

3. I understand the pre-referral (Child Study Team) process by which a student is referred for special education evaluation.

4. I understand the eligibility criteria/guidelines for special education services.

5. Regular education and special education personnel work together during the pre-referral process to develop adaptations for students who are being considered for special education evaluations.

6. Regular education and special education personnel work together to develop appropriate modifications for students who are on Individualized Educational Plans (IEPs).

7. I understand what criteria are used for determining a student’s dismissal from special education services.

8. Work requirements in the regular class are modified for students who are on Individualized Educational Plans (IEPs).

9. The scheduling of students’ time for special education services is flexible enough to enable specialists and teachers to meet individual student needs.
10. The school facilities made available for special education programs in your school are adequate.

11. Appropriate materials and equipment are available for special needs students to use in the classroom.

12. Inservice education offerings on special education topics in the past three years have been relevant to the needs of staff members.

13. The records of students who have special needs are easily accessible.

14. The special education program contributes to the students' development of positive attitudes about themselves.

15. The special education students who are in regular classrooms benefit academically.

16. Current special education guidelines appropriately identify students with severe emotional needs versus students who violate school discipline policies.

17. In my opinion, students view the special education services they receive as a positive factor in their learning experience.

18. There is agreement between my director of special education and me about the philosophy of special education programs.

19. Regular education and special education personnel in my building agree about the philosophy of special education programs.

20. Pre-referral (Child Study Team) meetings provide effective alternatives which allow students to become more successful in regular education.

21. The Child Study Team provides assistance in initiating referrals, when this becomes necessary.

22. The behavioral consultation model helps teachers adapt the classroom environment for students who exhibit inappropriate behaviors.

23. IEPs are useful in planning for special needs students in the regular classroom.

24. The special needs staff closely monitors student progress in the regular classroom setting.

25. Regular education staff attempt alternative strategies/adaptation prior to referring students for evaluations.
26. Information supplied by parents is considered in the decision-making process.
27. Parents participate in the decision-making process.
28. In general, the special needs program in your building is meeting the needs of students who have special needs.
29. I understand the regulations regarding discipline as they pertain to students who have special needs.
30. Special education record keeping is completed in a timely fashion in my building.
31. Procedures outlined in the special education handbook are followed.
32. Behavioral consultations between classroom teachers and special education behavioral management staff are scheduled in a timely fashion.

To what extent do you feel the following student populations can be successfully integrated into regular classrooms?

A - Very Successfully    B - Successfully    C - Unsuccessfully
D - Very Unsuccessfully  E - Uncertain

33. students who have severe behavior problems
34. mentally retarded students
35. learning disabled students
36. physically disabled students
37. hearing impaired students
38. visually impaired students

39. Which of the following co-teaching models would you like to see take place in your building?

A. two teaches taking turns teaching whole class
B. regular education teacher teaches lesson and special education teacher supports
C. special education teacher teaches lesson and regular education teacher supports
D. special education teacher teaches special needs students in the regular classroom
E. no co-teaching
40. What is your preferred way for children who have special needs to receive special education services?
   
   A. in the regular classroom
   B. through a pull-out program
   C. in a separate program

For the following questions please mark your answers on this sheet.

41. If staff members in your building are involved in co-teaching, how effective do you feel the situation is?

42. How would you describe the support related to special education?

43. How would you describe the level of cooperation and joint planning that exists between regular and special education staff?

44. If you have suggestions on how the special needs program in your building might be improved, what are they?
45. If there are constraints to cooperative planning between regular and special needs staff, what are they?

46. Describe your experience with the behavioral consultation model.

47. How do you feel about the current special education guidelines used to help identify students who have learning disabilities?

48. How do you feel about the current special education guidelines used to help identify students who have severe emotional needs?
49. How can special needs services/programs be improved to better prepare students to transition from school to work?

If there are students in your school who have previously been in self-contained special education programs and who are now included in a regular classroom please respond to the following statements.

50. The special needs students who are placed in the regular classroom benefit from being with peers.

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<tr>
<th></th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
<th>Don’t Know</th>
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51. The inclusion of all students improves the quality of education for regular education students.

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<tr>
<th></th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
<th>Don’t Know</th>
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</table>

52. The quality of education is improved for those students who are now placed in the regular classroom.

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<tr>
<th></th>
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<th>Agree</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
<th>Don’t Know</th>
</tr>
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</tbody>
</table>
53. Has your involvement with special needs students changed your attitude about working with them?

_______ Yes
_______ No

If so, how has it changed?

54. Has your role changed as a result of the integration activities in your schools?

_______ Yes
_______ No

If so, how has it changed?

55. What are your needs for further staff development that would be helpful to you in the integration process?

56. What kind of support would help staff members in your building in the integration process?
57. Which of the following impede integration activities in your school: (check all that apply)

[ ] lack of money
[ ] negative teacher attitudes
[ ] large class size
[ ] negative administrative attitude
[ ] lack of common planning time
[ ] inadequate facilities
[ ] lack of personnel
[ ] negative parental attitude
[ ] lack of professional development
[ ] other

58. Which of the following support integration activities in your school: (check all that apply)

[ ] money for additional teaching materials
[ ] flexibility of other professionals
[ ] accommodations in scheduling
[ ] administrative commitment
[ ] release time for planning
[ ] release time for training
[ ] paid summer planning time
[ ] paid summer training time
[ ] staff expertise
[ ] collaborative working relations with other teachers
[ ] other

THANK YOU FOR TAKING THE TIME TO COMPLETE THIS SURVEY
APPENDIX C

1993 PARENT SURVEY
BARNSTABLE PUBLIC SCHOOLS
SPECIAL EDUCATION PROGRAM EVALUATION

Parent Survey

Please complete this survey and return it in the enclosed envelope by Friday, May 14, 1993.

Please indicate the grade level of your special needs child:

K-6  7-8  9-12

Please circle the letter to the right of each question that best indicates the extent to which you agree with each statement about the special education program and services in Barnstable.

A - Strongly Agree  B - Agree  C - Disagree  D - Strongly Disagree  E - Don’t Know

1. In general, the special education service time given to my child is adequate for his/her needs.  A B C D E

2. In my opinion, the special education program has been helpful to my child.  A B C D E

3. I understand the pre-referral (Child Study Team) process by a student is referred for special education evaluation.  A B C D E

4. I understand the eligibility criteria/guidelines for special education services.  A B C D E

5. Regular education and special education personnel work together to develop appropriate modifications for students who are on Individualized Educational Plans (IEPs).  A B C D E

6. I understand what criteria are used for determining a student’s dismissal from special education services.  A B C D E

7. Work requirements in the regular class are modified as needed for my special needs child.  A B C D E

8. The scheduling of my child’s time for special education services is flexible enough to enable specialists and teachers to meet his/her individual needs.  A B C D E

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9. The school facilities made available for special education programs in your child’s school are adequate.

10. Appropriate materials and equipment are available for special needs students to use in the classroom.

11. The special education program contributes to my child’s development of positive attitudes about him/herself.

12. The special education students who are in regular classroom benefit academically.

13. In my opinion, my child views the special education services he/she receives as a positive factor in his/her learning experience.

14. IEPs are useful in planning for special needs students in the regular classroom.

15. The special needs staff closely monitors my child’s progress in the regular classroom setting.

16. Information supplied by parents is considered in the decision-making process.

17. Parents participate in the decision-making process related to the development of the Individualized Education Plan (IEPs).

18. In general, the special needs program in my child’s building is meeting his/her special needs.

19. My special needs child is achieving the goals written in his/her IEP.

20. I understand my rights as a parent of a special needs child.

21. The computerized goals and objectives of the IEP clearly state my child’s needs.
To what extent do you feel the following student populations can be successfully integrated into regular classrooms?

A - Very Successfully    B - Successfully    C - Unsuccessfully
D - Very Unsuccessfully    E - Uncertain

22. students who have severe behavior problems

23. mentally retarded students

24. learning disabled students

25. physically disabled students

26. hearing impaired students

27. visually impaired students

28. What is your preferred way for your child who has special needs to receive his/her special education services?

______ in the regular classroom

______ through a pull-out program

______ in a separate (self-contained program)

______ other (please specify)

29. I receive adequate support related to my child’s special education from: (check all that apply)

______ the building principal

______ regular education teachers

______ special education teachers

______ assistants

______ the director of special education

______ specialists

______ the counselor

30. How would you describe the level of cooperation that exists between you and your child’s teachers?
31. If you have suggestions on how the special needs program for your child might be improved, what are they?

32. If there are constraints to cooperation between you and your child’s teachers, what are they?

33. I understand the legal time frames for the IEP process (referral, testing, meetings, development of the IEP).

   ______ Yes
   ______ No

34. Do you feel that the time frames are followed for your special needs child?

   ______ Yes
   ______ No

   If not, please explain.
If your child has previously been in a self-contained special education program and is now included in a regular classroom please respond to the following statements.

35. My special needs child who has been placed in the regular classroom benefits from being with peers.

   ______  Strongly Agree
   ______  Agree
   ______  Disagree
   ______  Strongly Disagree
   ______  Don’t Know

36. The inclusion of all students improves the quality of education for regular education students.

   ______  Strongly Agree
   ______  Agree
   ______  Disagree
   ______  Strongly Disagree
   ______  Don’t Know

37. The quality of education is improved for my child who is now placed in the regular classroom.

   ______  Strongly Agree
   ______  Agree
   ______  Disagree
   ______  Strongly Disagree
   ______  Don’t Know

38. What are your needs for further information that would be helpful to you in the integration process of your child?
39. What kind of support from your child’s teachers would help in the integration process?

40. Are there factors that support integration activities in your child’s school?
   
   _____ Yes
   _____ No

   If so, please describe.

41. Are there factors that impede integration activities in your child’s school?
   
   _____ Yes
   _____ No

   If so, please describe.

THANK YOU FOR TAKING THE TIME TO COMPLETE THIS SURVEY.

Some parents will be interviewed as part of this evaluation process. If you would be willing to be interviewed, please write your name, address and phone number below. Parents who will be interviewed will be randomly selected from those who indicate their willingness to be interviewed.
APPENDIX D

1993 SURVEY RATES OF RETURN
### 1993
### Special Education Program Evaluation
### Survey Rates of Return

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<thead>
<tr>
<th></th>
<th># sent</th>
<th># returned</th>
<th>% returned</th>
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<td>70.4%</td>
</tr>
<tr>
<td>Itinerant Staff</td>
<td>16</td>
<td>16</td>
<td>100.0%</td>
</tr>
<tr>
<td><strong>Total Teacher Survey</strong></td>
<td>439</td>
<td>288</td>
<td>65.6%</td>
</tr>
<tr>
<td><strong>Administrator Survey</strong></td>
<td></td>
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<tr>
<td></td>
<td>22</td>
<td>15</td>
<td>68.2%</td>
</tr>
<tr>
<td><strong>Parent Survey</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>385</td>
<td>138</td>
<td>35.8%</td>
</tr>
</tbody>
</table>
Person being interviewed

Position/School

Date

Strengths/positives of special education program:

Weaknesses/negatives of special education program:
Recommendations for program improvement:

Describe communication/support/cooperation between regular and special education:
Staff development (past topics that have been helpful/future topics that would be helpful):

Describe pre-referral/referral experiences (process, modifications/adaptations, eligibility guidelines):
Describe inclusion experience and what made it positive/negative:

Any additional comments:
Person being interviewed ____________________________

Position/School ________________________________

Date ____________________________

Strengths/positives of special education program:

Weaknesses/negatives of special education program:
Recommendations for program improvement:

Describe communication/support/cooperation between regular and special education:
Staff development (past topics that have been helpful/future topics that would be helpful):

Describe pre-referral/referral experiences (process, modifications/adaptations, eligibility guidelines):
Describe inclusion experience and what made it positive/negative:

Any additional comments:
APPENDIX G

1993 PARENT INTERVIEW GUIDE
1993
PARENT
INTERVIEW GUIDE

Person being interviewed ________________________________

School/Level of Student ________________________________

Date ____________________

From your perspective, what do you see as strengths/positives of the special education program?

From your perspective, what do you see as weaknesses/negatives of the special education program?
What recommendations would you have to improve the program?

Describe the communication/support/cooperation between you and your child's teachers.
If your child has been included in the regular education program, describe your inclusion experience and what made it positive/negative.

Any additional comments:
APPENDIX H

1996 STAFF SURVEY
Barnstable Public Schools

SPECIAL EDUCATION PROGRAM EVALUATION

Staff Survey

This survey should be returned to your principal by May 15, 1996

Please indicate below and on the Scantron form whether you are a regular education staff member (classroom teacher; music, art, physical education, home economics, industrial arts, or foreign language teacher; reading or Title I teacher; librarian) or a member of the Pupil Personnel Services staff (special education teacher or assistant; adaptive physical education teacher; speech and language, occupational, or physical therapist; nurse; counselor).

Regular education staff member

Pupil Personnel Services staff member

Please mark the Scantron form in the appropriate space to indicate the extent to which you agree with each statement about the special education program and services in Barnstable.

A - Strongly Agree  B - Agree  C - Disagree  D - Strongly Disagree  E - Don’t Know

1. The special education service time given to students is adequate for their needs.
2. The special needs program in my building is meeting the needs of students who have special needs.
3. I understand the pre-referral (Child Study Team) process by which a student is referred for special education evaluation.
4. I understand the eligibility guidelines for special education services.
5. Regular education and special education personnel work together during the pre-referral process to develop adaptations for students who are being considered for special education evaluations.
6. Regular education and special education personnel work together to develop appropriate modifications for students who are on Individualized Educational Plans (IEPs).
7. I understand the criteria used for determining a student's dismissal from special education services.

8. Homework/classroom requirements in the regular class are modified for students who are on IEPs.

9. The scheduling of students' time for special education services is flexible enough to enable specialists and teachers to meet individual student needs.

10. The facilities for special education programs in my school are adequate.

11. There are adequate building/playground facilities that are handicapped accessible at my school.

12. Appropriate materials and equipment are available for students who have special needs to use in the classroom.

13. Inservice education offerings on special education topics in the past three years have been relevant to my needs.

14. The records of students who have special needs are easily accessible.

15. The special education program contributes to the students' development of positive attitudes about themselves.

16. The special education students who are in regular classrooms benefit academically.

17. The special education students who are in regular classrooms benefit socially.

18. Students view the special education services they receive as a positive factor in their learning experience.

19. There is agreement between my supervisor and me about the philosophy of special education programs.

20. Pre-referral (Child Study Team) meetings provide effective alternatives which allow students to become more successful in regular education programs.

21. Regular education and special education personnel collaborate on grading.

22. Assessment data are useful in planning for special needs students in the regular classroom.
23. IEPs are useful in planning for special needs students in the regular classroom.

24. The special needs staff closely monitors student progress in the regular classroom setting.

25. Regular education staff attempt alternative strategies/adaptations prior to referring students for evaluations.

26. Information supplied by parents is considered when decisions related to their child's special needs programs are made.

27. Parents are active participants in the special education TEAM process.

28. Students who have special needs achieve the goals written in their IEPs.

29. The special education evaluation process is completed within the state mandated requirements in my building.

30. Procedures outlined in the special education handbook are followed.

31. The inclusion of all students improves the quality of education for regular education students.

32. The quality of education is improved for those students with special needs who are now receiving their special education services in the regular classroom.

To what extent do you feel the following student populations can be successfully integrated into regular classrooms?

A - Very Successfully    B - Successfully    C - Unsuccessfully
D - Very Unsuccessfully  E - Uncertain

33. students who have severe behavior problems
34. students who are cognitively delayed
35. students who are learning disabled
36. students who are physically disabled
37. students who are hearing impaired
38. students who are visually impaired
39. Which of the following teaching models best describes your co-teaching situation?

A. regular education teacher and special education teacher have shared responsibility for whole class lessons
B. regular education teacher teaches lesson and special education teacher supports
C. special education teacher teaches lesson and regular education teacher supports
D. special education teacher teaches special needs students in the regular classroom
E. not co-teaching

40. What is your preferred way for children who have special needs to receive special education services?

A. within the regular classroom
B. through a pull-out program
C. a combination of within the regular program and through a pull-out program
D. in a separate program

To what extent have the following recommendations of the Special Education Program Evaluation conducted in 1993 been implemented in the past three years?

A - Full Implementation    B - Some Implementation    C - Little Implementation
D - No Implementation      E - Uncertain

41. Explore ways to ease time constraints of both regular and special education staff members so that they can increase collaboration and joint planning, work together more effectively to provide improved special education services, and more closely monitor students’ progress.

42. Evaluate staffing needs in relation to changing caseloads, service delivery expectations, and increased needs for collaboration, and to encourage more flexibility in scheduling of special education services.

43. Continue to provide opportunities for staff development based on the needs as determined by the staff members in each individual school and/or curriculum area.
44. Assess facilities, materials, equipment, and the use of new technology, especially computers, in relation to program needs and new service delivery models.

45. Strengthen the commitment of all administrators in the district to work together more closely to achieve the goal of educating all students in the least restrictive environments.

46. Continue to be involved in work to revise specific curriculum areas at all levels to broaden opportunities within the curriculum for students who have special needs.

47. Improve communication between home and school, and increase the building level involvement and participation of parents of children who receive special education services.

48. Share results of the 1993 Special Education Program Evaluation with regular education staff members, PPS staff members, administrators, and parents.

For the following questions please write your answers on this survey. If you need more space for your answers, please use the back of page 7 or attach additional page(s). Thank you.

49. If you are involved in co-teaching, how effective do you feel your situation is?
50. How are students who have special needs advocating for themselves in your classroom?

51. How would you describe the level of cooperation and joint planning that exists between regular and special education staff?

52. How does the presence of an advocate impact your participation in TEAM meetings?
53. I receive adequate support related to special education from: (check all that apply)

- the building principal
- special education teachers
- regular education teachers
- counselors
- school nurse
- assistants
- the director of special education
- specialists
- the students’ parents

54. Discuss how regular education and special education staff members participate in the grading process of students who receive special education services.

55. If you have suggestions on how the special needs program in your building might be improved, what are they?

56. If there are constraints to cooperative planning between regular and special needs staff, what are they?
57. How has your involvement with special needs students changed your attitude about working with them?

58. How has your role changed as a result of the utilization of the in-class model in your school?

59. What are your needs for further staff development that would be helpful to you to provide special education services in the regular classroom?

60. What kind of support from your supervisor would help you meet the needs of special education students in your class?
61. How can the transition process for students with special needs be improved as they move from one building/level to another.

62. In what ways have special education teacher assistants been effectively utilized in your building?

63. In what ways can special education teacher assistants be more effectively utilized in your building?
64. Check any of the following impeding integration activities in your school? (check all that apply)

- lack of money
- negative teacher attitudes
- large class size
- negative administrative attitude
- lack of common planning time
- inadequate facilities
- lack of personnel
- negative parental attitude
- lack of professional development
- not enough computers
- not enough time
- needs of other children in the class
- other ____________________________

65. Do any of the following support integration activities in your school? (check all that apply)

- money for additional teaching materials
- flexibility of other professionals
- accommodations in scheduling
- administrative commitment
- release time for planning
- release time for training
- paid summer planning time
- paid summer training time
- staff expertise
- collaborative working relations with other teachers
- teacher assistant in classroom
- positive attitudes
- other ____________________________

Comments: (use the back of this page or attach additional page(s) if you need more space)

THANK YOU FOR TAKING THE TIME TO COMPLETE THIS SURVEY.

Some staff members will be interviewed as part of this evaluation process. If you would be willing to be interviewed please write your name and phone number below or call the Special Education Office (790-6442) and leave your name. Staff members who will be interviewed will be randomly selected from those who indicate their willingness to be interviewed.
APPENDIX I

1996 ADMINISTRATOR SURVEY
Barnstable Public Schools

SPECIAL EDUCATION PROGRAM EVALUATION

Administrator Survey

Please return this survey to the Pupil Personnel Office by June 7, 1996.

Please mark the Scantron form in the appropriate space to indicate the extent to which you agree with each statement about the special education program and services in Barnstable.

A - Strongly Agree      B - Agree      C - Disagree      D - Strongly Disagree
E - Don’t Know

1. The special education service time given to students is adequate for their needs.
2. The special needs program in my building is meeting the needs of students who have special needs.
3. I understand the pre-referral (Child Study Team) process by which a student is referred for special education evaluation.
4. I understand the eligibility guidelines for special education services.
5. Regular education and special education personnel work together during the pre-referral process to develop adaptations for students who are being considered for special education evaluations.
6. Regular education and special education personnel work together to develop appropriate modifications for students who are on Individualized Educational Plans (IEPs).
7. I understand the criteria used for determining a student’s dismissal from special education services.
8. Homework/classroom requirements in the regular class are modified for students who are on IEPs.
9. The scheduling of students’ time for special education services is flexible enough to enable specialists and teachers to meet individual student needs.
10. The facilities for special education programs in my school are adequate.
11. There are adequate building/playground facilities that are handicapped accessible at my school.

12. Appropriate materials and equipment are available for students who have special needs to use in the classroom.

13. Inservice education offerings on special education topics in the past three years have been relevant to the needs of staff members.

14. The records of students who have special needs are easily accessible.

15. The special education program contributes to the students' development of positive attitudes about themselves.

16. The special education students who are in regular classrooms benefit academically.

17. The special education students who are in regular classrooms benefit socially.

18. Students view the special education services they receive as a positive factor in their learning experience.

19. There is agreement between the director of special education and me about the philosophy of special education programs.

20. Regular education and special education personnel in my building agree about the philosophy of special education programs.

21. Pre-referral (Child Study Team) meetings provide effective alternatives which allow students to become more successful in regular education programs.

22. Regular education and special education personnel collaborate on grading.

23. IEPs are useful in planning for special needs students in the regular classroom.

24. The special needs staff closely monitors student progress in the regular classroom setting.

25. Regular education staff attempt alternative strategies/adaptations prior to referring students for evaluations.

26. Information supplied by parents is considered when decisions related to their child's special needs programs are made.

27. Parents are active participants in the special education TEAM process.
28. Students who have special needs achieve the goals written in their IEPs.

29. The behavioral consultation model helps teachers adapt the classroom environment for students who exhibit inappropriate behaviors.

30. I understand the regulations regarding discipline as they pertain to students who have special needs.

31. The inclusion of all students improves the quality of education for regular education students.

32. The quality of education is improved for those students with special needs who are now receiving their special education services in the regular classroom.

33. Behavioral consultations between classroom teachers and special education behavioral management staff are scheduled in a timely fashion.

34. Current special education guidelines appropriately identify students with severe emotional needs versus students who violate school discipline policies.

To what extent do you feel the following student populations can be successfully integrated into regular classrooms?

A - Very Successfully       B - Successfully       C - Unsuccessfully
D - Very Unsuccessfully    E - Uncertain

35. students who have severe behavior problems
36. students who are cognitively delayed
37. students who are learning disabled
38. students who are physically disabled
39. students who are hearing impaired
40. students who are visually impaired

41. What is your preferred way for children who have special needs to receive special education services?

A. within the regular classroom
B. through a pull-out program
C. a combination of within the regular program and through a pull-out program
D. in a separate program
To what extent have the following recommendations of the Special Education Program Evaluation conducted in 1993 been implemented in the past three years?

A - Full Implementation  B - Some Implementation  C - Little Implementation  
D - No Implementation  E - Uncertain

42. Explore ways to ease time constraints of both regular and special education staff members so that they can increase collaboration and joint planning, work together more effectively to provide improved special education services, and more closely monitor students’ progress.

43. Evaluate staffing needs in relation to changing caseloads, service delivery expectations, and increased needs for collaboration, and to encourage more flexibility in scheduling of special education services.

44. Continue to provide opportunities for staff development based on the needs as determined by the staff members in each individual school and/or curriculum area.

45. Assess facilities, materials, equipment, and the use of new technology, especially computers, in relation to program needs and new service delivery models.

46. Strengthen the commitment of all administrators in the district to work together more closely to achieve the goal of educating all students in the least restrictive environments.

47. Continue to be involved in work to revise specific curriculum areas at all levels to broaden opportunities within the curriculum for students who have special needs.

48. Improve communication between home and school, and increase the building level involvement and participation of parents of children who receive special education services.

49. Share results of the 1993 Special Education Program Evaluation with regular education staff members, PPS staff members, administrators, and parents.
50. Which of the following co-teaching models are taking place in your building: (check all that apply)

A. regular education teacher and special education teacher have shared responsibility for whole class lessons
B. regular education teacher teaches lesson and special education teacher supports
C. special education teacher teaches lesson and regular education teacher supports
D. special education teacher teaches special needs students in the regular classroom
E. not co-teaching

For the following questions please write your answers on this survey. If you need more space for your answers, please use the back of the last page or attach additional page(s). Thank you.

51. How effective is the co-teaching that is taking place in your building?

52. How are students who have special needs advocating for themselves in your building?
53. How would you describe the level of cooperation and joint planning that exists between regular and special education staff?

54. How does the presence of an advocate impact the participation in TEAM meetings in your building?

55. How would you describe the support related to special education that you receive from the director of special education?

56. Discuss how regular education and special education staff members participate in the grading process of students who receive special education services.
57. If you have suggestions on how the special needs program in your building might be improved, what are they?

58. If there are constraints to cooperative planning between regular and special needs staff, what are they?

59. Describe your experience with the behavioral consultation model.

60. How do you feel about the current special education guidelines used to help identify students who have learning disabilities.
61. How has your involvement with special needs students changed your attitude about working with them?

62. How has your role changed as a result of the utilization of the in-class model in your school?

63. What are the needs for further staff development that would be helpful to your staff as they provide special education services in the regular classroom?

64. What kind of support would help staff members meet the needs of special education students in your building?
65. How can the transition process for students with special needs be improved as they move from one building/level to another?

66. In what ways have special education teacher assistants been effectively utilized in your building?

67. In what ways can special education teacher assistants be more effectively utilized in your building?
68. Check any of the following impeding integration activities in your school? (check all that apply)

- lack of money
- negative teacher attitudes
- large class size
- negative administrative attitude
- lack of common planning time
- lack of personnel
- negative parental attitude
- lack of professional development
- not enough computers
- not enough time
- needs of other children in the class
- other ________________________________

69. Do any of the following support integration activities in your school? (check all that apply)

- money for additional teaching materials
- flexibility of other professionals
- accommodations in scheduling
- administrative commitment
- release time for planning
- release time for training
- paid summer planning time
- paid summer training time
- staff expertise
- collaborative working relations with other teachers
- teacher assistant in classroom
- positive attitudes
- other ________________________________

Comments: (use the back of this page or attach additional page(s) if you need more space)

THANK YOU FOR TAKING THE TIME TO COMPLETE THIS SURVEY.

Some administrators will be interviewed as part of this evaluation process. If you would be willing to be interviewed please write your name and phone number below or call the Special Education Office (790-6442) and leave your name. Administrators who will be interviewed will be randomly selected from those who indicate their willingness to be interviewed.
APPENDIX J

1996 PARENT SURVEY
Barnstable Public Schools

SPECIAL EDUCATION PROGRAM EVALUATION

Parent Survey

Please complete this survey and return it in the enclosed envelope by Wednesday, August 7, 1996.

Please indicate the grade level of your child who has special needs:

Preschool _____ K-5_____ 6-8_____ 9-12_____

Please circle the letter to the right of each question that best indicates the extent to which you agree with each statement about the special education program and services in Barnstable.

A - Strongly Agree   B - Agree   C - Disagree   D - Strongly Disagree   E - Don’t Know

1. The special education service time given to my child is adequate for his/her needs. A B C D E

2. The special education program is meeting the needs of my child. A B C D E

3. I understand the pre-referral (Child Study Team) process by which a student is referred for special education evaluation. A B C D E

4. I understand the eligibility guidelines for special education services. A B C D E

5. Regular education and special education personnel work together to develop appropriate modifications for my child who is on an Individualized Educational Plan (IEP). A B C D E

6. I understand the criteria used for determining a student’s dismissal from special education services. A B C D E

7. Homework/classwork requirements in the regular class are modified as needed for my child who is on an IEP. A B C D E
8. The scheduling of my child's time for special education services is flexible enough to enable specialists and teachers to meet his/her individual needs.

9. The facilities for special education programs in my child’s school are adequate.

10. There are adequate building/playground facilities that are handicapped accessible in my child’s school.

11. Appropriate materials and equipment are available for my child who has special needs to use in the classroom.

12. The special education program contributes to my child’s development of positive attitudes about him/herself.

13. The special education students who are in regular classrooms benefit academically.

14. The special education students who are in regular classrooms benefit socially.

15. My child views the special education services he/she receives as a positive factor in his/her learning experience.

16. IEPs are useful in planning for special needs students in the regular classroom.

17. The special needs staff closely monitors my child’s progress in the regular classroom setting.

18. Information supplied by parents is considered when decisions related to their child’s special needs programs are made.

19. Parents are active participants in the special education TEAM process.

20. My child who has special needs is achieving the goals written in his/her IEP.

21. I understand my rights as a parent of a special needs child.
22. The inclusion of students who have special needs improves the quality of education for regular education students.  

23. The quality of education is improved for my child who receives his/her special education services in the regular classroom.

To what extent do you feel the following student populations can be successfully integrated into regular classrooms?

<table>
<thead>
<tr>
<th>A - Very Successfully</th>
<th>B - Successfully</th>
<th>C - Unsuccessfully</th>
<th>D - Very Unsuccessfully</th>
<th>E - Uncertain</th>
</tr>
</thead>
<tbody>
<tr>
<td>24. students who have severe behavior problems</td>
<td>A B C D E</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>25. students who are cognitively delayed</td>
<td>A B C D E</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>26. students who are learning disabled</td>
<td>A B C D E</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>27. students who are physically disabled</td>
<td>A B C D E</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>28. students who are hearing impaired</td>
<td>A B C D E</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>29. students who are visually impaired</td>
<td>A B C D E</td>
<td></td>
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</tr>
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</table>

To what extent have the following recommendations of the Special Education Program Evaluation conducted in 1993 been implemented in the past three years?

<table>
<thead>
<tr>
<th>A - Full Implementation</th>
<th>B - Some Implementation</th>
<th>C - Little Implementation</th>
<th>D - No Implementation</th>
<th>E - Uncertain</th>
</tr>
</thead>
<tbody>
<tr>
<td>30. Assess facilities, materials, equipment, and the use of new technology, especially computers, in relation to program needs and new service delivery models.</td>
<td>A B C D E</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>31. Improve communication between home and school, and increase the building level involvement and participation of parents of children who receive special education services.</td>
<td>A B C D E</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>32. Share results of the 1993 Special Education Program Evaluation with regular education staff members, PPS staff members, administrators, and parents.</td>
<td>A B C D E</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
33. What is your preferred way for your child who has special needs to receive his/her special education services?

_____ within the regular classroom
_____ through a pull-out program
_____ a combination of within the regular program and through a pull-out program
_____ in a separate (self-contained program)
_____ other (please specify) ________________________________

34. Have you had an advocate attend a TEAM meeting for your child with you?

_____ yes
_____ no

If you have, please describe how this impacted your participation in this meeting.

35. I receive adequate support related to my child’s special education from: (check all that apply)

_____ the building principal
_____ regular education teachers
_____ special education teachers
_____ assistants
_____ the director of special education
_____ specialists
_____ the counselor
_____ the school nurse

36. How would you describe the level of cooperation that exists between you and your child’s teachers?
37. If there are constraints to cooperation between you and your child’s teachers, what are they?

38. If you have suggestions on how the special needs program for your child might be improved, what are they?

39. I understand the legal time frames for the IEP process (referral, testing, meetings, development of the IEP).

   ________ Yes
   ________ No

   If not, what information would be helpful to you?
40. Do you feel that the time frames are followed for your child who has special needs?

_____ Yes
_____ No

If not, please explain.

41. Are there ways in which the transition process for students who have special needs can be improved as they move from one building/level to another?

42. Describe factors that support integration activities in your child's school.

43. Describe factors that impede integration activities in your child's school?
THANK YOU FOR TAKING THE TIME TO COMPLETE THIS SURVEY.

Some parents will be interviewed as part of this evaluation process. If you would be willing to be interviewed please write your name and phone number below or call the Special Education Office (790-6442) and leave your name. Parents who will be interviewed will be randomly selected from those who indicate their willingness to be interviewed.
APPENDIX K

1996 SURVEY RATES OF RETURN
### 1996

**Special Education Program Evaluation**

**Survey Rates of Return**

<table>
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<th>Survey Type</th>
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<tr>
<td><strong>Total Staff Survey</strong></td>
<td>718</td>
<td>322</td>
<td>44.8%</td>
</tr>
<tr>
<td><strong>Administrator Survey</strong></td>
<td>25</td>
<td>17</td>
<td>68.0%</td>
</tr>
<tr>
<td><strong>Parent Survey</strong></td>
<td>454</td>
<td>131</td>
<td>28.9%</td>
</tr>
</tbody>
</table>
From your perspective, what do you see as strengths/positives of the special education program?

From your perspective, what do you see as weaknesses/negatives of the special education program?
What recommendations would you have to improve the special education program?

Describe the communication/support/cooperation between regular and special education teachers.
Staff development (past topics that have been helpful/future topics that would be helpful):

Describe pre-referral experience (process, modifications/adaptations, eligibility guidelines):
Describe your inclusion experiences and what made them positive/negative:

Any additional comments:
Person being interviewed ________________________________

Position/School ________________________________

Date ________________________________

From your perspective, what do you see as strengths/positives of the special education program?

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Any additional comments:
From your perspective, what do you see as strengths/positives of the special education program?

From your perspective, what do you see as weaknesses/negatives of the special education program?
What recommendations would you have to improve the program?

Describe the communication/support/cooperation between you and your child's teachers.
Describe your inclusion experiences and what made them positive/negative.

Any additional comments:
BIBLIOGRAPHY


Massachusetts Board of Education. (1992). *A focus on integration: Including all students.*


Timothy W. v. Rochester School District, 875 F2d 954 (1st Cir. 1989), cert. denied, 110 S.Ct. 519.


