An Examination of Preschool Services and Programs for Children With Disabilities in North Carolina School Districts

by

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AN EXAMINATION OF PRE-SCHOOL SERVICES AND PROGRAMS FOR CHILDREN WITH DISABILITIES IN NORTH CAROLINA SCHOOL DISTRICTS

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(ABSTRACT)

The purpose of this study was to examine the provision of physical, occupational and speech therapy services and restrictiveness of settings for programs for children, 3-5 years old, with disabilities by North Carolina school districts. Public and federal school systems in North Carolina were participants in the study.

A survey research design was utilized to collect information from school districts. In addition to examining implementation of related service and least restrictive environment requirements in the Individuals with Disabilities Education Act (IDEA), possible effects of district size was also explored relative to the provision of preschool services. Also examined was whether differences existed between the public and Department of Defense federal school systems.

Data from surveys received from North Carolina Exceptional Children Program Administrators were used to illustrate that not all school districts provided all necessary therapy services to preschoolers with disabilities. Occupational therapy was the most reported therapy not provided to children identified as requiring the service. The primary reason for not providing therapy was a shortage of appropriate personnel.
Locations of preschool services including preschool education, speech, occupational and physical therapy services were also examined. While services were provided in a wide variety of settings by districts of all sizes, the least number of school districts used general education preschool settings and the most number of districts provided preschool education, physical therapy and occupational therapy services in elementary schools. Speech therapy was provided by most districts in Head Start and child care settings.

Higher percentages of large districts provided services in more restrictive, less natural settings than medium and small districts. Large districts also had the least opportunity for children with disabilities in preschool classes to interact with nondisabled peers when compared with other size districts.

Federal school districts in North Carolina operated by the Department of Defense provided all therapy services while comparable public school districts were unable to provide occupational and speech therapy services to all preschool children in need. While a higher percentage of comparable districts had self-contained preschool classes, these children had more opportunities for interaction with nondisabled peers than children in self-contained classrooms in the federal school systems.
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INTRODUCTION

The goal of American Education is to value each child equally as an individual and entitled to equal opportunity of development of his own capabilities, be they large or small in range... Each has needs of his own as significant to him as those of others are to them. The very fact of natural and psychological inequality is all the more reason for establishment by law of equality of opportunity, since otherwise the former becomes a means of oppression of the less gifted.

Thomas Dewey

With the passage of The Education for All Handicapped Children Act, Public Law 94-142, the United States Congress initiated landmark special education legislation mandating “a free appropriate public education (FAPE) by September 1, 1980, for all eligible 3- through 21-year olds” (Hebbler, et al., 1991 p.107). The result was a dramatic increase in the number of children with disabilities being provided special education and related services as well as “significant increases in funding for special education at all levels of government, better and more training of numerous instructional and administrative personnel and parents, increased support of needed research and development of models of delivery of services, and increased awareness and public acceptance of children with disabilities” (Garwood et al., 1988, p. 1). The impact of this legislation on children with disabilities between the ages of 6-through 17 was profound. Children with disabilities who were 3-5 years old and 18-21 years old were affected if a public education was not “inconsistent

1
with state law or practice, or the order of any court, respecting public education within such age groups in the state” [P.L. 94-142, Section 612(2)(B)].

During the first year of implementation of P.L. 94-142, some states served preschoolers with disabilities in response to the Preschool Incentive Grant Program (Section 619) included in the legislation (USDOE, 1987), while others continued serving preschoolers as they had previous to the legislation. Yet states received monetary rewards for the first time from the Federal government for specifically serving preschoolers with disabilities. By July of 1985, 21 states, 4 territories and the District of Columbia were serving these preschoolers (Committee on Education and Labor, 1986). Although 259,483 preschool children with disabilities were being served during the 1984-85 school year, it was “estimated that an additional 70,000 handicapped preschoolers were unserved” (Barnett, 1988; Committee on Education and Labor, 1986). In addition to the number of children not served in 1985, there were indicators that the number and proportion of children with special needs were increasing (Broman, Nicholas, & Kennedy, 1975; Scott & Carran, 1988). Demographic data collected in the Collaborative Perinatal Study conducted by Broman et. al., (1975) indicated: “the number and percentage of children living in poverty [had] increased steadily; ...[that there had been] a dramatic increase in infant survival rates in the United States; ...that more than 1 infant in 20 [with low birth weights were] placed in an intensive neonatal care unit at birth (or soon afterward), and that special education services are required 2.5 times more frequently for low birth weight than for normal birth weight children.”

In response to the inadequacy of P.L. 94-142 to meet the needs of children
under 6 years old with special needs, Congress enacted P.L. 99-457, Part H, The Education of the Handicapped Amendments of 1986. Beginning school year 1990-91, P.L. 99-457 extended all the rights and protections of P.L. 94-142 to include children with handicaps ages three through five years. In response to the inability of some States to finance this program within the time given, Congress extended the deadline to school year 1992-93. In addition to the requirements in P.L. 94-142, a transition component was also incorporated into the new legislation. To support the implementation of services to these children, new funding incentives were included. However, for states not providing services to preschoolers came the penalty of not receiving any EHA funds for preschool activities including research, personnel preparation and technical assistance (Barnett, 1988; Dunlap, 1989; and Garwood et al., 1988). This legislation also created "new policy and programmatic opportunities for handicapped children ages birth through five years" (McNulty, 1989, p.156). Subsequently, the following national agenda was established by Congress:

"The expansion of opportunities for all eligible young children and their families in the United States to receive the benefits of universal early intervention and preschool services. Specifically, the intent of Congress is to promote child and family development, to minimize the likelihood of institutionalization, and to be supportive of families who have children with special needs" (Trohanis, 1989, p. 16).

Although Public Law 99-457 contains a variety of programs, the major portion of the law which is "particularly critical to comprehensive services to preschoolers is Title II- Preschool Grants Program (ages 3 through 5 years)" (Trohanis,
Critical to the implementation of the Preschool Grants Program was whether States had a mandate by school year 1991-92, to ensure a free appropriate public education (FAPE) for all children, three to five years old, with disabilities. States which did not have such a mandate would lose their eligibility “for funding for 3-5 year old children with disabilities served under: (a) the Preschool Grants Program, (b) Part B of the IDEA, (c) Parts C through G of the IDEA discretionary projects relating exclusively to 3-5 year old children with disabilities, and (d) Chapter 1 of ESEA” (USDOE, 1993).

Although historically North Carolina has had a variety of programs in place for infants, toddlers and preschoolers with disabilities, North Carolina was one of seven states which delayed mandating preschool services for all preschool children with disabilities until the latest possible date, school year 1991-92. If the mandate to provide services to all eligible children three to five years old was not in place by the 1991-1992 academic year, North Carolina would have forfeited all money available under the federal Preschool Grant Program (IDEA, Part B, Section 619); all federal special education state grant dollars under IDEA, Part B available for children ages three to five years, federal special education discretionary dollars “which relate exclusively to programs, projects, and activities pertaining to handicapped children ages 3 to 5 years, inclusive,” and federal funds under the reauthorized Chapter 1, Handicapped Program in P.L. 100-297 (NEC*TAS, 1991).

Although there was a North Carolina state mandate for services to all eligible children with disabilities, ages 3 through 5 years by the academic year
1991-92, a provision existed in the IDEA allowing an extension for the fourth or fifth year participation in the federal grant program. North Carolina was one of the states whose extended participation in the grant was approved as a result of meeting several requirements. North Carolina was able to satisfy the eligibility criteria of the fourth year of participating in the Preschool Grant program. The Governor submitted a request for extended participation by demonstrating to the Secretary “that the State is experiencing significant hardships in meeting the eligibility criteria described ...for the fourth or fifth year of participation; and a plan, including timelines, for meeting the eligibility criteria...for the fourth, fifth, or succeeding years of participation” (IDEA, Sec.1475.(e)(1)(B)(i)(ii)). Subsequently, school year 1992-93 was the first academic year during which all eligible 3 through 5 year old children with disabilities in North Carolina received special education and related services under the IDEA as amended by Public Law 102-119. 

**Statement of the Problem**

Public Law 94-142 required all states to provide special education to all 3-5 year old children with disabilities, unless it was inconsistent with state law or policy regarding the provision of education to 3-5 year old children (Section 612(2)(B), 1975). After 17 years, the Federal government amended P.L. 94-142 to require all states to provide services to eligible 3-5 year old children with disabilities or suffer the possible loss of all federal funding aligned with preschool special education.

Beginning school year 1992-93, all school districts in North Carolina were required to provide a free appropriate public education to all eligible children
with disabilities, ages 3 to 5, in compliance with the requirements of Part B of the IDEA. Included in the requirements is the provision of special education and related services in the “least restrictive environment”. Due to the fact that all school districts in North Carolina just recently began providing services outlined in the Federal regulations for all preschoolers with disabilities, to date no study has examined the implementation of special education and related services and the location of those services for children living in North Carolina. Subsequently, there is a lack of data and information regarding the implementation of the Federal preschool special education requirements outlined in the IDEA by school districts in North Carolina. This study is intended to yield such implementation information and examine the possible effects of school district size.

Legislative Background

Following nearly 20 years of federal support to states, there were almost two million children with disabilities being denied access to a public education in 1975 (Garwood, 1983). Furthermore, of the estimated eight million exceptional children receiving some form of special education services, many “were not receiving appropriate educational services, and many were being placed in inappropriate educational settings because their handicaps were going undetected” (Abeson & Zettel, 1977, p. 115). “Public laws are enacted to carry out the national policy for the benefit of individual citizens, their communities, and the nation” (Garwood, Fewell & Neisworth, 1988, p. 1). In response to the need for a greater effort to provide services to children with disabilities, President Gerald Ford signed Public Law (P.L.) 94-142, The Education for All
Handicapped Children Act (EHA), (now known as P.L. 101-476, Individuals with Disabilities Education Act, [IDEA]) into law November 29, 1975. Under P.L. 94-142, Congress specified a national policy regarding the education of the handicapped:

> it is the purpose of this Act to assure that all handicapped children have available to them, within the time periods specified, a free appropriate public education emphasizing special education and related services designed to meet their unique needs... (EHA, 1975).

The Education for All Handicapped Children Act of 1975 "incorporated all of the previous requirements (due process, Least Restricive Environment [LRE]) and added others (individualized education programs [IEPs], and specific procedural safeguards)" (Hebller, Smith, and Talbot, 1991, p.107). A major principle of the legislation was a policy of zero-reject. "Nothing is clearer in P.L. 94-142 than the intent of Congress that no handicapped child be excluded from school by recipients of federal funds for the education of the handicapped" (Turnbull, and Turnbull, 1978, p. 50). The major program implementation requirements included child find, individualized educational programs, appropriate education, procedural safeguards, due process, and least restrictive environment (Hebller et al., 1991; Turnbull, and Turnbull, 1978). The principles incorporated in P.L. 94-142 were a culmination of previous court decisions, i.e., Brown v Board of Education, 1954; PARC v Commonwealth of Pennsylvania, 1972; and Mills v Board of Education of District of Columbia, 1972, and federal legislation, i.e., The Elementary and Secondary Education Act; Vocational Educational Amendments of 1968; Economic Opportunities Act
of 1972; and Developmental Disabilities Assistance and Bill of Rights Act of 1974. Public Law 94-142 "came into being because existing federal legislation was inadequate to meet the educational needs of all exceptional children" (Garwood et al., 1988, p.2).

North Carolina

Prior to the mandate for early intervention services, North Carolina implemented a variety of programs for preschool children. The 1993 Report to the Governor on Early Intervention in North Carolina listed the following programs as being in place prior to the Federal mandate for services:

1) A statewide network of home-based and center-based programs for handicapped and at-risk infants, toddlers and preschoolers sponsored by the Division of Mental Health, Developmental Disabilities and Substance Abuse Services; 2) Statewide network of 18 Developmental Evaluation Centers sponsored by the Division of Maternal and Child Health in the Department of Environment, Health, and Natural Resources for the identification, evaluation, and treatment of infants and preschoolers with special needs; 3) ... [a] high priority infant program (now known as Service Coordination) for identifying and following children at risk for handicaps sponsored by the Division of Maternal and Child Health; 4) Health care services including the Regionalized Perinatal Care System of neonatal intensive care nurseries, Child Health Services which provides periodic health assessments and follow-up through local health departments, and Children’s Special Health Services which provides diagnostic and
treatment services as well as medical reimbursement for children with chronic illness and/or developmental disabilities; 5) Public school programs for preschool children with special needs sponsored by the Department of Public Instruction as early as 1968; 6) A national, early intervention, training and technical assistance network (now known as NEC*TAS, the National Early Childhood Technical Assistance System) which assists states and demonstration projects in developing policies and practices to expand and improve comprehensive early intervention services; 7) A statewide network of Head Start programs that serves over 2,000 preschoolers with professionally diagnosed disabilities and provides cooperative programs with the Department of Public Instruction; 8) ... statewide, state supported programs of center-based and itinerant services for preschoolers with hearing impairments sponsored by the state schools for the deaf; 9) preschool services for children with visual impairments sponsored through the Governor Morehead School; and 10) ... statewide, state supported network of community-based centers to provide services, research, and training for persons with autism or related disorders of behavior or communication sponsored by Division TEACCH (Treatment and Education of Autistic and Related Communication Handicapped Children) through the University of North Carolina at Chapel Hill.

North Carolina was officially declared a participant in Part H of P.L. 99-457 by the Governor in January of 1987. The State Department of Public Instruction
was appointed the lead agency for 3 to 5 year old children with disabilities. Subsequently, the North Carolina General Assembly enacted several bills to support the provision of early intervention services in North Carolina. In 1990, House Bill 1679 was passed which established the Interagency Coordinating Council in the state statutes, identified the lead agency for services for infants and toddlers as the Department of Human Resources, and established a framework for the provision of additional early childhood intervention services for infants, toddlers and preschoolers. The General Assembly also appropriated $3.7 million for services for 3-and-4-year-old children with disabilities during the 1990 session (1991 Report to the Governor).

During the 1991 session of the General Assembly, House Bill 83 was enacted for Fiscal Year 1991-1993. Primarily a funding bill, it appropriated $45 million for children with disabilities from birth to age four for a two-year period. An additional budget bill was enacted during the 1992 session to appropriate funds for specialized therapies for children birth through four years old, for assistive technology services and devices for children birth through two years, and for transportation services for children birth through two years. House Bill 1340 "appropriated $650,000 for specialized therapies..., $250,000 for assistive technology services," and $516,135 for transportation services (1992 Report to the Governor, p.4).

**Federal School Systems**

Out of the 132 school districts in North Carolina, 130 are public school systems which fall under the direction of the North Carolina Department of Public Instruction or Bureau of Indian Affairs. The two remaining districts are
located on United States Government Military Installations under the direction of the Department of Defense.

Congress acknowledged the need to provide a free public education for dependent children of United States military personnel and federally employed civilian personnel residing on Federal property when it enacted Public Law 81-874 in 1950 (20 U.S.C. 24). The preference of the Department of Defense (DoD) was that those children be educated whenever possible in the local public school systems (P.L. 81-874; P.L. 95-561; P.L. 97-35; and DoD Directive 1342.16; DoD Directive 1342.21). However, in conformity with these Public Laws, if it was not suitable for those children to attend a locally operated public school, arrangements had to be made by the Secretary of Defense, or designee, for the free public education of such children. “The arrangements made may include the establishment of schools within the United States and specified possessions” (DoDD 1342.16(C)(2)). If it became necessary to establish schools, the Department of Defense would make funds available for the “operation and maintenance of Section 6 School Arrangements” (DoDD 1342.16 (C)(6)).

Eighteen Federal school systems or “Section 6 School Arrangements” were established in the United States and the territory of Puerto Rico under Public Law 81-874. With the closing of Myrtle Beach Air Force Base in South Carolina and England Air Force Base in Louisiana, sixteen school systems remained as of school year 1992-93. For those military installations with Section 6 School Arrangements, the requirement is that “to the maximum extent practicable, such education shall be comparable to free public education provided for children in
comparable communities in the State" (P.L. 81-874, Chapter 1124, Section 6(2)).

Camp Lejeune and Ft. Bragg Dependents Schools in North Carolina are two of the remaining Section 6 school systems. Whereas the Section 6 School Arrangements were directed to provide comparable public education to eligible children, they were also directed to comply with Public Law 94-142, The Education of the Handicapped Act (DoDD 1020.1; DoDD 1342.16; DoDl 342-12). Under these directives, the schools were to provide “its’ handicapped students a free appropriate public education, as defined in Public Law 94-142” (DoDD 1342.16 (C)(5)). The identification, assessment, and programming requirements for students with disabilities were to be implemented. However, the funding and reporting procedures and impartial due process hearings were separate issues and procedures from State and P.L. 94-142 guidelines.

In October, 1991 when Congress reauthorized the Individuals with Disabilities Education Act (formerly cited as Education of the Handicapped Act), Sections 23 and 24 pertained to Section 6 Schools:

For the purpose of providing such comparable education, all subsequent rights and protections and procedural safeguards (including due process procedures) available to children with disabilities age 3 to 5, inclusive, under Part B of the Individuals with Disabilities Education Act and to infants and toddlers under part H of such Act shall be applicable to such comparable education, by academic year 1992-93.
(P.L. 102-119, Sec. 23, October, 1991)

Section 24 of the Act amended the Defense Dependents’ Education Act of 1978 (20 U.S.C. 927 (c)) to include the requirement of a free appropriate public education to include children with disabilities, aged 3 to 5, inclusive, in
compliance with Part B of IDEA in all stateside schools operated by the Department of Defense. The funding and reporting provisions of Part B were excluded from the requirements. With the enactment of this legislation, the Section 6 School Systems were required for the first time by Federal mandate to assure the provision of special education and related services to children, ages 3-5, living on military installations that have Federal schools.

Summary

Since it is clear that Federal and State regulations require all North Carolina districts to provide services to eligible 3-5 year old children with disabilities, beginning no later than September, 1992, it can be assumed that all districts are providing some level of service. Although all school districts may not be providing all of the necessary elements, such as related services or provision in the least restrictive environment, the question of whether school districts are providing special education to preschoolers with disabilities will not be explored in this study. Information will be obtained to enable an examination of the provision of related services and restrictiveness of settings. The possible effects of district size will be examined relative to the provision of preschool services. Also examined will be whether there are differences between the public and Federal school systems.

Research Questions

1. Are North Carolina school districts providing related services to all 3-5 year old children with disabilities who need physical, occupational or speech therapy services? And if not, why not?

2. Do differences exist in the level of restrictiveness of the location of preschool
services for children with disabilities between small, medium and large school districts?

3. Do differences exist in the amount of interaction preschoolers with disabilities have during the school day with preschoolers without disabilities between small, medium and large school districts?

4. Do differences exist in the provision of services to preschoolers with disabilities between Section 6 schools in North Carolina and their comparable districts?

**Significance of the Study**

This study is of value for several reasons. First, an analysis of the existing situation is needed to determine if there is a need for change, and if there is, to what extent. By furnishing the results for each school system involved, districts can use the results in their formative evaluation of specific components of the restrictiveness of their preschool program (compared to other North Carolina school districts) and use the results to guide any changes deemed appropriate. Such changes could result in improved compliance and services to preschoolers with disabilities.

Also, if differences in the implementation of the local education agency requirements being examined correlate with the size of districts, further study may be warranted to investigate the reasons for the differences.

**Limitations of the Study**

There cannot be a generalization of the results to other school districts outside of North Carolina nor to other Section 6 school systems in other states. Generalizations to children with disabilities who are not receiving preschool
special education services by the systems participating in the study would also be inappropriate. Perhaps a significant limitation of this project is that it did not measure the quality of the programs being implemented. Another significant limitation is that it did not examine the number of children receiving therapy services or placed in the various locations. The data collected only reflected the number and percentages of school districts with various responses to questions on the survey. The study will, however, delineate where services were provided to students and relate the locations to the hierarchy of restrictiveness of settings. Additionally, because the concept of “Least Restrictive Environment (LRE)” is directly related to the individual needs of students, a generalization cannot be made as to which specific settings are more in compliance with the LRE requirement.

This study examined the implementation of the requirements in the Individuals with Disabilities Education Act for special education, related services and least restrictive environment in North Carolina, one year after there was a state mandate to comply with the Federal Regulation. It was also the first year that every school district in North Carolina, both public schools and schools operating under the Department of Defense, were required to implement the services to all eligible 3-5 year children with disabilities. As districts become more experienced in providing services to preschoolers and improve on the implementation and quality of the services provided, it could be expected that program implementation will continue to improve.
Definition of Terms

Children, 3-5 years old, with Disabilities:

The term 'children with disabilities' for children age 3-5, may, at the State's discretion, include children experiencing developmental delays, as defined by the State, and measured by appropriate diagnostic instruments and procedures, in one or more of the following areas: physical development, cognitive development, communication development, social or emotional development, or adaptive development; and who, by reason thereof, need special education and related services" (IDEA, Sec. 1401. (a)(B)(i)(ii))

Special Education:

specially designed instruction, at no cost to the parent, to meet the unique needs of a child with a disability, including instruction in the classroom, in the home, in hospitals and institutions, and in other settings; and instruction in physical education" (IDEA, Sec.1401. (16)(A)(B))

Related Service:

transportation and such developmental, corrective, and other supportive services (including speech pathology and audiology, psychological services, physical and occupational therapy, recreation, including therapeutic recreation, social work services counseling services, including rehabilitation counseling, and medical services, except that such medical services shall be for diagnostic and evaluation purposes only) as may be required to assist a child with a disability to benefit from special education, and includes the early identification and assessment of disabling conditions in children (IDEA, Sec.1401.(17))
Free Appropriate Public Education:

special education and related services that:
(A) have been provided at public expense, under public supervision and direction, and without charge,
(B) meet the standards of the State educational agency involved, and
(C) include an appropriate preschool, elementary school, or secondary school education in the State involved, and
(D) are provided in conformity with an individualized education program required under Section 1414(a)(5) of this title (IDEA, Sec. 1401. (18)(A)(B)(C)(D))

Least Restrictive Environment:

that to the maximum extent appropriate, children with disabilities, including children in public or private institutions or other care facilities, are educated with children who are not disabled, and that special classes, separate schooling or other removal of children with disabilities from the regular educational environment occurs only when the nature or severity of the disability is such that education in regular classes with the use of supplemental aids and services cannot be achieved satisfactorily (IDEA, Sec. 1412. (5)(C))
REVIEW OF THE LITERATURE

"Nothing is more worth doing than easing the pain and improving the life chances of vulnerable, blameless children."

Sylvia Ann Hewlett

This chapter will provide a review of the literature regarding early intervention services. An examination of literature and empirical studies examining early intervention with children without developmental delays, with preschool children with disabilities and with preschoolers with disabilities with their nondisabled peers will be provided. In addition, the concept of least restrictive environment will be explored in the context of legal-legislative, social-ethical, and psychological-educational rationales.

Early Intervention

The first five or six years of children’s life are critical in their acquisition of basic skills in every area of development (Allen, 1980; Piazza & Rothman, 1979). In fact, early research studies have demonstrated that the fastest period of learning and development in humans takes place during the first three or four years of life (Bloom, 1964; Hunt, 1961; Kirk, 1958). This knowledge combined with the suggestion that 50 percent of total intellectual capacity as an adult is developed by the age of four (Piazza & Rothman, 1979), has provided the impetus for the provision of early intervention services.

Additional motivation for supporting early intervention services was provided by the Carnegie Study (1991) which reported that 35% of U.S. children entering kindergarten are not ready to participate successfully in the formal education
program. Harold Hodgkinson (1991) attributed the lack of readiness and subsequent negative impact on educational success to “poverty, neglect, sickness, handicapping conditions, and lack of protection and nurturance” (p. 19).

Early intervention is a “period of systematic intervention carried out in infancy or early childhood. Duration of intervention may vary from months to years” (Simeonsson, Cooper & Scheiner, 1982, p. 636). Services may be implemented using an educational, psychological or therapeutic approach. Children for whom early intervention services have primarily focused have been those considered disabled, at-risk or disadvantaged. The purpose of early intervention has primarily been to enhance development, prevent or remediate developmental delays or disabilities, minimize potential developmental delays, provide support where disabilities exist, provide instruction to children and families, and prevent institutionalization of children with severe disabilities (Bailey & Wolery, 1984; Guralnick & Bennett, 1987; Sameroff & Chandler, 1975; Meisels, 1986; Wachs & Gruen, 1982; White, Bush, & Casto, 1986).

There has been a considerable amount of research supporting the theoretical implications that developmental outcomes of children can be altered substantially by social and physical environmental factors during the infant/toddler and preschool years of a child’s life (Guralnick & Bennett, 1987; Infant Health and Development Program, 1990; Rouh, Achenbach, Nurcombe, Howell, & Teti, 1988; Resnick, Armstrong, & Carter, 1988). “Changes in accelerated rates of development, acquisition of new behaviors, and increased independent functioning” (Bailey and Wolery, 1984, p.13) have been
demonstrated by the initiation of intervention at an early age. Long term gains from early intervention programs have also been documented (Bailey and Wolery, 1984; Lazar, Hubbell, Murray, Rushe, and Royce, 1977; Moore, Frederick, & Baldwin, 1981). It is important to note that the relationship between environmental factors present during the first few years of life is substantially established for children raised in highly deprived settings, as well as for children who grew up in more economically supportive settings (Bee et al., 1982; Bradley & Caldwell, 1976; Clarke-Stewart, 1973; Guralnick & Bennett, 1987; Wachs & Gruen, 1982). The Milwaukee Project and The Carolina Abecedarian Project demonstrated the ability to prevent the intellectual decline often seen in disadvantaged children (Herbert & Garber, 1975; Ramey & Cambell, 1977; Ramey, Collier, Sparling, Loda, Cambell, Ingram, & Finkelstein, 1976). Both projects also demonstrated no detrimental effects on family or peer relationships (Spodek, 1982).

**Early Intervention With Children Without Developmental Delays**

The most widely instituted and publicly known early intervention program for children who are at-risk or disadvantaged is Head Start. Beginning as an experimental program in 1965 by the Office of Economic Opportunity, Head Start is the largest federally funded early intervention program for children without developmental delays (Bridgman, 1985). The outcomes of research studies on the impact of Head Start and similar preschool programs have been mixed. A major study conducted by Lazar and Darlington (1979) on the long term effects of Head Start and well-run, well-controlled preschool programs
similar to Head Start revealed that the graduates of preschool programs were less likely to be placed in special education classes during elementary school than children without the benefit of early intervention. Children who participated in the early intervention programs were also less likely to be retained in elementary school than their peers who had not participated in some form of early intervention. A reduction in the number of children who are retained or placed in special education results in a substantial financial savings for the public school system.

Another major study conducted to examine the effects of Head Start on the cognitive and affective development in children was implemented by the Westinghouse Learning Corporation and Ohio University in 1969 (Cicirelli, Evans & Schiller). The Westinghouse project found that neither cognitive nor affective gains remained through early elementary years for children who participated in summer Head Start programs. For children in full year programs, there did not appear to be an influence on affective development; however, there were documented cognitive gains which continued to be evident through third grade. Although Head Start children tested below national norms on a standardized evaluation of Psycholinguistic Ability, readiness scores approached national norms. One significant outcome of the Westinghouse study was that parents both supported and participated in the program. Later studies found that parent involvement is necessary if gains in development are to endure (Bronfenbrenner, 1974; Smith & Bissell, 1970).

Following the Westinghouse study, a number of other studies examining the efficacy of Head Start and other preschool programs emerged. The results of
some of these studies indicated that positive academic-intellectual gains sometimes dissipated after special services were terminated and children were placed in general education elementary school settings (Bronfenbrenner, 1975; Evans, 1975; Zigler & Hunsinger, 1979). Subsequently, several intervention programs were developed to prevent the loss of developmental gains among elementary students (House, Glass, McLean, & Walker, 1978; Stallings, 1975). Later longitudinal studies of the long term outcomes for disadvantaged young people who had attended quality preschool programs, including Head Start, found a reduction in costs to society of special and remedial education, welfare, and criminal justice (Consortium for Longitudinal Studies, 1983; High Scope Educational Research Foundation, 1983; Health and Human Services, 1980). Although results of Head Start and other similar preschool programs for children have been varied, it appears that for most children, especially males, any type of preschool early intervention is better than none (Evans, 1975; Bailey & Wolery, 1984).

There is also evidence that an advantage exists relative to formal school entry for children who attended preschool. There is evidence that children who attend preschool manifest a higher ability to adjust to classroom routines, improved self-care skills and sharing behavior, and an increased ability to follow teacher directions upon entry to kindergarten (Evans, 1975; Bailey & Wolery, 1984). Bailey and Wolery (1984) acknowledged that it was important for the Head Start or other preschool programs to be well-designed and executed if the educational development of disadvantaged children was to be accelerated. Unfortunately, they also found that such programs were rare.

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within the usual Head Start programs.

**Early Intervention With Children With Developmental Delays**

As critical as the first years of life are for children in general, there is evidence that it may be even more crucial for children with developmental delays (Guralnick & Bennett, 1987). In addition to the benefits of “accelerated rates of development, acquisition of new behaviors, and increased independent functioning” (Bailey and Wolery, 1984, p.13), numerous research studies have demonstrated that early intervention has served to prevent the measured intelligence declines in children with delays (Goodman, Cecil, & Barker, 1984; Guralnick, 1991; Guralnick & Bricker, 1987; Infant Health and Development Program, 1990; Ramey, Bryant, & Suarez, 1964; Ramey, Collier, Sparling, Loda, & Cambell, 1977; White & Casto, 1985).

Evidence also indicates that the provision of early intervention for children with developmental delays may assist in the prevention of secondary handicaps and/or help detect disabilities (Bailey & Woiery, 1984; Consortium for Longitudinal Studies, 1983; Garland, Stone, Swanson, & Woodruff, 1981; Guralnick & Bricker, 1987; Infant Health and Development Program, 1990; Lazar and Darlington, 1982; Palmer, Shapiro, et al., 1988; Schwienhart & Weickart, 1981; Sharov & Shlomo, 1986; U.S. House of Representatives Committee on Education and Labor, 1986). "Failure to intervene during the first 5 years of life to press development to its limits and to minimize any secondary problems is likely to place a child at a disadvantage with regard to future opportunities to develop" (Guralnick & Bennett, 1987, p. 18).

Moreover, Casto and Mastroiopier (1986), after conducting a meta-analysis of the statistical findings of 74 research studies on the effect of early intervention, concluded that intervention for children with disabilities produced "a sizable effect size" (p.417). Immediately upon receipt of early intervention, moderately large positive benefits for preschoolers with disabilities were found in language, IQ, motor and cognitive development. Although some benefits of early intervention have been noted to decline for disadvantaged populations of preschoolers who no longer receive early intervention, Casto and Mastroiopier's (1986) analysis found that the positive immediate gains in children with disabilities were intact as late as two years after early intervention had been terminated. Gains across all developmental areas have been found to be maintained (Bailey & Wolery, 1984; Cole, Mills, & Dale, 1989) and have been demonstrated across disabling conditions (Casto & Mastroiopier, 1986).
Whereas early intervention programs have been found to improve the functioning of children with delays across all developmental areas, there is also evidence that the need for specialized services and placements are consequently reduced (Dunst, 1989; Edgar, Heggelund, & Fischer, 1988; Lazar & Darlington, 1978; Lazar & Darlington, 1982; Schweinhart & Weickart, 1981; Smith, 1985; U.S. House of Representatives Committee on Education and Labor, 1986). When conducting a follow-up study regarding placement of children with moderate disabilities who had received preschool services for children with disabilities 1-6 years previous to the time of the study, Hayden, Morris, and Bailey (1977) found that only 66% of students were in special class placements. Of these students, 34% were placed in general education classrooms and 22% were “functioning as well as children in [general education] class placements.” The conclusion by the researchers was that language remediation received in preschool may have prevented special education placements by preventing cognitive delays.

Another study of students with moderate mental disabilities found that there was no statistical difference between children who had received one year of early intervention and those who received none (Moore, Fredericks, & Baldwin, 1981). However, in the same study, Moore et. al. (1981) did discover that children who received two or more years of early intervention demonstrated higher assessment scores in all areas of development except social skills. By reducing the amount of specialized services and placements, the cost of educating individuals with disabilities is also reduced (Antley & Dubose, 1981; Barnett & Escobar, 1990; Berrueta-Clement, Schweinhart, Garnett, Epstein, &

In addition to the financial benefit to school systems and communities, the benefit to parents of children with disabilities have also been documented. The acquisition of skills, including self help skills, lessened the demands children placed on their parents, thereby reducing parent’s stress (Dunst & Trivette, 1989; Dunst, Trivette, & Thompson, 1990; Dunst, McWilliam, & Trivette, 1986; Moore et al., 1981). The assistance provided to parents in the form of information regarding their child’s disability, training, and respite from constant care have also served parents and children well (Bailey & Wolery, 1984; Gallagher, 1990; Kaiser & Hammeter, 1989; Turnbull & Turnbull, 1986; Upshur, 1991; White, Bush, Casto, 1986).

The numerous research studies illustrating the effectiveness of early intervention with children with developmental delays have convinced many researchers that the empirical support is present (Guralnick, 1991; Guralnick & Bricker, 1987; Haines. Fowler, & Chandler, 1988; Simeonsson, Cooper, & Scheiner, 1882; Thurlow, Lehr, & Ysseldyke, 1987). It is felt by many that “it is no longer debatable that early special education programs provide immediate and long term gains...across diverse handicapping conditions and all degrees of impairment” (McNulty et al., 1983, p. 12).

Although most researchers and almost all practitioners support the concept of early intervention, there are some members of the scientific community who are not convinced that “there is sufficient evidence for the effectiveness of early
intervention to justify the substantial costs” (Ferry, 1981; White, Bush, & Casto, 1986, p. 418). The findings in some studies involving children with delays (resulting from Down Syndrome and other biological reasons) have found that although there were positive results from early intervention, there was more variability in the possible outcomes for children whose delays were not from Down Syndrome but from other biological reasons (Guralnick & Bricker, 1987).

After examining the conclusions of 34 research projects meeting criteria established for internal and external validity, White et al., (1986) found that although 94% found that early intervention resulted in substantial immediate effects, there was less substantiation of long term maintenance of gains. When examining whether gains were maintained over time, 41% concluded that long-term gains resulting from early intervention programs were maintained, 18% concluded that gains were not evident, and 41% found that sufficient evidence was not available to reach a conclusion.

The results are clear. There have been numerous studies examining the efficacy of early intervention for children with developmental delays with the vast majority substantiating immediate and long-term benefits for children, parents, and school systems.

Although most researchers and practitioners believe the evidence is undisputable, some problems exist with much of the efficacy research. Some methodological problems in the implementation of studies “as well as the changing quality and nature of the early intervention approaches” have contributed to questions regarding research in early childhood special education (Guralnick, 1988, p. 75). Some of the early research employed
methods leading to questions regarding the validity of the results (Dunst, 1986; Farran, 1990; Guralnick & Bricker, 1987; Karnes, Schwedel, Lewis, Ratts, & Esry, 1981; Ottenbacher, 1989; Shonkoff, Hauser-Cram, Krauss, & Upshur, 1988). Other problems with efficacy studies are due to the nature of the population preventing "true" experimental designs. Obstacles to experimental research designs include: the inability to randomly assign children to treatment conditions; the inability to assign children identified with delays to non-treatment control groups; the absence of assessment tools normed on preschool children with specific developmental delays and/or disabilities; the variability in services and programs; and the heterogeneous nature of preschoolers with developmental delays and/or disabilities (Dunst & Snyder, 1986; Guralnick, 1988; Guralnick & Bricker, 1987; Odom & Fewell, 1983; Odom & Karnes, 1988).

Although some problems have been noted with efficacy studies on early intervention programs, a transition in the types of studies and research questions being asked can be detected (Guralnick, 1988). There has been a shift from professionals asking whether or not early intervention for preschoolers with developmental delays works, to more specific questions such as "for whom does it work, under what conditions, and toward what goals" does early intervention work (Guralnick, 1988, p. 75).

With the majority of researchers and practitioners reaching the conclusion that early intervention services to children with and without developmental delays has an immediate and long lasting positive impact for children, families and school systems, the research studies have shifted their focus (Burke, McLaughlin, & Valdivieso, 1988; Bricker, Seibert, & Casuso, 1980; Gallagher,
Beckman, & Cross, 1983; Simeonsson, Cooper, & Scheiner, 1982; Smith, 1985). When examining what factors are inherent in effective early intervention programs, researchers have documented features including: family involvement and parent training (Smith & Strain, 1984; Walher & Dumas, 1984; White, 1986; Vincent, Lisbeth, & Salisbury, 1988); use of instructional strategies and structures like those found in kindergarten and first grade classrooms (Gallagher & Bristol, 1988; Vincent, Salisbury, Walter, Gruenewald, & Powers, 1980; Zeitlin, 1981); lower child/teacher ratios (NAEYC, 1983; Smith & Strain, 1988; White, 1986); individualized services designed to maximize development and independence (Smith & Strain, 1988; Wolery, 1991); well trained personnel (Bricker, Seibert, & Casuso, 1980; Gallagher, Beckman, & Cross, 1983; Guralnick, 1990; McLaughlin, Smith-Davis, & Burke, 1986; Simeonsson, Cooper, and Scheiner, 1982; Vincent & Salisbury, 1988); programs planned, implemented and evaluated by multi-disciplinary teams (Smith & Strain, 1984; Schweinhart, Koshel, Bridgman, 1987; Smith & Strain, 1988; Wolery, 1991); and programs that include children with and without disabilities when implemented in classrooms (Wolery, 1991). Of the quality indicators of effective early intervention programs mentioned, one of the features mandated specifically by law and the subject of numerous research studies is the education of children with disabilities with non-disabled children.

**Education of Preschoolers With Disabilities With Non-Disabled Peers**

Sarason (1972) defined the creation of settings “as any instance in which two or more people come together in new relationships over a sustained period of
time in order to achieve certain goals” (p.1). The legislative requirements of P.L. 99-457 (102-119) authorized the creation of thousands of discrete settings in which individuals were brought together to form new relationships over time to achieve the requirements and objectives of early intervention services for children with or at risk for developmental delays. As these new relationships developed and settings were created, a variety of service delivery models emerged. “The creation of a setting is rooted in local and social history, and, as a consequence, it almost always reflects more or less conventional values and styles of thinking” (Sarason, 1972, p.141). As service delivery models emerged as newly created settings, it became apparent that there were differences in values and styles of thinking and what was a “natural” extension of the existing culture, particularly in regard to the education of children with disabilities with their non-disabled peers.

Although services are usually provided using a home-based model, with a worker going into the home one to three times a week, or through a center based model, where services are provided in a center or school (Bailey & Wolery, 1984), the remainder of this chapter will focus on center-based settings and the inclusion, or not, of peers with disabilities or delays.

**Least Restrictive Environment**

The original premise of the least restrictive alternative deemed it to be “a legal doctrine that historically was applied to non-education related civil rights cases. The doctrine simply put, requires that when government attempts to restrict an individual’s fundamental liberty, it can do so only with full due
process of law” (Smith & Strain, 1988). The least restrictive alternative doctrine as applied to special education has been interpreted to mean that placement of students in special environments for educational purposes can be a restriction of fundamental liberties (Johnson, 1976). Subsequently, the requirement has been that “substantive efforts be made by educators to maintain [children with disabilities] with their peers in a regular education setting, and that the state (as represented by individual school districts) bear the burden of proof when making placements or when applying treatments which involve partial or complete removal” of children with disabilities from their peers without disabilities (Johnson, 1976, p. 60).

A precise definition of least restrictive environment (LRE) is difficult because of the diversity of its use and meaning within the profession. When examining the many usages of LRE, a common principle or underlying theme can be identified. The principle of LRE embodies the understanding that “services for people with developmental disabilities should be designed according to a range of program options varying in terms of restrictiveness, normalization, independence, and integration, with a presumption in favor of environments that are the least restrictive and most normalized, independent and integrated” (Taylor, 1988, p. 45). Since the LRE principle was conceptualized, it has been operationally defined as a continuum, or an ordered sequence of placements varying according to the degree of restrictiveness at each level (Abeson, Bolick, & Haas, 1976; Deno, 1970; Hitzing, 1980; Reynolds, 1962; Schalock, 1983; Taylor, 1988; Zettel & Ballard, 1982). Although the concept of LRE does not eliminate special classes or institutions as placement options, it does maintain
that "if a child can be educated adequately in the general education classroom, the child should not be placed in a special class; and if a child can be educated in a special class, the child should not be placed in an institution" (Schifani, Anderson & Odic, 1980, p. 17). When determining if a child can be educated adequately within the general education classroom, IDEA requires that placements in more restrictive placements occur only if the use of supplementary aids and services within the classroom cannot satisfactorily meet the child’s needs.

The hierarchical continuum or cascade of placement options go from most to least restrictive, with the assumption that the least restrictive placements are the most integrated and offer the least intensive services (Taylor, 1988). Within this structure, individuals develop skills and behaviors and are able to “transition” to the next less restrictive placement (Hitzing, 1987). The concept of LRE has influenced the design of special education programs and services for individuals with disabilities since the late 1960s and early 1970s (Taylor, 1988).

The principle of LRE was conceived at a time when individuals with disabilities were offered complete segregation or nothing at all (Taylor, 1988). Although LRE assisted in the creation of a variety of options and alternatives for individuals with disabilities as a legal concept and impetus for policy direction, professionals in the field have argued that the traditional continuum of services was conceptually flawed (Bronston, 1980; Haring & Hansen, 1981; Hitzing, 1987; Taylor, 1988). Some of the later opposition to the continuum of LRE options include the perception that the LRE principle: 1) legitimizes restrictive environments (Brown et. al., 1983; Gilhool & Stutman, 1978; Taylor, Racino,
confuses segregation with the intensity of services (Brown et. al., 1983; Taylor, 1988); 3) is based on a “readiness model” where individuals with disabilities have to earn the right to move to a lesser restrictive environment (Schalock, 1983; Taylor, 1988); 4) sanctions infringements on people’s rights (Taylor, 1988; Turnbull, 1982); and 5) directs attention to physical settings as opposed to what services and supports are needed to be successfully integrated into the community (Taylor, 1988).

Opponents reject the most restrictive and segregated settings at the end of the traditional continuum and the assumption that segregated environments prepare individuals to function in integrated environments (Bellamy et. al., 1984; Bellamy, Rhodes, Bourbeau et. al, 1986; Bronston, 1980; Haring & Hansen, 1981; Hitzing, 1987; Wilcox, 1987). Some of the opponents of the traditional continuum of services advocate a community-based continuum where totally segregated environments are eliminated but include a variety of options within the community which allow for some degree of interaction with individuals without disabilities (Taylor, 1988). Although the community-based continuum does not contain the more restrictive placement options, many of the conceptual flaws found with the traditional continuum remain (Taylor, 1988). Other interpretations of the principles of LRE suggest that a commitment to inclusion requires participation of children with disabilities in fully mainstreamed programs (Taylor, 1988).

Public school programs which do not provide general education to preschool children have a particular challenge when implementing LRE for preschool children with developmental delays (USDOE, 1993). Although states
reported to the Office of Special Education Programs (OSEP) that in school year 1988-89 they provided special education and related services to 84 percent of the 3-4 year olds in regular school buildings, the amount of interaction is questionable since most, if not all, of the other children were older.

The perception of many professionals, advocates, individuals with disabilities, and their families is that the provision of special education to students in segregated classrooms or environments is contrary to the underlying principles of LRE. Many individuals generally view the "pull-out" approach to providing special education services "as an acceptable option only when alternative approaches attempted in regular classes with the support of all needed personnel, curricula, equipment, and related services have been found to be ineffective or unfeasible" (Wang & Baker, 1986, p. 503).

Advocates for educating children with disabilities, (including preschoolers) with their nondisabled peers base their support on rationales which can usually be divided into three categories. Rationales for the inclusion of children with disabilities in classrooms with their non-disabled peers generally base their support on a legal-legislative argument, social-ethical argument, or a psychological-educational argument (Bricker, 1978). Proponents of the integration or inclusion of children with disabilities take the position that it is in almost all (if not in all) cases the least restrictive environment for the education of children.

Legislative Requirements

As a legal theory, the concept of LRE "may be the strongest argument
available to support the integration of people with disabilities into educational and other environments (Taylor, 1988, p. 47). Two basic requirements were initially written into The Education for All Handicapped Children Act (P.L. 94-142) and extended to 3-5 year-olds in Public Law 99-457 and maintained in the legislation when reauthorized by Congress (P.L. 101-476 and P.L. 102-119). First is the mandate for the provision of a free appropriate public education [FAPE] and second, for FAPE to be provided in the least restrictive environment (IDEA). The IDEA specifies that “each public agency shall ensure: 1) That to the maximum extent appropriate, children with disabilities ... are educated with children who are non-disabled; and 2) That special classes, separate schooling or other removal of children with disabilities from the regular educational environment occurs only when the nature or severity of the disability is such that education in regular classes with the use of supplementary aids and services cannot be achieved satisfactorily” (20 U.S.C. 1412, Section 300.550(b)(1)(2)).

Prior to the partial or full removal of students to segregated classroom placements, Congress attempted to provide the legal basis for the delivery of special education as a part of general education with the use of supplementary aides and services (Gallagher, Trohanis, & Clifford, 1989). The LRE mandate was important enough that Congress included in the Federal Register possible alternative methods for meeting the LRE requirements for preschool children for school districts who did not serve preschoolers without disabilities.

Evolving from court decisions and previous legislative acts, the mandates outlined in the IDEA demonstrate the legal preference for the placement of preschoolers in the most integrated or inclusive environment possible (Barnett,

**Legal-Legislative Rationale**

Evolving from court decisions and previous legislative acts, the mandates outlined in the IDEA demonstrate the legal preference for the placement of children with disabilities, including preschoolers, in the most integrated or inclusive environment possible (Bricker, 1978). Congress endorsed an appropriate education in an environment with non-disabled peers to the maximum extent possible in Section 504 of the Rehabilitation Act of 1973; the Developmentally Disabled Assistance and Bill of Rights Act of 1975 or DD Act; and the Education for All Handicapped Children Act (1975). Congress’ commitment to this principle has been reaffirmed in subsequent reauthorizations of these Acts. Furthermore, “appropriate” placements have included placement in the least restrictive appropriate program as a component of the definition (Gallagher, Trohanis & Clifford, 1989; Guralnick, 1990; Turnbull, 1986).

Judicial precedents set by the courts laid the foundation for Congress to include the LRE principle in its legislative acts and have subsequently served to help clarify the definition. Initially a civil rights issue, the landmark decision in
Brown v. Board of Education (1954), brought to an awareness level the negative effects of segregation and separation in schools (Stainback, Stainback, & Bunch, 1989). As stated in the court decision by Chief Justice Earl Warren, “separateness in education can generate a feeling of inferiority as to [children's] status in the community that may effect their hearts and minds in a way unlikely to ever be undone. This sense of inferiority...affects the motivation of a child to learn...[and] has a tendency to retard...educational and mental development” (p. 493). It became apparent from the Brown v. Board of Education case that the constitutional principles under the Fifth and Fourteenth Amendments of equal protection and due process were applicable to public education (Turnbull & Turnbull, 1978).

The first cases on the battlefield of racial desegregation of the schools found state-required or state-sanctioned racial segregation to be unconstitutional. As other successful civil rights cases challenged discrimination by the government against individuals because of “their unalterable personal characteristic (such as race or sex), as well as the rise of other “right to education” cases, the rights of individuals with disabilities gradually became established (Turnbull & Turnbull, 1978, p.13).

Another precedent impacting on later cases revolving around the education of children with disabilities is that education in separate facilities, as in the Brown (1954) case or “within the same school but in different tracks as in the Hobsen v. Hansen case [1966], is a violation of the individuals placed in such segregated settings” (Bricker, 1978, p.12).

Under the scope of the constitutional principles of due process, equal
protection, and liberty, the federal courts began in the late 1960s and early 1970s to address "the rights of children and adults with disabilities in schools and institutions" (Taylor, 1988, p.42) and to incorporate the principle of least restrictive environment into their rulings (Biklen, 1982; Taylor, 1988; Turnbull, 1982). Two cases are attributed to having a significant impact on the future of educating students with disabilities in the least restrictive setting: 1. the Pennsylvania Association for Retarded Citizens (PARC) v. the Commonwealth of Pennsylvania (1972) case and 2. the Mills v. the District of Columbia (1972) case. By acknowledging the right to a free public education in the least restrictive environment with guaranteed due process procedures for parents, PARC ensured the right of an education to children with mental disabilities who had previously been excluded from public schools. Closely paralleling the PARC case, the Mills v. the District of Columbia (1972) decision extended legal access to a free and equal public education to all school aged children with disabilities and clearly stated that a lack of funds is not an acceptable excuse for the exclusion of children from public schools. In addition, the Supreme Court underscored the congressional preference, thereby national policy, of providing services to individuals with disabilities in settings which are the least restrictive of personal liberties in their Pennhurst State School and Hospital v. Halderman (1981) decision (Taylor, 1988). Other landmark decisions influencing future placements of individuals with disabilities in less restrictive settings include Wyatt v. Stickney (1972); New York State Association for Retarded Children v. Carey (1978); and Wyatt v. Ireland (1981). In all of these cases, the courts upheld the constitutional right to the least restrictive possible circumstances
with the least intrusion or infringement upon individual rights (Taylor, 1988). This right has been further substantiated in the more recent court decisions of Daniel R.R. v. State Board of Education (1989); Oberti v. Board of Education of Borough of Clementon School District (1993); and the decision rendered in Sacramento Unified School District v. Holland (1994).

Clearly, judicial decisions and congressional mandates have proven to be strong arguments for educating children with disabilities to the maximum extent appropriate alongside non-disabled peers. Although some professionals have pointed out the discrepancy between the Supreme Court decision in the 1954 Brown v. Board of Education case, relative to the unconstitutionality of racial segregation and the acceptance of Congress for a continuum of services to include completely segregated placements and facilities, there is clearly a strong judicial and congressional preference for the least restrictive option (Sarason & Doris, 1979; Taylor, 1988).

**Social-Ethical Rationale**

In addition to the legal-legislative arguments for the inclusion of children with disabilities with their non-disabled peers, social-ethical considerations have also been used as justification (Bricker, 1978). Discussions have taken place regarding not only the social implications of segregating students with disabilities from their peers (including the most efficient and effective use of limited educational resources), but also societal attitudes of individuals with disabilities. As a philosophical outgrowth of concern ensued about individual civil rights and the less restrictive, more natural, integrated educational
environment, child advocates also believe that the benefits derived from these settings are considerably greater than those possible in non-integrated environments (Jenkins, Speltz, & Odom, 1985).

Educational settings not only affect academic performance, but also have an impact on the social and emotional development of children (Leinhardt & Pallay, 1982). This is particularly important for preschool children. Appoloni and Cooke (1975) contended that peer play and interaction may be essential to normal growth and development of the attitudes and behaviors of young children. Others have established that developing meaningful and productive relationships with peers during early childhood is an essential skill (Garvey, 1986; Hartup, 1989). The documented benefits of positive peer relationships during the preschool years have included language and communicative development, social-cognitive development, development of pro social behaviors, and the socialization of aggressive tendencies (Guralnick, 1990; Rubin & Lollis, 1988). In addition, some adjustment problems in school age children have been associated with difficulties during early childhood in establishing appropriate peer relations (Guralnick, 1990; Parker & Asher, 1987).

In settings where children with disabilities are educated with non-disabled peers, development has been linked to the opportunity for children with disabilities to model appropriate social behaviors (Cooke, Apolloni & Cooke, 1977; Devoney & Guralnick, 1990; Dunlop, Stoneman, & Cantrell, 1980; Guralnick & Groom, 1988a; Guralnick, & Rabin, 1974; Karnes & Zehrbach, 1977). Opportunities for teachers and non-disabled children in classrooms, comprised of children with and without disabilities, include learning about
children with disabilities and learning to be tolerant of individual differences (Guralnick, 1974; 1990; Hobbs, 1975; Karnes & Zehrbach, 1977; McHale & Simeonsson, 1980; Voeltz, 1980; 1982). The contention of those who recognize the benefits of educating children with their non-disabled peers has been that the influence of peer interaction can only take place if children are given the opportunity to observe and have contact with one another.

A variety of studies have been implemented to examine the social outcomes of children with and without disabilities who are educated together in integrated programs. The Collaborative Education Project examined the social and academic outcomes for all children in an inclusive elementary school (Salisbury, 1991). The documented positive social and academic outcomes for all children were attributed to the increased sense of equity among children and the successful identification of solutions to inclusion obstacles (Salisbury, 1991; Salisbury, Evans, Palombaro, & Veech, 1990).

The examination of social outcomes of preschoolers with and without disabilities have supported the positive outcomes found in the Collaborative Education Project at the elementary school level. One of the social outcomes examined in several preschool studies has been friendships. A study conducted by Buysse (1993) explored issues related to friendship among 58 preschool children with disabilities who were placed in 27 “typical child care centers.” Based on the reports from parents; 79% had developed mutual friends by the end of the year, 10% had unilateral relationships, and 10% of the children had no friendships or unilateral relationships. Based on teacher reports, 55% had mutual friends, 19% had unilateral relationships, and 26%
had no friends or unilateral relationships. Although there were perception differences between the parents and teachers, both groups perceived the majority of the children to have at least one mutual friend. Although the proportion of preschoolers with disabilities found to have mutual friends is higher than that found in earlier studies, results support the conclusions that higher percentages of children with disabilities having mutual friends exists in inclusive preschool environments than in those environments without inclusion (Buysse, 1993; Field, 1984; Guralnick & Groom, 1988; Roopnarine & Field, 1984).

In addition to friendships, another outcome of integrated preschool environments has been the opportunity for more social interactions to take place. Upon examination, the integrated environments have been found to be socially and communicatively responsive and stimulating to children with disabilities (Guralnick, 1984; 1990; Guralnick & Paul-Brown, 1980; Strain, 1984; Strain & Odom, 1986). Children without disabilities were found to adjust their interactions and language as appropriately necessary when interacting with peers with disabilities (Guralnick, 1984; Guralnick & Paul-Brown, 1980). Social outcomes in integrated environments versus segregated environments for children with disabilities have included more frequent social behavior such as cooperative play (Jenkins, Speltz & Odom, 1985); increased acceptance by and greater social involvement with non-disabled children (Ispa & Matz, 1978; Leonoff & Craig, 1989); and less adult directed activities for children (Guralnick & Groom, 1988). Children with mild disabilities chose to interact with same age non-disabled peers over others in the classroom and subsequently engaged in
much higher rates of peer related social interactions and constructive play when compared to similar children in segregated settings (Guralnick, 1980; Guralnick & Groom, 1988). Children with moderate and severe disabilities interacted with all children within the integrated settings (Guralnick, 1980).

In a study of the differences in growth across developmental areas between children placed in integrated and nonintegrated environments, Jenkins, Speltz and Odom (1985) found significant gains evident in children from both types of programs. Although gains were documented in all areas, of the developmental areas assessed, social play scored significantly higher for children in the integrated settings when compared to children in segregated environments. Additionally, studies finding that parents perceived increased positive social interaction in integrated environments have supported the findings of studies conducted which documented increased social interaction (Reichart, Lynch, Anderson, Svobodny, DiCola, & Mercury, 1989).

Although the social skills of preschoolers and other children with disabilities have been found to be significantly improved and peer interaction increased when educated in integrated environments, the social skill deficits have not been eliminated (Guralnick, 1990; Guralnick & Groom, 1987). Seemingly due to remaining deficits in peer social competence, there is some indication that children with disabilities are sometimes perceived by other children as lower in social status and consequently interacted with less by nondisabled peers (Appoloni, Cooke, & Cooke. 1977; Beckman, 1983; Guralnick & Groom, 1987). Other studies of attitudes have found that the attitudes of children with disabilities by their peers in integrated settings were more negative than those
by children who had little or no interaction with peers with disabilities (Burstein, 1986; Honig & McCarron, 1988; Novak, Olley, & Kearney, 1980). Others have documented evidence of strained relationships and social separation within the classroom (Cavallaro & Porter, 1980; Guralnick & Groom, 1987; Guralnick & Paul-Brown, 1989; Jenkins, Speltz, & Odom, 1985).

Where studies do exist suggesting negative social effects of educating children with and without disabilities together, several explanations have also been provided noting the differences in outcomes of the various studies. One primary factor noted was the proportion of children with disabilities to those without. Upon closer examination, some researchers concluded that more negative outcomes were evident in studies of classrooms with larger proportions of children with disabilities and that they were often placed with non-disabled children who were considerably younger than themselves (Guralnick, 1990; Guralnick & Groom, 1988). Guralnick and Groom (1988) attributed the negative outcomes in some of the earlier studies to the fact that the number of children with disabilities in the classroom far out-weighed the other children, therefore impacting adversely upon the level of social relationships. Leanonoff and Craig (1989) also found a difference in the attitudes toward children with disabilities when comparing full and partially integrated programs. An increased acceptance and liking of children with disabilities by non-disabled classmates and greater social involvement between the two groups took place over time; however, this interaction was only apparent for children who participated in the fully integrated programs. The finding by Leanonoff and Craig (1989) supported similar results of earlier studies (Field,

Another conclusion documented in the literature is the belief that physical proximity by itself is not enough to result in the significant benefits documented (Gresham, 1984; Jenkins, Speltz, & Odom, 1985). Programmatic factors such as classmates similar in chronological age and specific programming to promote peer interaction are believed to be necessary to promote social integration and the resulting significant positive outcomes (Allen, 1980; Cooke, Ruskus, Appoloni, & Pick, 1981; Guralnick & Groom, 1988; Hundert & Houghton, 1992; Jenkins, Speltz, & Odom, 1985; Karnes & Lee, 1979; Leinhardt & Pallay, 1982; Meyen & Lehr, 1980; Odom & McEvoy, 1988; Vincent, Brown, & Getz-Shaffel, 1981).

It is clear that proponents who base their reasons for serving children with disabilities (including preschoolers) in educational environments alongside non-disabled peers, do so on the social-ethical grounds and social outcomes. While some argue that if we want a society in which everyone is considered to have equal worth and equal rights, there is no justification for segregation in education (Stainback, Stainback, & Bunch, 1989; Stainback, Stainback, & Forest, 1989). Others caution that although integrated programs may be an avenue for more efficiently using existing resources to provide all children with more effective educational programs (and may improve outcomes for children with disabilities), if such programs are not implemented with careful programmatic considerations, the rights of more able children may be violated (Bricker, 1978; Scriven, 1976).

The findings of the vast majority of research studies have concluded that
integrated educational settings appear to be supportive of naturally occurring social interactions between children with and without disabilities. Investigators have also determined that having the opportunity to interact with non-disabled peers allows for observational learning of more appropriate social behaviors; the development and engagement of higher levels of play; higher expectations of appropriate social and play behaviors and that gains in social and play skills are maintained (Guralnick, 1984; 1986a; 1990; Kohler & Strain, 1990; Sebba, 1983; Strain & Odom, 1986). Moreover, more recent research suggests that although nonschool contacts of children with their peers typically continue to increase across the years, nonschool contacts for young children with disabilities stay substantially limited (Lewis, Feiring & Brooks-Gunn, 1987; Stoneman, Brody, Davis & Crapps, 1988). Subsequently, from a social perspective, the time in school for children with disabilities becomes even more important.

**Psychological-Educational Rationale**

Psychological-educational considerations provide a final rationale for educating preschoolers with and without disabilities in inclusive programs (Bricker, 1978). Theoretically, the argument has been that exposure to peers who are developmentally advanced could substantially contribute to the acquisition of skills by children with disabilities (Bricker, 1978; Odom & McEvoy, 1988). Proponents contend that through placement in environments that are more cognitively and linguistically advanced, children with disabilities are given the opportunity to model behaviors through observational learning.
consequently acquiring more advanced skills (Bricker, 1978; Bricker & Sandell, 1979; Guralnick, 1981c; Karnes & Lee, 1979; Odom & McEvoy, 1988; Turnbull, 1982).

Studies conducted to examine the development of young children have found that the processes which occur in integrated educational environments are highly supportive of the developmental growth of children with disabilities (Guralnick, 1986a; Guralnick & Groom, 1988). Other studies have documented that children with and without disabilities have learned to interact, communicate, and work with each other, and to assist peers relative to their individual strengths and needs (Goldstein & Wickstrom, 1986; Forest, 1987; Stainback & Stainback, 1988; Stainback, Stainback, & Bunch, 1989; Strully, 1986). When conducting a meta-analysis of 10 years of studies examining the effects of integrated or inclusive educational placements, Wang and Baker (1986) found that "mainstreamed disabled students consistently outperformed nonmainstreamed students with comparable special education classifications" (p. 504). Furthermore, other studies have demonstrated that all students can be given the opportunity to achieve their potential within integrated educational environments if the programs are individualized to meet students' needs and incorporate cooperative learning programs (Berres & Knoblock, 1987; Certo, Haring, & York, 1984; Madden & Slavin, 1983; Stainback & Stainback, 1985; Stainback, Stainback, & Bunch, 1989).

When investigating children with disabilities placed in preschool programs with nondisabled peers, Bricker and Bricker (1971; 1972; 1973) found scores on standardized intellectual measures showed significant yearly gains across a
three year period for preschoolers with disabilities. Similar gains were
duplicated in later studies conducted by Bricker and Sandall (1979) and Bricker
and Sheehan (1981). Whereas significant improvements in standardized
scores were demonstrated, the results help substantiate the development of
preschoolers with disabilities when educated with nondisabled preschoolers.

In some studies examining the outcomes on children with disabilities, the
outcomes of children without disabilities were also examined. In programs
where children with and without disabilities are educated together, there has
been no documentation that detrimental effects on the non-disabled children
have occurred. When examining the development of children without
disabilities, data collected indicated that development progressed as expected
or better without any regression noted (Bricker & Bricker, 1971; 1972; Bricker,
1978; Cooke, Ruskus, Peck, & Apolloni, 1979; Guralnick, 1976; Odom, Deklyen,
& Jenkins, 1984).

Although most studies have found a significant increase in the
developmental skills and behaviors of preschoolers with disabilities who have
been educated in settings with non-disabled peers, there has generally been
minimal or no significant differences when compared to the development of
children with disabilities in segregated settings (Cole, Mills, Dale, & Jenkins,
1991; Cooke, Ruskus, Apolloni, & Peck, 1981; Ispa & Matz, 1987; Jenkins,
In addition, data in some studies demonstrating that the cognitive and language
gains by children with disabilities were relative to the severity of disability (less
disabled children having greater gains than more disabled children) is also

In conclusion, of the three primary rationales: legal-legislative, ethical-social and psychological-educational used for placing preschool children with disabilities in programs, the psychological-educational argument appears to be the least supported by empirical evidence (Taylor, 1988). Although clear documentation exists showing significant developmental growth for children with disabilities when placed in educational environments with non-disabled peers, a large majority of children with disabilities do not demonstrate more developmental growth than when placed in segregated educational settings.

Summary

There is clear evidence which supports the placement of children with disabilities in educational placements with non-disabled peers. The decisions of Congress have been reinforced by a variety of court decisions. A wide variety of studies have examined the outcomes to determine the efficacy of such placements and the effects on children with and without disabilities. Positive social and developmental outcomes for children both with and without disabilities are evidenced in the preponderance of the research. However, growth in children with disabilities does not appear to be solely related to physical integration in classrooms with non-disabled peers. It is evident from the research conducted that the presence of effective teaching practices to promote social integration of students and facilitate growth across all developmental areas is extremely important (Allen, 1980; Guralnick, 1990;
Leinhardt & Pallay, 1982). It is also evident that the variables needed for positive student outcomes can occur in most settings, including classrooms where children with and without disabilities are educated together (Leinhardt & Pallay, 1982). When effective teaching strategies are present so that the individual needs of students can be met within the context of integrated environments, students have been shown to demonstrate significant growth. If children are not harmed by their placement, and the educational benefits are at least equal to those in non-integrated placements, those arguing for integrated or inclusive environments contend that inclusion is the least restrictive environment (Bricker, 1978; Jenkins, Odom, & Speltz, 1989; Strain, 1990; Thousand and Villa, 1990). If the individual needs of a student cannot be met within the integrated setting, then a more restrictive setting may be the least restrictive environment for a student to receive a free appropriate public education as mandated in the Individuals with Disabilities Education Act.
METHOD

This chapter delineates the procedures used to investigate the implementation of several local education agency requirements of the Individuals with Disabilities Education Act. Preschool special education services implemented by school systems in North Carolina were the focus of this study. The selection of participants, procedures for data collection and description of how the data were analyzed will be outlined in this chapter.

PARTICIPANTS

The subjects chosen for participation in this study included all 132 North Carolina school districts. Of the 132 school districts, 129 were public school districts under the direction of the the North Carolina Department of Public Instruction, two were systems on military installations which are under the direction of the Department of Defense, and one school system is under the direction of the Bureau of Indian Affairs. Within each school district, the person designated as the Director of Exceptional Children's Programs was used as the source of information.

A comparison between Section 6 school districts operated by the Department of Defense in North Carolina and their comparable districts made up the second series of analysis. The Section 6 schools were the school systems located at Camp Lejeune Marine Corps base and Ft. Bragg Army base. The "comparable districts" included the five school districts in North Carolina which are used by each of the two Section 6 school systems for their
comparability data reports sent to the Section 6 Headquarters. Required comparable districts include the school system in which the state capital is located and the school system contiguous to the military installation where the Section 6 school system is located. Each system has the flexibility of choosing three additional systems in the state which are similar in school district size. Whereby the three school systems chosen by both Section 6 school systems were the same, the only difference in the five districts used by each was the system which was contiguous to each base. Subsequently, the "comparable districts" used for the purposes of this study included the four districts used by both Section 6 school systems and the additional two school districts contiguous to each base. The six school systems used in this study for comparability with the Section 6 school systems included: 1. Wake County (capital of North Carolina is located in this county); 2. Chapel-Hill - Carrboro (used by both); 3. Shelby City (used by both); 4. Asheville City (used by both); 5. Onslow County (contiguous to Camp Lejeune); and 6. Cumberland County (contiguous to Ft. Bragg).

**DATA COLLECTION**

Data were collected utilizing a survey design (Appendix A). The purpose of the information gathered was to illustrate each school system's implementation of services for children with disabilities, 3 through 5 years old, through surveys to the Director of Exceptional Children's Programs for each school system. All survey questions pertained to school year 1992-93.
PROCEDURES

The initial proposed study for this project was a comparative analysis between Camp Lejeune Dependents school system operated by the Department of Defense and five comparable school systems. A comparison of the implementation of special education services for eligible preschoolers with disabilities was planned. Following the field testing of the questionnaire, the actual project was changed to examine the provision of related services and the restrictiveness of settings for preschoolers with disabilities by all school systems in North Carolina.

Field Test of Instrument

Prior to the implementation of the formal survey study, a field test of the instrument was conducted. The purpose of the field test was to obtain feedback regarding the survey instrument itself and to use a small sample to assure that data collected from the surveys would be beneficial in analyzing differences in implementation between school systems. The proposed study at the time of the field test was a comparative analysis of preschool programs for children with disabilities between one Department of Defense federal school system in North Carolina and its' five comparable districts.

The participants in the field test were the Directors of Exceptional Children Programs and all teachers and therapists working with preschool children receiving services. Three school systems were chosen for the field test which were not intended to participate in the study. Two of the school systems in the field test were Federal Section 6 school systems, one in North Carolina and the other in South Carolina. The other participant was a public school system in
North Carolina. All individuals involved in field testing the survey were asked to complete the survey and to identify confusing or difficult questions and/or instructions. They were also asked to specify how long it took to complete the survey. There was a 100% response rate from participants from all three systems.

The intent of the surveys was to gather information regarding a variety of local education agency implementations of programs for 3-5 year old children, with disabilities. Six areas were surveyed including: 1. special education and related services, 2. transition, 3. assessment, 4. child find activities, 5. least restrictive environment, and 6. parent involvement.

Field test returns suggested that some information included would not be different between districts, particularly if only six school districts were to participate in the study. The answers to questions regarding transition, assessment, and parent involvement did not differ between school systems. The areas which illustrated differences between districts included special education and related services, and the restrictiveness of location when these services were provided.

As a result of the field test, several items were reworded and modified to improve clarity. Questions were redesigned based on comments of ambiguity or confusion from respondents. Questions were deleted relating to areas where differences were not evident between district responses, and some questions revised where differences were illustrated. The focus of the project was narrowed to the primary areas of related services and least restrictive environment. The selection of participants of the project was broadened to
include all school districts in North Carolina.

**Data Collection**

A. Surveys were mailed to each of the 132 Exceptional Children Program Administrators of the school systems in North Carolina (See Appendix A). Each survey was number coded per school system in order to monitor returned surveys. An introductory letter and coded self-addressed stamped envelope accompanied each survey. Participants were asked to complete the survey and return it in the self addressed envelope.

B. Three weeks following the mailings, a follow-up letter was sent to all Directors from whom a survey had not been received (as indicated by coded surveys).

C. Three weeks following the mailings of follow up letters, a copy of the survey with a follow up letter and self-addressed stamped envelope was sent to any Director from whom a survey had not been received (as indicated by coded surveys).

D. A final copy of the survey and follow-up letter was sent to all non-respondents four weeks after the mailing in Phase 3.C.

E. Following the receipt of the surveys from administrators, follow-up phone interviews were conducted if there were responses on the written questionnaire needing clarification.

**DATA ANALYSIS**

As surveys were received by the researcher, the data were entered into a computer spreadsheet program (ClarisWorks). Before entering the information
on the spreadsheet, all answers on the survey were coded. A process was implemented to review all coded answers on the spreadsheet to assure the accuracy of the codes entered. The spreadsheet was then reduced to include only those responses to questions used in the analysis, and copied into several different documents for the various types of analysis which would take place. The different documents included: 1) all districts in North Carolina; 2) the districts designated as "large"; 3) the districts designated as "medium"; 4) the districts designated as "small"; 5) the Section 6 schools data; and 6) the Section 6 school’s comparable districts information. Mathematical formulas were implemented within each document for each question to derive descriptive data regarding the percentages of districts having particular responses. Analyses were completed on the various spreadsheet codes of survey responses to questions to compare responses between the different groups of districts regarding the requirements of special education, related services and the provision of services in the least restrictive environment. The descriptive information obtained was in the form of percentages of districts with various responses.

The division of school districts into size categories was accomplished by taking the total student membership in the state public schools as reported in the 1994 Statistical Profile of North Carolina Public Schools (1994, NCDPI) and the final 1993 school year membership listed for the three federal school districts as reported in the 1993-94 North Carolina Education Directory (1994, NCDPI). The school systems were then ranked from 1 to 132 according to size of student population. The largest system was number 1 and the ranking
continued to the district with the smallest student population. With a total student membership of 1,106,854, the list was then separated by including the largest districts with approximately 24% of the total student population making up the group designated as large districts. The next districts which encompassed approximately 50% of the total student population made up the medium size group, and the last districts on the ranking were designated as the small district group, with approximately 26% of the total student population.

Results obtained comparing responses between school systems participating in this study, are outlined in Chapter 4. Data are presented demonstrating differences in the provision of related services and the provision of services in the least restrictive environment. The results will be illustrated using percentages of school districts within various groups. Analysis procedures should determine if differences in implementation between the school systems participating in the study are related to the size of the system. Whether differences exist in the implementation of the requirements between the federal Department of Defense school systems and the North Carolina Public Schools systems designated as comparable systems will also be determined.
RESULTS

Of the 132 school districts in North Carolina, 108 responded to the survey sent to Exceptional Children Program Administrators for a total response rate of 82%. Of the responding districts, 105 are public schools under the direction of the North Carolina Department of Public Instruction. Two of the remaining districts are located on Federal Military Installations under the direction of the United States Department of Defense and are referred to as "Section 6" school systems. The final district is a federal school system falling under the direction of the Bureau of Indian Affairs.

For the purposes of this investigation, all school systems in North Carolina were divided into large, medium and small districts for one series of data analysis. Additionally, for another series of the analysis, district information was sorted and analyzed for comparisons between the two Section 6 Department of Defense school districts and their “comparable districts” as required in the federal law.

When the school systems in North Carolina were divided into small, medium and large districts, there were five districts included in the large group. The student population for the five districts totaled 264,513 with student populations ranging from 79,741 to 29,083. There was a 100% return rate on the surveys sent to the large school districts. The forty-two districts in the medium group had a student population of 551,487 with populations ranging from 27,143 to 7,077. The return rate from this group was 83% with thirty-five responses returned. The population of the eighty-five remaining districts
included in the small district group totaled 290,845 with student populations ranging from 6,822 to 744. Sixty-eight districts within this group returned surveys. The overall response rate was 80%.

NORTH CAROLINA SCHOOL DISTRICTS

Provision of Special Education Services

When examining the provision of special education by school districts in North Carolina, all districts indicated that special education services under IDEA were provided to all eligible preschool children. Although approximately 10% of the school districts had provided services to all preschoolers with disabilities for more than 6 years prior to the date of this study, the majority of districts, across all three size groups, had provided the services for only two years beginning in school year 1991-1992. Although the majority of districts had only provided special education services to all preschoolers qualifying under IDEA for the past two years, 40% of the districts had provided services to some preschoolers for 3-5 years, with 15% of the districts providing services for some children for as long as 12-19 years. The group of preschoolers who appear to have had services for the longest period of time are children with vision and/or hearing impairments.

Upon examining whether or not school systems provided special education services to all preschoolers with disabilities, the responses to the survey questions indicated that not all districts provided all special education services to all eligible children. Approximately 17% of the districts indicated that they
were not providing services to all eligible children. The services rendered were provided directly by the school system or through a contractual arrangement with outside agencies. It appears that the most often used contractual arrangement for special education services was with developmental day centers serving children with severe and profound disabilities. Other children received services by agencies outside of the school system (the most obvious being Head Start, with 73% of the districts having children with disabilities placed in Head Start programs).

Although all districts reported that all preschoolers in need of special education received special education services, not all districts actually conducted preschool classes for children with disabilities. Approximately 14% of the districts did not conduct preschool classes for children with disabilities. While 43% of districts implemented full time (more than 20 hours a week) classes, 21% conducted part time classes (20 hours or less a week) and 21% had a combination of part and full time classes.

**Provision of Related Services**

Whereas all school systems in North Carolina reported that all preschoolers who qualified under IDEA received special education services, not all districts provided therapy services to all students who required such services during school year 1992-93. Of districts not able to provide therapy services to preschoolers who were eligible, the most reported therapy not provided was occupational therapy. Twenty-two percent of the school systems were unable to provide occupational therapy to the extent needed.

The second most reported therapy not provided was physical therapy, with
15% of the districts reporting an inability to provide physical therapy to everyone.

Although the lack of speech therapy services was not as critical as physical and occupational therapy, 8% of the systems were still not able to provide this service to students in need. The primary reason school districts reported an inability to provide therapy services to all preschoolers was due to a shortage of personnel. Only 2 districts reported both the shortage of therapists and funds as the reason for not providing needed therapy services. The lack of speech therapy services in large districts constitute the greatest discrepancy between district sizes in the provision of all therapies. Figure 1.0 illustrates the differences between the different size districts in their inability to provide therapy services to preschoolers with disabilities.

**Location of Services**

In addition to gathering information regarding the length of time school systems have provided services and what types of services are provided to eligible preschoolers under IDEA, the location of services was also examined. Services including, but not limited to, preschool education and speech, physical and occupational therapy were provided by the school systems in a variety of settings. These settings included elementary schools, developmental day centers, child care centers, Head Start programs, home-based and general education preschool environments. The environment in which the lowest percentage of districts provided all services, including preschool education, was the general education preschool setting. The highest percentage of districts provided all services, with the exception of speech therapy, in
Figure 1.0

North Carolina School Systems Not Able To Provide All Needed Therapy Services

N=108
elementary schools. Services were provided 32-42% more in elementary schools than in general education preschools. Speech therapy was provided by most districts in Head Start and child care settings. The information in Figure 2.0 illustrates the location of services reported for all districts.

When examining the variance in the locations of services provided by school systems across district sizes, several observations are evident. One is the fact that preschool education was provided in general education preschool settings by 20% more small than large school systems and by 5% more small than medium systems. Not only did more small districts provide preschool education in general education preschool environments, a higher percentage also provided all therapy services in these settings than by the other two sized districts. All large school districts provided preschool education, speech, physical and occupational therapy within elementary schools and developmental day centers. Elementary schools were used by up to 53% less small and up to 34% less medium districts than large systems for providing services. Developmental day centers were used by up to 50% less small and 54% less medium districts as compared with the percentage of large districts that provided services in that setting. Although not used by 100% of all large districts for all services, child-care centers and children's homes were locations for the delivery of services by more large districts than small and medium districts. Table 1.0 illustrates the percentage of each size district which used each location for providing preschool education and therapy services.

For districts with preschool classes, a variety of types of classes were evident across systems. The majority of classes for preschoolers with disabilities were
Figure 2.0

Location of Preschool Programs and Services By All North Carolina School Districts.

N=108
Table 1.0

Location of Preschool Services For Different Size School Districts In North Carolina. (N=108)

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in self-contained classrooms consisting only of children with disabilities. The substantially higher percentage of self-contained classrooms was evident across all district sizes. The second most common type of classroom was comprised of students who were disabled and those considered at-risk. Figure 3.0 illustrates the percentages of districts with various types of classrooms for preschoolers with disabilities across all districts, as well as a comparison between different size school systems.

Within the preschool classes, the proportions of disabled students to the other students in the class were similar across districts sorted for size. The percentages for classes of children with disabilities and at-risk children were almost 50% for each group in small districts, but there was a higher percentage of at-risk children in classrooms in medium districts (see Figure 4.1). Classes which included at-risk children consisted of children who were identified and served through the Chapter 1 preschool program and children identified under IDEA. None of the large districts had preschool classes with both children with disabilities and at-risk children.

Small and medium size school districts were also the only districts having classes of children with disabilities and without disabilities. The medium size districts had an equal proportion of each type of student while the smaller districts had a much larger proportion of children without disabilities in classrooms (see Figure 4.2).

Small districts were the only districts with classes having a combination of students with disabilities, at-risk students and non-disabled students. The general proportions of the students were 25% with disabilities, 25% at-risk,
Student Populations in North Carolina Preschool Classes for Children With Disabilities.

N=106
Figure 4.1

Proportions of Students in North Carolina Preschool Classes Consisting of Both Children With Disabilities and Children Identified as At-risk.

N=108
Figure 4.2

Proportions of Students in North Carolina Preschool Classes Consisting of Children with Disabilities and Non-Disabled Children.

N=108
and 50% who were non-disabled.

Finally, all the district groups had a small percentage with a variety of types of preschool classes within their district. Of the large districts, 20% had a combination of different types of classes, while 3% of the medium and 6% of the small districts had combinations of different type classes. Self-contained classrooms were included in the types of classes these districts implemented.

**Interactions with Students Who Are Not Disabled**

As reported earlier, there was a low percentage of school districts with preschool classes for students with disabilities incorporating non-disabled preschoolers. Table 2.0 provides information regarding the percentage of districts with preschool classes which were not self-contained.

**Table 2.0**

**North Carolina Preschool Classes Which Were Not Self-Contained.**

<table>
<thead>
<tr>
<th>Types of Students in Class</th>
<th>All %</th>
<th>Large %</th>
<th>Medium %</th>
<th>Small %</th>
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<td></td>
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<tr>
<td>Disabled / At-Risk</td>
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<td>0</td>
<td>5.88</td>
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<td>0</td>
<td>1.85</td>
</tr>
<tr>
<td>Disabled / Non-Disabled</td>
<td>5.38</td>
<td>0</td>
<td>5.88</td>
<td>5.56</td>
</tr>
</tbody>
</table>

For districts having classes where students with disabilities were educated with students who did not have disabilities, the opportunity to interact with non-disabled peers existed for the entire school day. On the other hand, for students who did not attend preschool classes with peers who were non-disabled, the
percentage of the school day in which they interacted with other students was substantially lower. The highest percentage of the school day that students in these types of classes had the opportunity to interact with non-disabled peers was 15%. Figure 5.0 shows the mean percentage of interaction during school hours when preschoolers with disabilities in preschool special education classes had an opportunity to interact with other young children who did not have disabilities.

SECTION 6 SCHOOLS AND COMPARABLE DISTRICTS

Provision of Special Education Services

Data collected in this study were sorted for a second series of analysis. The two Section 6 school systems operated by the Department of Defense and each of their five comparable districts in North Carolina were examined to look at possible differences in the implementation of preschool services for children with disabilities. Because four of the five comparable districts used by each Section 6 school system were the same, the analysis examined the two Section 6 school systems in comparison with these four districts and the additional school district used by each of the Section 6 school systems as comparable districts. The one system that varied between the two Section 6 schools was the inclusion of the school district contiguous to each of the military installations where the school systems are located.

All eight of the school systems used for this series of analysis indicated that special education services for preschool children with disabilities found
Figure 5.0


N=108
eligible under IDEA was provided. While one of the Section 6 school systems provided all preschool services for three years and the other one for two years, 67% of the comparable districts provided all services for preschoolers for two years and 17% provided services for three years. One school district in the comparable district group indicated that preschool services had been provided for 12 years.

When examining the length of preschool classes implemented by the two groups, a considerable difference was noted. While both of the Section 6 school systems offered a combination of full and part time options for preschool classes for children with disabilities, the comparable districts were distributed across the various possibilities. Part time classes were offered by 17% of the comparable districts while another 17% did not have preschool classes for children with disabilities. An equal percentage of 33% districts provided full time classes along with a combination of full and part time classes.

**Provision of Related Services**

Although both Section 6 school systems and their comparable districts indicated that preschool education was provided to all eligible children with disabilities, not all systems provided all therapy services needed by preschoolers in school year 1992-93. As illustrated in Figure 6.0, both of the Section 6 schools indicated that they provided all therapy services to preschoolers who required the service. The shortage of personnel to provide the necessary services was the reason given by the other districts explaining why occupational and speech/language therapy services were not provided to all preschoolers who had such services listed on their IEPs.

73
Figure 6.0

Therapy Services Provided by Section 6 Schools and Comparable Districts

N=8
Interaction With Children Without Disabilities

When determining the amount of time during school hours preschoolers with disabilities interact with other young children without disabilities, there first needs to be a description of the types of students in the classes for preschoolers with disabilities. A higher percentage of districts in the comparable group have self-contained classes comprised only of preschoolers with disabilities as well as a higher percentage of districts with combinations of types of classes, including self-contained. The students in the classes illustrated in Figure 7.0 under “Disabled and Non-disabled” classes interact with non-disabled students across the entire school day.

The amount of time outside of the classroom was used to calculate the mean percentage of the school day during which preschoolers with disabilities had an opportunity to interact with non-disabled children. Subsequently, if non-disabled students were in district classrooms with preschoolers with disabilities, those particular districts were not used in the calculations. Districts with a combination of types of classrooms, including self-contained options, were also excluded due to the inability to accurately reflect amount of time of interactions with non-disabled peers. The one Section 6 school district having self-contained classrooms for preschoolers with disabilities indicated that there was no opportunity for those students to interact with preschoolers determined to be at-risk, non-disabled preschoolers, or kindergartners. On the other hand, the comparable districts had a mean percentage of 9% of the school day to interact with at-risk preschoolers, 3% of the day to interact with non-disabled peers, and 4% of the school day to interact with kindergartners.
Figure 7.0

Populations of Students in Classes for Preschoolers With Disabilities in Section 6 Schools and Comparable Districts.

N=8
Perceptions of Program Areas By School Districts

In addition to examining the specific research questions outlined in Chapter 1, it was requested that the person completing the survey provide his/her perceptions regarding various program areas of his/her districts' preschool program for children with disabilities. Respondents were asked to rate each program area from 1 to 5, with 1 being poor and 5 being excellent. In the majority of cases the special education program administrator was the person who completed the survey. In some instances, the person responsible for the preschool program under the direction of the program administrator completed the form. In several small districts, the preschool special education teacher completed the survey.

Figures 8.1 and 8.2 present the perceptions of the person completing the survey reporting his/her district's preschool program areas of related services and least restrictive environment. As to the provision of related services, 59% more districts rated themselves overall as "very good" or "excellent," than the percentage of districts rating themselves as "good", "fair", and "poor" combined. More large districts rated themselves as poor (19% more) in this area than either the medium or small districts. Small districts rated themselves in the "very good" and "excellent" range 24% more often than large districts and 35% more than medium districts.

When examining the perceptions of the issue of least restrictive environment, several outcomes are worth noting. While no large district rated least restrictive environment as "excellent", 11% of the medium districts did as well as 35% of
Figure 8.1


N=108
Figure 8.2
North Carolina School District Personnel Perceptions of Implementation of The Least Restrictive Environment for Services for Preschoolers with Disabilities.

N=108
the small districts. When looking at the combination of "very good" and "excellent" ratings, 26% more small districts' ratings fell in this range in comparison with large districts and 23% more than the medium size districts. None of the school districts perceived themselves as being "poor" in this area.

Summary

In summation, data which were obtained from surveys sent to the special education program administrator for each school district in North Carolina were analyzed for a variety of comparative information. Initially, the data from all responding school systems were analyzed to examine if any differences were evident between small, medium and large school systems. Possible differences in the provision of special education, related services and restrictiveness of settings were examined. A second component to this investigation was to sort the data from two school systems under the direction of the Department of Defense and their 5 comparable school districts to conduct a comparison between their provision of preschool services for children with disabilities.

Although all school systems in North Carolina indicated that all eligible preschoolers under IDEA received special education either by the school district or another agency, not all children were provided the therapy services needed. The primary reason cited for the lack of services was the personnel shortage. Occupational and physical therapists were the most difficult specialists to find to provide the services required by preschoolers. When comparing the provision of these services between school systems in North Carolina operated by the Department of Defense and their comparable public
school districts, the Section 6 schools were able to provide all required therapy services whereas occupational and speech therapy were not provided, as necessary, by all of the comparable districts.

Another finding of this study was that the majority of preschool classes for children with disabilities implemented by school systems in North Carolina were self-contained and provided the opportunity for a maximum of 15% of the school day to interact with non-disabled children. Small school systems had the highest percentage of districts with preschool classrooms where children with disabilities were educated with non-disabled children. Small districts also had the highest percentage of opportunities within the school day for children in non-integrated classrooms to interact with non-disabled children.

Within the Section 6 schools and their comparable districts, the Section 6 schools were split, with one having inclusive classrooms with children with and without disabilities, and one with self-contained classrooms. The district with self-contained classrooms had no opportunities for the children to interact with non-disabled children within the school day. Within the group of comparable districts, the majority had self-contained classrooms with a 9% opportunity for interaction with at-risk children, and a 3% opportunity for interaction with non-disabled children. There was one comparable district with integrated classrooms of children with and without disabilities and one district with a variety of types of classrooms, including self-contained.

The final outcome of this study examined the perceptions of the person completing the questionnaire (usually the special education program administrator) relative to his/her district’s provision of related services and the
issue of least restrictive environment. They were asked to rate these two program areas relative to the preschool program for children with disabilities. On a five point scale, the majority of districts gave themselves the highest two ratings for both areas. When comparing small, medium and large districts’ ratings, a higher percentage of small districts rated themselves in the very good to excellent range.

In conclusion, some differences were noted between small, medium and large school systems in the implementation of preschool services for children with disabilities. The most notable difference was the implementation of all services by a higher percentage of small school districts in less restrictive settings for children with disabilities. Not only were services implemented by a higher percentage of small districts in less restrictive settings, for those students in self-contained classrooms, the opportunity for students with disabilities to interact with non disabled peers was available for a higher percentage of the school day.

Additionally, while differences between the Section 6 schools and their comparable districts were not as apparent, there were some differences noted. One of the differences between these two groups of school systems was the ability to provide the necessary therapy services to all preschoolers in need. While both of the Section 6 school systems were able to hire and/or contract enough therapists to provide the services, not all the comparable districts were able to do so. The other major difference between these two groups of school districts was the restrictiveness of the preschool classes. A higher percentage of comparable districts had self-contained classrooms while a higher
percentage of Section 6 districts had classes comprised of students with and without disabilities.
CONCLUSIONS and IMPLICATIONS

Through surveys sent to the 132 school systems in North Carolina, this study examined the implementation of special education and related services to children with disabilities, aged 3-5 years old. Locations of services provided were examined in relation to their relative restrictiveness. In addition, this study also determined whether or not physical, occupational and/or speech therapy services were provided to all students who needed the services. Comparisons of the restrictiveness of settings and the provision of related services were analyzed between small, medium and large school districts. Differences between Section 6 Federal School systems and school districts designated as comparable districts were also explored.

NORTH CAROLINA SCHOOL DISTRICTS

Provision of Special Education and Related Services

For the first time, beginning with school year 1991-92, all school districts in North Carolina had a federal mandate to provide special education and related services to all preschoolers with disabilities, ages 3-5. As a result of an extension of the Individuals with Disabilities Education Act regulations, some districts who were not able to provide services to all children under IDEA by school year 1991-92 were permitted to wait until 1992-93. Subsequently, all North Carolina public school districts were allowed to wait until school year 1992-93 to meet the federal requirements to provide special education and
related services to all 3-5 year old children with disabilities. Additionally, under the reauthorization of IDEA, the Section 6 schools operated by the United States Department of Defense were mandated to provide IDEA services to all eligible 3-5 year olds with disabilities beginning school year 1992-93.

As indicated by participants in this project, it appears that all districts provided services outlined in the IDEA to 3-5 year old children with disabilities during the 1992-93 school year. The service was usually provided directly by the school systems or indirectly through a contractual arrangement with an outside agency. For some children, educational services were implemented independent of the school system through private arrangements made by parents or through agencies such as Head Start.

When examining the provision of therapy services to preschoolers with disabilities in North Carolina, the researcher found a shortage of appropriate therapy personnel. This finding is consistent with the shortage of therapy personnel being experienced by the North Carolina Department of Public Instruction and across the country (Area Health Education Center Report, 1994; USDOE, 1993). The result of the shortage was the inability of some districts to provide the related services mandated by federal law to all eligible children. School systems were often unable to find enough therapists to provide therapy services written into individualized Education Programs. Not only were there not enough available therapists to hire, but there was also a shortage of available contract personnel. Two small school systems indicated that they had to contend with the issue of the shortage of personnel as well as a shortage of funding, even if the appropriate specialists could be found.
The lack of therapy services to children who were five years old and younger is of concern for at least two reasons. First, based on the assertion that the fastest period of development in humans takes place in the first three or four years of life, the lack of direct early intervention services in needed areas could potentially have long-lasting negative effects on the development of children (Allen, 1980; Bloom, 1964; Hunt, 1961; Kirk, 1958). Secondly, since research has also demonstrated that the attainment of identified skills may prevent later declines in tested intelligence, the possible resulting negative outcomes across school years broaden both for children and school systems (Bailey & Wolery, 1984; Gurainick & Bennett, 1987).

**Restrictiveness of Settings**

When examining the relative restrictiveness of settings in which preschool services were provided, two factors should be considered. First, is the actual location of the services. Some settings are inherently more restrictive and less natural than others. Second, consideration should be given to the opportunities available for children with disabilities to interact with children without disabilities. Part of the requirement for children with disabilities under IDEA, supported in case law, is for children with disabilities to be educated to the maximum extent appropriate with their non-disabled peers (Daniel R.R., 1989; Overti, 1993; Holland, 1994). Subsequently, this factor must be part of the consideration when determining compliance with the “least restrictive environment” requirement. As stated by Taylor, there is a “presumption in favor of environments that are the least restrictive and most normalized, independent and integrated” (1988, p.45).
Preschool services were provided by school systems of all sizes across a variety of settings. The primary settings where services were provided were in elementary schools, developmental day centers, child-care centers, children's homes, Head Start programs and in general education preschool settings. Of these settings, those which are the most natural (or would be settings a child may be in if he did not have a disability), include child-care centers, homes, Head Start programs and general education preschool environments. Typically, preschoolers are not in elementary school settings nor in developmental day centers which are center-based programs for children with severe and profound disabilities operated by the North Carolina Department of Human Resources. When looking at distinctions among different size districts, one finds that 50-100% of the school districts provided preschool and speech therapy in child-care centers; 60-100% in children's homes; 70-100% in Head Start centers, and a 20-44% range of districts providing services in general education preschool settings. The small districts had the largest percentage of districts providing services in the general education settings, in contrast to 20% fewer large districts.

Of the three different size district groups, small districts had the highest percentage of districts providing services in general education preschool settings while large districts had the lowest. This finding leaves some speculation as to the possible administrative ease of providing services to larger numbers of children in a center based setting. Another possibility for the difference between large and small districts is the lessened feasibility of joint programs with larger numbers of children and most likely higher incidences of
children with more severe disabilities.

One noteworthy finding was that the developmental day center was used by 66% of the total school districts in North Carolina. Developmental day centers are center-based programs implemented by the Department of Human Resources for children from birth to six years old with severe and profound disabilities. A certain number of openings are reserved for each school system for placement of preschoolers with severe and profound disabilities. The cost of these placements is paid to the developmental day centers through funding to local education agencies from the Department of Public Instruction. The availability of funds designated specifically for the purchase of services from the developmental day centers for children who have severe and profound disabilities may encourage placement of these children by local education agencies into more restrictive settings. The lack of neutral funding for children with disabilities has been recognized by the Council for Exceptional Children as a possible disincentive for placing children in less restrictive environments (CEC, 1994). The practice of target funding for placing children in the developmental day centers is found in spite of the supporting research that indicates that children with severe and profound disabilities reap more benefits from less restrictive settings when educated with non-disabled peers than in self-contained placements (Guralnick, 1980; Jenkins, Speltz, & Odom, 1985; Guralnick & Groom, 1987).

Because the least restrictive setting for a given individual with disabilities must be determined based on the unique needs of each person, a blanket statement as to what does or does not meet the least restrictive environment
mandate cannot be made. Additionally, school systems are required to have a continuum of placement options available when meeting the unique learning needs of students with disabilities. Although, the degree of restrictiveness of the end of the continuum has been the subject of much professional debate (Bellamy, Rhodes, Bourbeau et. al, 1986; Haring & Hansen, 1981; Hitzing, 1987; Taylor, 1988; Wilcox, 1987). However, the fact that many districts used a range of settings does support the conclusion that a continuum of placement options did exist across the state.

If one were to look for those settings which meet the criteria stated by Taylor (most natural, independent, and integrated), the general education preschool setting is the setting which best meets the criteria. Because the lowest percentage of each size district provided any service whatsoever in this setting, the least restrictive component becomes questionable. One could argue that child-care settings should also be included in what is considered the least restrictive, most natural setting. However, when looking at students who require special education services, one infers the need for some type of structured education. It is presumed that a preschool education environment typically is more of a structured educational environment than a child-care setting. However, if the percent of districts providing preschool education in preschool education environments and child-care settings are averaged, 19% fewer districts provided preschool education in those two settings in comparison with elementary schools and developmental day centers.

Although a range of settings does appear to have been utilized, this does not appear to be the case when looking at the issue of children educated with non-
disabled peers to the maximum extent appropriate. This issue is a difficult one for school systems because the only preschoolers within North Carolina public schools are at-risk preschoolers being served through the Chapter 1 program and preschoolers with disabilities served under the IDEA. Chapter 1 or similar type preschool programs have not been an option for the Section 6 school systems. When it comes to implementing preschool education programs for children with disabilities, 76% of the districts did so only through self-contained classrooms. The least restrictive environment question again comes under scrutiny. And this question is particularly pertinent when numerous studies have concluded that all students can be given the opportunity to achieve their potential within integrated educational environments if the programs are individualized to meet students' needs and incorporate cooperative learning programs (Berres & Knoblock, 1987; Stainback, Stainback, & Bunch, 1989; Stainback, Stainback, & Forrest, 1989). Even when looking at individual needs of students and assuming that for some students a self-contained setting may be the least restrictive environment, it is doubtful that such a setting is the least restrictive setting for all children needing preschool education in 76% of the districts.

Research studies have demonstrated the positive effects on the social and cognitive development of children with disabilities, especially when these children are educated with non-disabled peers and in classroom situations where the peer influence of non-disabled children shows obvious benefits resulting from positive peer relationships. The documented benefits of language and communicative development, social-cognitive development,
development of pro-social behaviors, and the socialization of aggressive tendencies of children placed in integrated settings would not likely occur in non-integrated settings (Guralnick, 1990; Rubin & Lollis, 1988).

While the high percentage of districts with classes consisting only of preschoolers with disabilities is of concern and casts doubt on the issue of placement in the least restrictive environment, the low percentage of the school day in which these children had the opportunity to interact with non-disabled peers does little to minimize the concern or questions. In small, medium and large districts with self-contained classrooms, a disabled student would only interact with a non-disabled student approximately 7-15% of the school day. The large districts had the least opportunity for interaction with at-risk preschoolers, non-disabled preschoolers and kindergarten students. Small districts had the most opportunity for interaction with at-risk and non-disabled preschoolers and medium districts had the most opportunities for kindergarten interaction.

The multitude of research studies designed to examine the benefits of integrated preschool programs looked at interactions within a classroom setting (Guralnick, 1990; Guralnick & Groom, 1987; Reichart, Lynch, Anderson, et. al., 1989). Opportunities for interaction in places such as the cafeteria or recess (which are outside of a classroom situation) more than likely would not provide the benefits associated in the literature with the development of friendships, availability of good speech and language models, cooperative learning experiences, and higher expectations for students with disabilities which are documented results accruing from integrated classrooms (Buysse, 1993;
Devoney & Guralnick, 1990; Salisbury, 1991). Proximity and opportunities for interaction versus actual interactions also need to be recognized and differentiated. In classrooms, or during other times of the day, proximity or opportunity for interaction in and of itself is not enough for the growth and development of children with disabilities to take place (Bricker, 1973; Jenkins, Odom, & Spelts, 1989). In addition to the opportunity for interaction, the presence of effective teaching practices must also be evident (Guralnick, 1990; Strain, 1990; Thousand & Villa, 1990).

Another way to examine the opportunity for interactions with non-disabled peers during the school day is to examine the populations of students within the preschool classes. Medium and small districts had 6% and 17% of the districts within each size respectively with class populations consisting of students with disabilities and at-risk preschoolers. Within these preschool classes, there was a higher average proportion of students who were at-risk than those who had disabilities. Whereas some negative social effects have been documented with the integration of children with disabilities with non-disabled peers, these negative effects have been found primarily in studies where there is a higher proportion of children with disabilities than non-disabled children in classes (Guralnick, 1990; Guralnick & Groom, 1988; Leonoff & Craig, 1989). The 17% higher proportion of at-risk students in medium districts and 4% higher proportion in small districts demonstrate a higher number of non-disabled children. However, because at-risk children are identified and placed by testing in the lower percentile on tests administered to preschool children referred to the program, the full impact of benefits in the literature of integrated classrooms
with non-disabled peers may not apply.

While medium and small districts were the only districts with classes of preschoolers determined to be at-risk or disabled, they were also the only districts with classes of preschoolers with disabilities being educated with non-disabled peers. With the medium districts having an even percentage of each type of student within their classes and the small districts with 44% more non-disabled students than children with disabilities, the presence of appropriate peer models to help facilitate the development of children with disabilities appears to have been available.

In summation, educating students with disabilities in classes with non-disabled peers does not guarantee the actualization of the benefits which have been documented from integrated programs. Being placed in an integrated classroom allows the opportunity for the benefits to be realized if the necessary effective teaching practices are implemented within the learning environment. On the other hand, for the 76% of the districts in North Carolina who have only self-contained classrooms for providing preschool education for children with disabilities, even with 7-15% opportunity for interaction during the school day, it is almost inevitable that the benefits toward the students' development from appropriate peer models in class will not take place.

**Perceptions Versus Reality**

How one describes and understands the creation of a setting depends on one's relationship to it.... It is not a question of the validity of the different reports but rather that different vantage points inevitably produce different emphasis and reflect different interests, motivations and goals (Sarason, 1972)
While one may view the high percentage of districts with self-contained classrooms with little or no opportunities for interaction with non-disabled peers as questionably in compliance with the LRE mandate, the perceptions of personnel responding to the survey may indicate otherwise. Although 76% of the responding districts provided special education to preschoolers with disabilities in self-contained classrooms with opportunities for interaction with non-disabled peers ranging between 0-15% of the school day, the overriding response from the individuals who completed the surveys was that the LRE mandate for preschool children in their district was good to excellent.

In addition, the inability of 8-22% of the districts to provide needed therapy services to preschoolers did not appear to diminish the perception of their provision of related services. With the majority of perceptions listed in the very good to excellent range, 97% of the districts indicated that their provision of related services to preschoolers was in the the good, very good or excellent range.

SECTION 6 SCHOOLS AND COMPARABLE DISTRICTS

The two school systems in North Carolina operated by the Department of Defense and the six school systems designated as their comparable districts have provided special education and related services to preschool children under IDEA since the North Carolina mandate to start in school year 1991-92. One Section 6 school system provided services one year prior to the mandate for North Carolina and two years previous to the Section 6 federal mandate. The other Section 6 school provided services one year prior to the Section 6
mandate for services for all 3-5 year olds with disabilities. Of the North Carolina school districts used as comparable districts, 67% began providing services for all 3-5 year old eligible children during school year 1991-92. Of the remaining districts, 17% provided the services for one year longer than the mandate and 17% provided services to all eligible children for twelve years.

Between the government school systems and comparable districts there was a distinct difference in the provision of needed therapy services for children with such services designated on their Individualized Educational Programs (IEP). While both of the Section 6 schools provided the therapy services outlined on preschoolers' IEPs, 17% of the comparable districts did not provide all the occupational and speech therapy services needed by preschoolers in their district. The reason given by the districts for their lack of services was the unavailability of personnel to be hired or contracted. In contrast, both Section 6 school districts provided speech and occupational therapy services to all preschoolers who had the services listed on their IEP. All Section 6 and comparable districts provided physical therapy services outlined in all of the preschoolers' IEPs for the 1992-93 school year. The difference in the ability to hire and/or contract related service personnel between Section 6 and comparable districts is not related to the access of personnel through the Naval Hospitals on the military installations. Independent of any military component aboard the base, Section 6 schools are responsible for hiring and/or contracting all related service personnel.

Another difference between the Section 6 schools and their comparable districts was found in the student populations of preschool education classes
for preschoolers with disabilities. Sixty percent of the comparable districts had self-contained preschool classes compared with one of the two Section 6 school systems. On the other hand, one Section 6 school system had classes of students with and without disabilities compared with 20% of the comparable districts. Twenty percent of the comparable districts also had a combination of classrooms including self-contained classrooms. For students with disabilities in self-contained classrooms in the comparable districts, opportunities for interactions with non-disabled children ranged from only 3-9% of the time during the school day. These limited opportunities for interaction was in contrast to the one Section 6 school system with self-contained classrooms having no opportunities for interaction. One contributing factor to this difference may be the fact that Section 6 schools do not have access to the Chapter 1 preschool funding and subsequently do not have at-risk preschoolers located in their schools.

When examining the differences between the two Section 6 school systems and their comparable districts, the sizes of the districts should be taken into consideration. Although six districts are designated “comparable” districts, a difference in regard to the sizes of the districts exists. Using the criteria established for this study, the two Section 6 school districts used in this study fall into the group of small North Carolina districts. Of the six comparable districts, two are in the large group, one in the medium group and three in the small. This may account for some of the differences noted between the two groups.
SUMMARY

While there is clearly a strong judicial and congressional preference for the least restrictive option for providing services, Congress has accepted a continuum of services to include completely segregated placements and facilities (IDEA; Sarason & Doris, 1979; Taylor, 1988). In addition, social-ethical arguments have been supported by congressional mandates and court decisions in regard to the civil rights inherent to all individuals. Social-ethical arguments have also been empirically supported by educational research demonstrating considerably greater social and emotional development derived from integrated educational environments for children with disabilities than possible in non-integrated environments (Jenkins, Spelts, & Odom, 1985; Leinhardt & Pallay, 1982; Parker & Asher, 1987). Furthermore, some researchers have found that children with disabilities, including preschoolers, placed in integrated educational settings have outperformed peers on functional tasks as well as standardized intellectual measures than those children placed in segregated educational environments (Bricker & Bricker, 1971; 1972; 1973; Bricker & Sandall, 1979; Bricker & Sheehan, 1981; Wang & Baker, 1986). Whereas most studies found significant increases in the developmental skills and behaviors of children with disabilities who were educated with non-disabled peers, a significant difference in comparison to those educated in segregated settings has not always existed (Cole, Mills, Dale, & Jenkins, 1991; Ispa & Matz, 1987; Jenkins, Odom, Speltz, 1989). However, the results of the research have made it extremely clear that all students, both
with and without disabilities, can be given the opportunity to achieve their potential within integrated educational environments if programs are individualized to meet their needs and if programs incorporate cooperative learning strategies (Berres & Knoblock, 1987; Stainback & Stainback, 1985; Stainback, Stainback, & Bunch, 1989; Stainback, Stainback, & Forest, 1989).

The Individuals with Disabilities Education Act (IDEA) specifically requires all public school systems to provide a free and appropriate public education (FAPE) to 3-5 year-old children with disabilities in the least restrictive environment. Through federal regulation and litigation, appropriate education has been defined as the provision of special education and related services to eligible children in an environment where children are educated to the maximum extent appropriate with non-disabled peers.

Based on the information obtained from the survey sent to all school districts in North Carolina, it can be surmised that FAPE was not provided to all preschoolers with disabilities in North Carolina during the 1992-93 school year. As some school systems were not able to provide physical, occupational and/or speech therapy to all preschoolers who needed the services, an appropriate education was not provided to those children. Although not all services were provided to the extent needed, the reason for all but two districts for not providing the services was not the result of decisions made by district personnel but rather the unavailability of appropriate therapists.

Another area of an appropriate education which does not appear to have been provided is the provision of special education in the least restrictive environment. While some professionals in the field may argue that any self-
contained classrooms for children with disabilities violates the letter and spirit of the law, certainly having 76% of the districts in North Carolina with only self-contained preschool classrooms is in opposition to children being educated to the maximum extent appropriate with non-disabled peers.

**Impetus For Change?**

...value is the necessary and sufficient condition for the creation of new settings which are successful in terms of their stated objectives (Sarason, 1972)

Whereas not providing needed related services is in violation of the requirement to provide a free, appropriate public education to children with disabilities, a distinct difference existed between the 8-22% unable to provide needed therapy services and the perception of 97% of the districts that the provision of related services in their district was good, very good, or excellent. In addition, 76% of the districts provided special education to preschoolers with disabilities in self-contained classrooms with little to no opportunity for interaction with non-disabled peers, yet 97% perceived their district’s implementation of the least restrictive environment mandate as good, very good or excellent. If individuals perceive their provision of services as good, very good or excellent, their perceived need to change the existing structure and put forth the thinking, attitudes and energies needed to attempt to solve a problem will not likely take place because a problem is not thought to exist in the first place. Subsequently, an internal impetus for change is questionable, particularly in regard to the provision of services in the least restrictive setting. Because settings are reflections of the culture, attitudes and values that individuals have, if providing services in settings which clearly do not maximize
opportunities for educating children with disabilities with non-disabled peers is perceived as good, very good or excellent, the values needed to attempt to create new and different types of settings may also be missing.

CONCLUSIONS

The first question of this study related to the provision of the related services of speech, physical and occupational therapy to all children, 3-5 years old, with disabilities who needed the therapy. While the majority of respondents reported that preschoolers in need of therapy services were provided therapy, 8-22% of North Carolina school systems were not able to hire enough personnel to provide all related services listed on the Individual Education Programs for children in the district. Only two of the districts reported a shortage of personnel and funds as the reason services were not provided.

In addition to whether related services were provided to preschoolers, the restrictiveness of preschool services was also examined as a research question. The location of the services provided and the amount of interaction children with disabilities in preschool programs had to interact with non-disabled peers were explored relative to school district size. During school year 1992-93 the majority of all school districts in North Carolina provided services to preschoolers with disabilities in elementary school and the least number of districts provided services in general education preschool settings. Of the different size districts, more small districts provided services in settings which were more integrated and most natural than either medium and large
districts. Additionally, fewer small districts placed children in the self-contained, center-based developmental day centers than large districts. While higher percentages of small school districts provided services in less restrictive settings, the overall percentage of North Districts districts providing services in lesser restrictive settings is small.

When examining the opportunities for interaction of preschoolers with disabilities with non-disabled children, only small and medium districts had preschool classes which included children without disabilities. In addition, for those children placed in self-contained preschool classes, students in the classes in large districts had the smallest percentage of the school day available to interact with non-disabled peers.

The final question examined was whether differences existed between Section 6 school districts operated by the Department of Defense in North Carolina and their comparable districts in the provision of services to preschoolers with disabilities. Differences were noted between the Section 6 schools and comparable districts in regard to the provision of related services and restrictiveness of settings for preschool services. Whereas both of the Section 6 school systems provided all physical, occupational and speech therapy for preschool children who had these services listed on their IEP, the comparable districts were only able to provide physical therapy to the full extent needed.

Finally, when examining the restrictiveness of preschool classes conducted by the school systems, a higher percentage of comparable districts had self-contained classrooms and a lower percentage had classroom which included
non-disabled children than the Section 6 school systems. Although a smaller percentage of the Section 6 school systems had classes which were self-contained than the comparable districts, of the districts with self-contained classrooms, a higher percentage of the school day existed for opportunities for interaction with non-disabled peers in the comparable school districts.

Implications For Further Research

Although one might speculate why higher percentages of small districts provided services in less restrictive settings than medium and large districts, the actual reasons that districts either provide or do not provide integrated programs should be ascertained. Such determination could be accomplished through more direct on-site data collection, including interviews and other qualitative approaches, which may enhance the validity and depth of the responses and results. Additionally, the inclusion of data relating to the specific numbers of children in the various settings within each school district would greatly enhance the quality and depth of the research. The information derived from such a study would provide a more accurate picture of the implementation of the least restrictive environment mandate in the federal regulation. In addition, it may provide information enabling districts with more restrictive programs to provide services in more natural, less intrusive environments.

Another possible study as a follow-up to this study would be to examine changing trends over time. One would expect that the restrictiveness of settings and services would decrease as systems provide services to preschoolers with
disabilities for a longer period of time. The effect of one of the National Goals 2000 that “all students will enter school ready to learn” may also have a tremendous impact if public schools begin providing preschool education to all preschoolers. The change in accessibility to children without disabilities could potentially have a tremendous impact on the restrictiveness of placements for preschoolers with disabilities. However, accessibility to non-disabled peers may or may not increase the placement of children with disabilities in less restrictive settings. Large school systems did not have any combined classes of children with disabilities and at-risk preschoolers even though access to these children already exists within the public schools.

Finally, an implication for practice is in regard to the issue of target funding for educational placements of children in restrictive settings such as the developmental day centers. In light of the empirical evidence against placements of children with disabilities, even severe disabilities, in classrooms without opportunities for interaction with non-disabled peers, continuation of the practice of target funding should be carefully scrutinized.
Special Education Preschool Survey

All questions pertain to children, 3-5 years old, who receive services under the Individuals with Disabilities Education Act. Thank you for taking the time to answer this questionnaire.

1. When did your school system begin to provide preschool services to children, 3-5 years old, with disabilities? 19____ to 19____ school year

2. When did your school system begin to provide all services required under the Individuals with Disabilities Education Act to preschool children? 19____ to 19____ school year

3. a. Are preschool services provided by your school system for ALL eligible children, ages 3-5, with developmental delays at this time? (circle) YES NO

   b. If NO, specify population(s) NOT currently served by your school district:

   c. If some children are not served by your school system, specify who provides the service (ie. developmental day center, Head Start).

4. Place a check under the location(s) currently used for each service provided to preschoolers with disabilities by your school system. (Check all that apply.)

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5. Preschool classes are _____ hours and _____ minutes long for _____ days a week.

6. The average number of students in each class for preschoolers with disabilities is ______ .

7. The average number of staff assigned to each class on a full time basis is:

   _____ preschool teacher(s) certified in special education
   _____ preschool teacher(s) not certified in special education
   _____ teacher assistant(s)
   _____ other (specify) ____________________________________________

8. Choose the one item (A, B, C or D) which best describes the students in the preschool classes which serve students with disabilities.

   A. _____ All are in need of special education.
      [If A is checked: # _____ students with disabilities.]

   B. _____ Includes students with disabilities and students identified as “at risk”.
      [If B is checked: # _____ students with disabilities and #_____ at risk students].

   C. _____ Includes students with disabilities, students identified as “at risk”, and students without special needs.
      [If C is checked: # _____ with disabilities; #_____ at risk; and #_____ without special needs].

   D. _____ Includes students with disabilities and children without disabilities.
      [If D is checked: # _____ children with special needs and #_____ children without special needs].

9. Not including students in their class, during school hours preschool students interact with:

   A. Preschoolers identified as at risk for approximately _____ hours and _____ minutes a week.

   B. Preschoolers without special needs for approximately _____ hours and _____ minutes a week.

   C. Kindergarten students for approximately _____ hours and _____ minutes a week.

10. Place a check beside the description of how therapy services are provided to students who receive preschool special education. (Check all that apply.)

      _____ Pullout program where preschool class is located
      _____ Integrated within the preschool class
      _____ Place different from where the preschool class is located(specify) __________________
      _____ None Provided
11. Are therapy services provided to every preschool student with it listed on their IEP? (circle)

Physical Therapy YES NO
Occupational Therapy YES NO
Speech and Language Therapy YES NO

12. If a therapy service is not provided to all preschool students in need, please check the reason. (Check all that apply)

_____ Unable to hire or contract enough therapists to work with school system.
Check type: _____ Physical  ______ Occupational  _____ Speech / Language
_____ No funds available for therapy services
_____ Other (specify) ______________________________________________________________________

13. Circle the number which best describes each area listed below in regard to your program for preschoolers with disabilities.

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<th>Area</th>
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<th>3</th>
<th>4</th>
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</table>

Title of Person Completing Survey: ____________________________________________

If you would like to receive a summary of the results of this study when completed, you can write or call the number on the cover letter or write in school district name:_________________

Please return the completed survey in the enclosed self-addressed stamped envelope.

Thank you again, your time and cooperation are greatly appreciated!
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VITA

Stacey Ann Cacace was born in Beaufort, South Carolina on May 21, 1959. After attending high school in Naples, Italy and Camp Lejeune, North Carolina Stacey received her Bachelor of Science degree in Special Education from Appalachian State University in Boone, North Carolina in December, 1980. The semester subsequent to graduating she started an experimental classroom for adolescents with moderate mental disabilities and severe behavior disorders.

Stacey Cacace received a Master of Arts degree in Special Education with concentrated study in the area of severe and profound disabilities in 1982. Following receipt of her Masters degree, she taught children with autism and severe communication disorders in Gastonia, North Carolina. She then accepted the position of Lead Teacher at Lakewood Education Center, a center-based school for students, 2-21 years old, with severe and profound disabilities, in Norfolk, Virginia. After holding the position of lead teacher for three years, Stacey became the principal of St. Mary’s Infant Home School in Norfolk in 1986. St. Mary’s is a residential facility serving children, birth to twelve years, with profound multiple disabilities and in need of 24 hour nursing care. She was the principal of the school program at St. Mary’s for four years.

In May, 1989 Stacey earned a Certificate of Advanced Graduate Study degree in Administration and Supervision of Special Education from Virginia Polytechnic Institute and State University in Blacksburg, Virginia. After becoming the Director of Pupil Personnel Services for the Camp Lejeune Dependents Schools at Camp Lejeune Marine Corps Base in North Carolina in
April, 1990, she married Mr. Kevin Driscoll in June, 1990. In December, 1994
Stacey earned her second degree from Virginia Polytechnic Institute and State
University in Blacksburg, Virginia when she received her Doctorate of
Education in Administration and Supervision of Special Education. Dr. Cacace
is currently the Director of Pupil Personnel Services at Camp Lejeune and
resides at Emerald Isle, North Carolina.

[Signature]
Stacey Cacace