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AN ANALYSIS OF THE EXCESS COSTS OF EDUCATING MILITARY CONNECTED HANDICAPPED CHILDREN IN THE HAMPTON ROADS AREA OF VIRGINIA

by

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(ABSTRACT)

All branches of the military service have humanitarian transfer policies which require that consideration be given to the special educational and medical needs of dependent family members during the reassignment process. These policies may result in certain school districts serving a disproportionate number of military-connected handicapped children. Despite the federal financial assistance received by LEAs under P.L. 94-142 (Education for All Handicapped Children Act) and P.L. 81-874 (School Assistance for Federally Affected Areas) the presence of these children may create a fiscal burden on the LEAs. This study sought to determine if seven school districts in the Tidewater area of Virginia served a disproportionate number of military connected handicapped children, what the additional costs were to the LEAs to educate these children, and what percentage of military parents of handicapped children were

assigned to the Tidewater area due to the special educational needs of their children.

Analysis of the data indicated that 7.7% of the total military enrollment (40,824) of the seven school districts were enrolled in special education programs. This percentage is not considered disproportionate when compared with the 10.3% of the nonmilitary population enrolled in special education programs. A number of possible explanations were offered for these inconsistencies.

Per pupil costs were calculated for four self-contained programs in the Newport News School Division. Analysis of the data indicated that additional costs were incurred by the LEA to educate students in these high cost programs. These additional costs varied due to differing amounts of revenue received under P.L. 81-874 and the state reimbursement formula. It was concluded that the findings of this study would be applicable only to the Newport News School Division and to the programs and settings that were investigated.

Nineteen percent of the parents of military-connected handicapped children from five school districts were surveyed. Analysis of the data indicated that 55% of those parents were familiar with the armed forces' humanitarian reassignment programs. Forty-one percent of those familiar with the humanitarian reassignment programs had requested a transfer to the Tidewater area on the basis of their child's

special educational needs. A growing awareness of reassignment policies has implications for certain school divisions. These implications were presented and discussed.

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DEDICATION

To with love. I couldn't have done it without you.

TABLE OF CONTENTS

		Page
ABSTRACT		ii
ACKNOWLEDGEMENTS		v
DEDICATION		vi
LIST OF TABLES		xii
CHAPTER		
1	INTRODUCTION	1
	Statement of the Problem	3
	Previous Research	3
	Need for Additional Study	4
	Purpose of the Study	6
	Definition of Terms	7
	Limitations of the Study	12
	Organization of the Study	13
2	REVIEW OF RELATED LITERATURE	15
	Federal Role in Special Education for Handicapped Children	15
	The Evolution of Special Education	16
	Limitations of Federal Power	19
	Federal Legislation Affecting Special Education	21
	Judicial Decisions Affecting Special Education	25
	Summary	29
	School Assistance for Federally Affected Areas	30

Chapter		Page
	Impact Aid Reforms	35
	Funding the Impact Aid Program	36
	Humanitarian Assignment Programs and Policies of the Uniformed Services	39
	U.S. Army - Exceptional Family Member Program	41
	U.S. Navy - Humanitarian Assignment/ Hardship Discharge Policies	42
	U.S. Air Force - Children Have a Potential (CHAP) Program	43
	Summary	44
	Excess Costs of Special Education	45
	Sources of Funds	48
	Federal Funds	49
	State Funds	51
3	METHODOLOGY	53
	Population	54
	Data Gathering Procedures	56
	Data to Determine the Cost of Special Education Programs	57
	Parent Survey	59
	Data Analysis	60
	Analysis of Excess Cost Data	61
	Analysis of Parent Survey Data	61
	Summary	62

Chapter		Page
4	ANALYSIS OF RESULTS	63
	Military Enrollment in Sample LEAs	64
	Military Enrollment in Special Education Programs	66
	Summary of Analysis of Civilian/Military Enrollment Data	77
	Comparison With Previous Study	78
	Analysis of Cost Data	83
	Data Collection	85
	Determination of Special Education Costs	86
	Larson Model	86
	Discrete Cost Component	87
	Transportation Cost Component	87
	Overhead Cost Component	88
	Fixed Asset Component	88
	Related Services Component	89
	Aggregate Cost	90
	Comparison with Kienas Study	91
	Summary of Special Education Cost Analysis	95
	Additional Costs Attributable to Military Connected Pupils	96
	Summary of Additional Costs Attributable to Military-Connected Pupils	97
	Analysis of Parent Survey	101
	Analysis of the Survey Data	103

Chapter Page

5 DISCUSSION, CONCLUSIONS, AND RECOMMENDATIONS 105

Do the LEAs in the Greater Hampton Roads Area Serve a Disproportionate Number of Military-Connected Handicapped Pupils 107

Discussion 107

Conclusions 109

Recommendations 110

Do LEAs Incur Additional Costs in Providing Special Education Services to Military Connected Handicapped Pupils? 110

Discussion 110

Conclusions 112

Recommendations 113

What Percentage of Military Parents Selected Their Current Duty Assignment as the Result of the Armed Forces' Humanitarian Reassignment Policies 114

Discussion 114

Conclusions 116

Recommendations 116

Author's Commentary 117

REFERENCES 119

APPENDICES

A Fiscal Year 1986 Funding for School Assistance for Federally Affected Areas Act (P.L. 81-874) 125

B Letter to Parents of Military-Connected Handicapped Pupils 127

Page

C Survey Questionnaire for Parents of Military-Connected Handicapped Pupils . . . 129

VITA 131

LIST OF TABLES

Table		Page
1	Total Enrollment by School Divisions, Military Enrollment by School Divisions, and Military Percentage of Total Enrollment During the 1985-86 School Year	65
2	Total LEA Enrollment, Special Education Enrollment, and Special Education Enrollment as a Percentage of Total Enrollment	67
3	Total Enrollment in Special Education Programs, Military Enrollment in Special Education Programs, and Military Percentage of Total Special Education Enrollment	68
4	Total Military Enrollment, Military Enrollment in Special Education Programs, and Percentage of Military Students Enrolled in Special Education Programs	70
5	Estimated Prevalence and Actual Enrollment of Military-Connected Students in Special Education Programs	72
6	Estimated Prevalence and Actual Enrollment in Special Education Programs in Five Sample School Districts	73
7	Percentage of Military and Nonmilitary Students in Special Education Programs of the Separate School Divisions	74
8	Percentage of Military and Nonmilitary-Connected Students Enrolled in Special Education Programs	76
9	Estimates of the Prevalence of Various Types of Handicapping Conditions in the United States .	81
10	Estimated and Actual Enrollments of Military Connected Students in Categorical Special Education Programs in Norfolk, Newport News, Portsmouth, Chesapeake, and York County School Divisions - If Estimates of Prevalence Used in the Gray Study Were Used	82

Table		Page
11	Larson Model for Per-Pupil Aggregate Costs for Self-Contained Special Education Programs for Educable Mentally Retarded and Trainable Mentally Retarded Pupils	92
	Larson Model for Per-Pupil Aggregate Costs for Self-Contained Special Education Programs for Severely Emotionally Disturbed and Learning Disabled Pupils	93
12	Related Services Costs Using Larson Model . . .	94
13	Additional Per-Pupil Costs to LEA for Military Connected "A" Children in Self-Contained Special Education Programs for Severely Emotionally Disturbed Children	98
14	Additional Per-Pupil Costs to LEA for Military Connected "B" Children in Self-Contained Special Education Programs for Severely Emotionally Disturbed Children	99
15	Additional Cost to LEA for Military-Connected Pupils Enrolled in EMR, TMR, SED, and LD Self-Contained Special Education Programs	100

Chapter 1

Introduction

The right to special education for all handicapped children has been guaranteed by court decisions and federal legislation. Court rulings in the cases of Brown v. Board of Education (1954), Pennsylvania Association of Retarded Children v. Commonwealth of Pennsylvania (1972), and Mills v. the Board of Education of the District of Columbia (1972) clearly established that education is a right which must be available to all children on equal terms. Section 504 of The Rehabilitation Act (1973) forbids discrimination or denial of benefits to students solely by reason of handicap by any program or activity receiving federal financial assistance. The Education for All Handicapped Children Act (1975) (EHA-B) mandates a free, appropriate public education for all handicapped children ages 3 through 21 years, at no cost to the parent or guardian.

Educating a handicapped child inevitably costs more than educating a nonhandicapped child. Smaller classes require more teachers and often require additional personnel such as psychologists, occupational, physical and speech therapists, and teacher aides. Identification, evaluation and proper placement, psychological evaluation, and due-process

hearings involve additional costs. Special transportation must be provided when necessary. Expensive equipment and special services are sometimes required to provide the handicapped child with an appropriate education. Educational services must be provided to homebound and hospitalized children when needed, and, when appropriate, private placement provided at no cost to the parent (Turnbull, 1975).

Both the number of handicapped children and the cost of providing special educational services have increased each year since 1976. The Department of Education reported that 4.3 million children received special education and related services in school year 1985-86. This number represents an increase of 17.6% since enactment of EHA-B in 1975 (U.S. Department of Education, 1986).

The cost of providing special educational services to handicapped children is estimated to be 2.17 times greater than providing regular educational services to nonhandicapped children (Kakalik, Furry, Thomas, & Carney, 1981). During the period of 1975-80, local educational agencies' budgets for special education rose almost twice as rapidly (14%) as instructional and operating budgets (7 to 8% per year) (Hartman, 1980).

Statement of the Problem

The incidence of handicap and level of handicapping conditions are not distributed equally among school districts. Reports from school districts of pupils identified as handicapped range from a low of 1% to a high of 22% of the student population (National School Boards Association, 1979). Studies have found that LEAs offering exemplary special education programs may create a magnet effect and attract pupils from areas where such programs are unavailable, or of a lesser quality (Weintraub & Higgins, 1980). Another study (Gray, 1973) found that a disproportionate number of handicapped children may result where a LEA serves a large military-connected population. While Gray found selected school districts were impacted with military-connected children, no previous studies have addressed the cost of education of such an impacted condition.

Previous Research

A study of the public school districts in the San Antonio area (Gray, 1973) found that a disproportionate number of the children with low-prevalence handicaps were dependents of military families. Gray concluded the cause was twofold: (1) the LEAs in the San Antonio area offered excellent special education programs for low prevalence

handicapped children, and (2) the military services' humanitarian assignment policies permit members to request duty assignments in areas where special education programs meeting the unique needs of their handicapped children were offered. Gray further concluded that as a result of the disproportionate number of military-connected handicapped children in the San Antonio school districts, additional costs were incurred by LEAs that provided these children with special educational services.

Need for Additional Study

During the thirteen years that have passed since the completion of Gray's study, the federal government has been actively involved in many areas of education that affect handicapped children. Congress has enacted legislation that mandates a free, appropriate public education for all handicapped children, regardless of the cost. Federal legislation providing financial assistance to local educational agencies for special education has been enacted, and subsequently amended, reformed, and often underfunded. Local jurisdictions affected by a large military presence have been faced with the choice of seeking large property tax increases, or charging tuition for the children of military connected parents (Congressional hearing, June, 1981; Salmon, Sewell & Fulp, 1982).

School administrators and officials charged with the responsibility for planning, funding, and implementing special education programs in areas with a large military population would benefit from the findings of a current study of the problems examined by Gray. The purpose of this study was to replicate Gray's study and determine if the conclusions from her work are valid under current federal legislation and fiscal policy.

The geographic area included in this study (known as Greater Hampton Roads) was comprised of York County and the cities of Norfolk, Portsmouth, Chesapeake, Virginia Beach, Hampton, and Newport News. This area is similar in size and population to the area studied by Gray, and like the San Antonio area, Hampton Roads is heavily impacted by numerous military installations and naval activities. The Norfolk Naval Base is the world's largest naval establishment. Other significant naval installations include Oceana Naval Air Station, Little Creek Naval Amphibious Base, Portsmouth Naval Hospital and Portsmouth Naval Shipyard. The U.S. Air Force is represented by Langley Air Force Base. The U.S. Army installations include Fort Eustis, Fort Monroe and Fort Story. The Marine Corps and Coast Guard maintain various activities in the Hampton Roads area. Norfolk is the home port for a majority of the ships of the Atlantic Fleet, and

the families of fleet personnel usually reside in the area while the ships are deployed in foreign areas.

Military personnel and their dependents make up a large percentage of the population of the Hampton Roads area. The local school districts provide educational services to the children of military-connected parents. More than 20 percent of the total school enrollment is comprised of military connected students. All of the LEAs are eligible for financial assistance under the provisions of the School Assistance for Federally Impacted Areas Act (1950).

Purpose of the Study

The purpose of this study was to answer the following research questions: (1) do the seven LEAs in the Hampton Roads area which offer day programs for handicapped children serve a disproportionate number of military-connected handicapped children? (2) do LEAs incur additional costs in providing special educational services to military-connected handicapped pupils? and (3) what percentage of military-connected parents of handicapped children are assigned to the greater Hampton Roads area as a result of humanitarian transfer policies?

Definition of Terms

Cost accounting - A business term describing a process used to evaluate the operating costs of an organization for external reporting and internal planning of ongoing operations (Kienas, 1986, p. 12).

Cost index - The ratio of average per pupil expenditures for children in special education (or a particular program) to the average per pupil expenditures for children in a basic regular education program (Kienas, 1986, p. 12).

Excess costs - The costs for special education that are over and above the normal costs of educating nonhandicapped children (Kienas, 1986, p. 12).

Impact aid - Federal financial assistance given to local education agencies to compensate for the cost of educating children when enrollment and availability of revenues from local sources are adversely affected by federal activities (School Assistance for Federally Affected Areas Act, 1950).

Humanitarian reassignment policy - A policy followed by the military services whereby consideration is given to the special education and medical needs of family members during the personnel assignment process (U.S. Department of Defense Instruction 1342.12, 1981).

Local educational agency - A public board of education, or other public authority legally constituted within a state for either administrative control or direction of public

education in elementary and secondary schools (34 C.F.R. 300.8).

Special education - Specially designed instruction, at no cost to the parent, to meet the unique needs of a handicapped child, including classroom instruction, instruction in physical education, home instruction, and instruction in hospitals and institutions (34 C.F.R. 300.14).

Related services - Transportation and such developmental, corrective, and other supportive services as are required to assist a handicapped child to benefit from special education (34 C.F.R. 300.13).

Handicapped children - Children who are mentally retarded, hard of hearing, speech impaired, visually handicapped, seriously emotionally disturbed, orthopedically impaired, other health impaired, deaf-blind, multihandicapped, or who have specific learning disabilities, and who, because of those impairments, need special education and related services (34 C.F.R. 300.5).

Handicapping condition - The disability associated with a handicapped child requiring special education (The Education for All Handicapped Children Act of 1975). The handicapping conditions included in this study are:

(1) Deaf means a hearing impairment which is so severe that the child is impaired in processing linguistic information through hearing, with or without

amplification, which adversely affects educational performance.

(2) Deaf-blind means concomitant hearing and visual impairments, the combination of which causes such severe communication and other developmental and educational problems that they cannot be accommodated in special education programs solely for deaf or blind children.

(3) Hard of hearing means a hearing impairment, whether permanent or fluctuating, which adversely affects a child's educational performance but is not included under the definition of "deaf".

(4) Mentally retarded means significantly subaverage general intellectual functioning, existing concurrently with deficits in adaptive behavior and manifested during the developmental period, which adversely affects a child's educational performance.

(5) Multihandicapped means concomitant impairments (such as mentally retarded-blind, mentally retarded-orthopedically impaired, etc.), the combination of which causes such severe educational problems that they cannot be accommodated in special education programs solely for one of the

impairments. The term does not include deaf-blind children.

(6) Orthopedically impaired means a severe orthopedic impairment which adversely affects a child's educational performance. The term includes impairments caused by congenital anomaly (e.g., clubfoot, absence of some member, etc.), impairments caused by disease (poliomyelitis, bone tuberculosis, etc.), and impairments from other causes (e.g., cerebral palsy, amputations, and fractures or burns which cause contractures).

(7) Seriously emotionally disturbed is defined as follows:

(i) The term means a condition exhibiting one or more of the following characteristics over a long period of time and to a marked degree, which adversely affects educational performance:

(A) An inability to learn which cannot be explained by intellectual, sensory, or health factors;

(B) An inability to build or maintain satisfactory interpersonal relationships with peers and teachers;

(C) Inappropriate types of behavior or feelings under normal conditions;

(D) A general pervasive mood of unhappiness or depression; or

(E) A tendency to develop physical symptoms or fears associated with personal or school problems.

(ii) The term includes children who are schizophrenic. The term does not include children who are socially maladjusted, unless it is determined that they are seriously emotionally disturbed.

(8) Specific learning disability means a disorder in one or more of the basic psychological processes involved in understanding or in using language, spoken or written, which may manifest itself in an imperfect ability to listen, think, speak, read, write, spell, or to do mathematical calculations which adversely affect the child's educational performance. The term includes such conditions as perceptual handicaps, brain injury, minimal brain dysfunction, dyslexia, and developmental aphasia. The term does not include children who have learning problems which are primarily the result of visual, hearing, or motor handicaps, of mental

retardation, of emotional disturbance, or of environmental, cultural, or economic disadvantage.

(9) Speech and language impaired means a communication disorder, such as stuttering, impaired articulation, or a language impairment which adversely affect a child's educational performance.

(10) Visually handicapped means a visual impairment which, even with correction, adversely affects a child's educational performance. This term includes both partially seeing and blind children.

(11) Severely and profoundly handicapped includes individuals who: (a) have primary disabilities that severely impair cognitive and/or adaptive skills and life functioning; (b) may have associated severe behavior problems; (c) may have high probability of additional physical and/or sensory handicaps; and (d) do require significantly more educational resources than are provided for the mildly and moderately handicapped in special education programs (34 C.F.R. 300.5).

Limitations of the Study

This study investigated the percentage of military connected handicapped students in all categorical programs

in five Hampton Roads school districts. Per pupil costs were calculated from data provided by the Newport News Public School Division on the following self contained categorical programs offered in regular day school: educable mentally retarded, trainable mentally retarded, emotionally disturbed and learning disabled. Per pupil costs for the remaining categorical programs were obtained from a study conducted by Kienas (1986) in the Norfolk Public School Division for the 1984-85 school year.

Organization of the Study

An introduction to the excess cost of providing special educational services to handicapped children is presented in Chapter 1. The financial burdens imposed on LEAs serving disproportionate numbers of handicapped students was discussed. The statement of the problem, previous studies, need for additional research, purpose of the study, definitions, and limitations of the study were discussed.

In Chapter 2, the literature pertaining to specific legislation, regulations, statutes and judicial decisions affecting the cost of special education was reviewed. Military personnel policies which bear upon the possible causes of the disproportionate representation of handicapped students in school districts serving large military populations were described.

The methodology used to complete this study is described in Chapter 3. It explains the data-collection procedures, parent surveys, and analysis of the data.

An analysis and discussion of the results of the data collection procedures is presented in Chapter 4.

Chapter 5 includes findings and conclusions based on an analysis of the data and current research. Recommendations for further research are also provided.

Chapter 2

Review of Related Literature

The review of the literature focused on four specific areas related to this study:

1. federal role in special education for handicapped children;
2. school assistance for federally affected areas;
3. military humanitarian transfer program; and
4. additional costs for educational programs for handicapped children.

Federal Role in Special Education for Handicapped Children

In a relatively short span of years, the right to education for handicapped children has advanced from de jure discrimination to statutorily guaranteed access to educational opportunity for all children who can benefit from instruction. The federal government and the court system were major forces responsible for these changes (Chambers & Hartman, 1983). This section examines the evolution of special education and the role of the principal players - the Congress, courts, and advocacy groups.

The Evolution of Special Education

Although the constitution guarantees equal protection for all citizens, only in recent years have public policies recognized the rights of handicapped children (Savage, 1978). The handicapped were ignored and shunned by society, and often were victims of de jure discrimination. They were segregated or excluded through a variety of means. Based upon the presumption of incapacity, laws were enacted which severely restricted the rights of handicapped children. In Watson v. City of Cambridge (1893), the court upheld the suspension of a handicapped child on the grounds that he was "so weak in mind as not to derive any marked benefit from instruction...was troublesome to other children...and unable to take ordinary, decent physical care of himself" (Thomas, 1985, p. 2). The Wisconsin Supreme Court in Beattie v. Board of Education (1919) permitted the expulsion of a child with cerebral palsy because he had a "depressing and nauseating effect on teachers and students, and because he required an undue portion of the teacher's time" (Jones, 1981, p. 21). As recently as 1974, a law (Chicago Municipal Code, 1966) remained on the books that made it unlawful for a person who was "diseased, maimed, mutilated or in any way deformed so as to be an unsightly or disgusting or improper person to be allowed in or on the public ways or other public places"

(Thomas, 1985, p. 2). In essence, responsibility for handicapped children was private and familial.

In the early decades of the twentieth century, school enrollment expanded enormously due to enactment of compulsory education laws. Enforcement of these laws provided impetus for special education. Schools were overwhelmed by the large number of handicapped children who entered school for the first time (Brewer & Kakalik, 1979). Also, intelligence testing emerged during this period, and testing revealed that a large percentage of the school population was unable to perform at grade level. States passed laws permitting special classes for handicapped and underperforming children. Unfortunately, the humanitarian concern for the handicapped often became secondary to the desire to segregate students whom the educational system considered "morally and socially deviant and disruptive" (Chambers & Hartman, 1983, p. 21). The goal was to isolate the subnormal so the teachers could work with normal children. Conditions were often deplorable. Classes were conducted in basement rooms by the least trained teachers, and children with different handicaps were lumped together with no real effort made to educate them. Further, as emotionally disturbed and learning disabled children were classified as handicapped, special education classes became disproportionately populated with non-English-speaking and minority students. Critics claimed that special education

enabled nonsegregated schools to incorporate large numbers of nonwhite pupils into the schools while simultaneously segregating them within the schools (Savage, 1978). This effectively continued racial segregation in those public schools that followed this practice.

In the early 1960s, a strong and aggressive coalition of parental organizations and advocacy groups evolved (Goldberg, 1982). They coordinated their efforts and challenged existing special education practices. They demanded that the education of their handicapped children be recognized as a public responsibility. Most importantly, they chose litigation as the strategy to obtain their objectives. The resulting judicial decisions clearly established that handicapped children could not be excluded from public schools by reason of handicap, and that individual handicapped children deserved individual and suitable educational programs. As a result of these court decisions, Congress passed numerous laws affecting the handicapped (Thomas, 1985). Most important of those laws were the Rehabilitation Act (1973), and the Education for All Handicapped Children Act (1975). Section 504 of the Rehabilitation Act prohibited exclusion from programs by reason of handicap, while the Education for All Handicapped Children Act (EHA-B) guaranteed a free appropriate education

for all children defined as handicapped under the law (Lerner, 1978).

Limitations of Federal Power

The federal government's role in special education for the handicapped followed the pattern of its limited role in regular education. The Constitution expressly limits the federal government's power to intervene directly. The Tenth Amendment states: "The powers not delegated to the United States by the Constitution, nor prohibited by the States, are reserved to the States respectively, or to the people" (Alexander, 1980, p. 43). Education is not mentioned in the Constitution, and is therefore presumably reserved "to the states or to the people" (p. 43).

Not withstanding its lack of direct Constitutional power, the federal government has played an active and positive role in affecting educational policies. It has promoted its objectives through persuasion, inducements and legislative enactments (Goldberg, 1982). Article I of the U.S. Constitution gives Congress the power to "lay taxes and collect taxes...and to provide for the general welfare..." (Alexander, 1980, p. 45). The U.S. Supreme Court held in Helvering v. Davis (1937) that the concept of general welfare is flexible, and Congress can tax and expend public money for general welfare purposes. Congress interprets the general

welfare clause to include education of the citizenry, and is able to exert powerful influence on educational policies through the indirect means of categorical grants. While states have the choice of accepting or rejecting federal funds, if they do accept, they are bound by the conditions imposed by the federal government regarding the use of these resources (Alexander, 1980).

The Commerce Clause contained in Article I of the U.S. Constitution is another source of federal power to influence education policies. The U.S. Supreme Court in Gibbons v. Ogden (1924) defined commerce as "...not merely an exchange of goods, but a means for the advancement of society, labor, transportation, intelligence, care, and various mediums of exchange..." (Alexander, 1980, p. 47). Under this broad definition, the Commerce Clause offers unlimited opportunity for Congressional action affecting education. In the past, educational policies in the areas of safety, transportation and labor relations have been affected by legislative enactments authorized under the Commerce Clause (p. 47).

A further source of federal power to shape educational policies rests in the federal court system (Cremins, 1983). Judicial rulings often limit state options in formulating educational policies, but such decisions are usually based on legitimate constitutional questions involving personal freedom and rights, or the unconstitutionality of state

statutes. The sovereign power of the states to operate the public schools is not affected by these federal court decisions. The right of the states to determine the methodology and content of their educational programs has been reaffirmed by numerous judicial decisions (Alexander, 1980).

Federal Legislation Affecting Special Education

The federal government's first involvement in special education occurred in 1827 with the passage of P.L. 19-8 providing for a grant of land to the Deaf and Dumb Asylum of Kentucky (Jones, 1981). In 1864, President Lincoln signed a law providing money to start Gallaudet College for the deaf (Chambers & Hartman, 1983). In 1879, Congress authorized ten thousand dollars to be provided to the American Printing House for the Blind to produce braille materials. In 1918, the Soldiers Rehabilitation Act was passed to provide physical and vocational rehabilitation to war veterans. This act was broadened to provide similar services to other handicapped citizens by the Smith-Fess Act in 1920 (Chambers & Hartman, 1983). From 1827 to 1950, more than 75 acts providing financial assistance for the handicapped were passed by Congress, however the legislation was limited to specific disabilities, such as the blind and the deaf.

Congress first acknowledged the need for federal aid to support and encourage appropriate education for the handicapped when it enacted the Cooperative Research Act of 1954. This was the beginning of a revolution in education for the handicapped that culminated in 1975 with the passage of The Education of All Handicapped Children Act.

P.L. 87-276, passed in 1961, provided training grants for specially trained teachers for the deaf. The Mental Retardation Facilities and Community Mental Health Centers Act of 1965 provided for the establishment of research and development centers to focus on early childhood education, learning characteristics of handicapped children, curriculum and materials development, and innovations in teacher education (Goldberg, 1982). The Federal Assistance to State Operated and Supported Schools for the Handicapped Act of 1965 established grants to state agencies for providing free public education to handicapped children. The Elementary and Secondary Education Act of 1965 provided funds for the establishment or expansion of exemplary or innovative programs, including special programs for handicapped children (Thomas, 1985). The Bureau of Education for the Handicapped was created by the Elementary and Secondary Education Act Amendments of 1966. This agency became responsible for administering programs and projects relating to the education of the handicapped. This legislation also authorized funds

for research projects, and to support pre-service and in-service training of researchers and administrators of special education (Lerner, 1978). P.L. 91-61, enacted in 1969, established a National Center on Educational Media and Materials for the Handicapped. The Education of the Handicapped Act of 1970 consolidated previous provisions and substantially increased federal funding. P.L. 93-42, enacted in 1973, provided for the establishment of a National Autistic Childrens' Week (Thomas, 1985).

The Rehabilitation Act (1973) provided the basis for the strategy of litigation adopted by advocacy groups seeking the right of special education for handicapped children. Section 504 states: "No otherwise qualified handicapped individual in the United States...shall, solely by reason of his handicap, be excluded from participation in, be denied the benefit of, or be subjected to discrimination under any program or activity receiving federal financial assistance" (The Rehabilitation Act of 1973). Among its numerous provisions prohibiting discrimination, the Act requires participants to provide handicapped students with aid, benefits or services that are equal to those provided nonhandicapped students (Turnbull, 1975). The Education of the Handicapped Amendments of 1974 required the Office of Education to establish a program for making grants for supplemental educational centers...educational

services...and establishment of exemplary elementary and secondary school education programs to serve as models for regular school programs (Thomas, 1985).

The Education for All Handicapped Children Act of 1975 guarantees all handicapped children the right to a free, appropriate public education under the least restrictive environment, and is often called the Bill of Rights for handicapped children (Levine & Wexler, 1981). Among its' requirements are: identify, locate, and evaluate all resident handicapped children; to develop an individual education program (IEP) for each handicapped child; to establish procedural safeguards; to hold in confidence information and data used in evaluation and placement. A free appropriate public education requires special education and related services that: (1) are provided at public expense and are under public supervision and direction; (2) meet the standards of the state education agency; (3) include an appropriate preschool, elementary, or secondary education; and (4) conform to a child's IEP (The Education for All Handicapped Children Act, 1975).

EHA-B authorized financial assistance to recipients based on an escalating funding formula to 40 percent of the national average per pupil expenditure (NAPPE). Appropriations to fund the program have fallen far short of the permanent authorization (Jones, 1981). In FY 1986, the

funding level was approximately 12% against the authorized level of 40%. The average per-child amount for FY 1985 was $275 (U.S. Department of Education, 1986). This per-child average is not a per-capita expenditure, but represents the distribution formula on which allocations to states are based. Flow-through provisions require states to distribute at least 75% of funds received under EHA-B to LEAs and IEUs (The Education for All Handicapped Children Act, 1975). The LEAs must expend EHA-B funds for direct services to handicapped children and give assurances that federal funds do not supplant state and local resources (Ballard & Zettel, 1978). If a state elects not to receive EHA-B funds, it is not required to comply with the provisions of the Act. However, Section 504 of The Rehabilitation Act imposes similar requirements in regard to meeting the needs of handicapped children (Bergoff & Veltman, 1979). Therefore, failure to participate in EHA-B will result in the loss of substantial federal funds with no offsetting reduction in responsibilities (Malakoff & Gittens, 1983).

Judicial Decisions Affecting Special Education

While advocacy groups exerted influence in the design and passage of the laws guaranteeing a free appropriate public education for all handicapped children, a strong impetus in the shaping and enactment of the final federal

legislation was provided by the courts (Chambers & Hartman, 1983). The Supreme Court said:

> Today education is perhaps the most important function of the state and local governments....where the state has undertaken to provide it, it is a right which must be available to all on equal terms (Brown v. Board of Education, 1954).

While the Brown decision pertained to racially segregated schools, this case has been cited in nearly every court decision relating to the rights of handicapped children to receive a free public education (Cremins, 1983). In January 1971, the Pennsylvania Association of Retarded Children (PARC) brought suit against the Commonwealth of Pennsylvania for the state's failure to provide all retarded children with a free public education. The case was resolved by a stipulation and consent agreement. The stipulation stated that retarded children cannot be denied access to a free public education without due process of law. The agreement required that all retarded children between the ages of six and twenty-one years must be provided with a publicly supported education. The Court further mandated that local educational agencies which provide pre-school education to any children must provide the same service to retarded children of pre-school ages (Bergoff & Veltman, 1979).

In Mills v. Board of Education of the District of Columbia (1972), the parents and guardians of seven District of Columbia children brought suit against the Board of Education, the Department of Human Resources and the mayor for failure to provide all children with a publicly supported education. In August 1972, the court issued an order and decree providing:

1. A declaration of the constitutional rights of all children to a publicly supported education.
2. A declaration that the defendants policies which excluded children denied plaintiffs rights of due process and equal protection under the law (Goldberg, 1982).

Although the defendants claimed that it would be impossible to afford plaintiffs the relief sought unless Congress appropriated needed funds, the Court decreed:

> ...if sufficient funds are not available to finance all of the services and programs that are needed and desirable in the system, the available funds must be expended equitably in such manner that no child is entirely excluded from a publicly supported education consistent with his needs and ability to benefit therefrom... (Cremins, 1983).

Closely following the P.A.R.C. and Mills cases were thirty-six right-to-education cases in twenty-seven states.

The decisions rendered in these cases had a critical impact on future federal legislation affecting education for handicapped children (Chambers & Hartman, 1983). In the years since implementation of the EHA-B, many of the controversial issues arising from the indefinitive language of the Act have been resolved by the courts (Malakoff & Gittens, 1983). In a landmark case, Board of Education v. Rowley (1982), the Supreme Court defined "appropriate" education for handicapped children as "access to...and not guaranteed outcome", and held that the requirement of the Act would be met when a handicapped child is offered a program that offers an opportunity to "benefit educationally" from the instruction. Other issues involving IEPs, placement, minimum competency testing, related services, etc., have worked their way through the judicial process, and court decisions have provided parents, children and educators with guidelines regarding their rights and responsibilities (Thomas, 1985). In general, violations of statutory and constitutional rights will not be permitted, and strict adherence to the statutory requirements of the Act will be required. In matters involving educational policies and the content and methodology of education programs, the courts will recognize the rights and responsibilities of professional educators, and will not interfere, absent statutory and constitutional violations (Alexander, 1980).

Summary

Special education for handicapped children has grown tremendously in a relatively short period of time--from deplorable neglect to a statutory guarantee of a free appropriate public education. The evolution of EHA-B began early in this century--in state legislatures, state and local education agencies, and with the help of special education professionals. However, only a small percentage of handicapped children were reached, and too often, the educational offerings were inadequate (Chambers & Hartman, 1983). Persistent advocacy groups kept the issue in the public limelight, pressured politicians, challenged educators and initiated litigation. Federal and state courts issued rulings requiring equal protection for handicapped children, and Congress enacted legislation to implement and fund various programs benefitting the handicapped, and imposed conditions for compliance (Goldberg, 1982). These efforts resulted in passage of the Education for All Handicapped Children Act, regarded by advocates as a Bill of Rights for handicapped children. While much remains to be done to improve the administration and delivery of special education services, federal leadership has been a positive factor in its success (Commission on the Financing of a Free Appropriate Public Education for Special Needs Children, 1983).

School Assistance for Federally Affected Areas

The School Assistance for Federally Affected Areas Act (1950) was the first major federal program to provide financial assistance for elementary and secondary education. This legislation, commonly known as the Impact Aid Program superseded the Landon Act, passed in 1940, to assist school divisions burdened by the sudden influx of defense workers and military personnel during World War II (Savage, 1977).

The purpose of the Impact Aid program is to compensate local educational agencies for the cost of educating children when enrollment and availability of revenues from local sources are adversely affected by federal activities (Kakalik, 1979). Impact aid payments are made under two separate legislative authorities: P.L. 81-874 provides assistance to local educational agencies to defray current operating costs of educating children in impacted areas and P.L. 81-815 is designed to provide LEAs with financial aid for school construction under specified conditions (e.g., for construction of urgently needed school facilities in districts where new federal activities have substantially increased school membership) (General Accounting Office Report, 1975).

Impact aid becomes part of the general operating accounts of LEAs and no special accounting is required. It is the closest approximation to general aid from the federal

government for elementary and secondary education (Brown, Ginsburg & Jacobs, 1979). An exception regarding the unrestricted use of impact aid funds was incorporated in The Education Amendments of 1974. It specifically directed that funds provided for handicapped children of military personnel and handicapped children living on Indian lands must be used to support special programs that meet the needs of these children.

Local educational agencies receive payments under P.L. 81-874 for children of civilian and military parents, children living on Indian lands, and children living in federally subsidized, low-rent housing. Children are classified under two broad categories: "A" children, whose parents live and work on federal property, and "B" children who live or whose parents work on federal property, but not both. The categories are further divided on the basis of the number of children served by the LEA. Children enrolled in LEAs serving 20% or more eligible children are known as super A's or B's. When the eligible children comprise less than 20% of the LEA's total enrollment, the children are classified as regular A's and B's (U.S. Department of Education Memorandum, 1986).

Payments are received by the local educational agencies on the basis of an entitlement. The entitlement is expressed as a percentage of an agency's local contribution rate (LCR)

and is intended to compensate for the burden imposed by the various types of federally-connected children at a rate which approximates locally raised education costs. The local contribution rate may be based either on comparable districts' per pupil costs, or alternatively, a minimum rate of the greater of one-half the state or national average per pupil cost (Savage, 1977). The seven educational agencies included in this study used the "comparable districts per pupil costs" method to determine their local contribution rate. Their LCR for FY 1986 was $1,792.97.

The percentage of the local contribution rate to which an agency is entitled varies for the several subcategories within the broad "A" and "B" classifications (see Appendix A). This reflects the notion that different types of federally connected children impose differing degrees of burdens on the LEAs. For example, the higher entitlements of "A" children reflect the theoretically greater loss in revenue to LEAs associated with the loss of tax revenue for both place of residence and place of work. Handicapped children receive a larger entitlement (150%) than nonhandicapped children.

The highest entitlements within the "A" classifications are provided for military and Indian handicapped children, reflecting the greater expense of providing an appropriate education for these children (Congressional hearing, 1984).

Nonhandicapped military children of the "A" and "B" classifications receive relatively higher entitlements than civilian children. The higher payment for military children is intended to compensate for the somewhat greater loss of revenues to a community which may result because military personnel often do business on military installations where products are exempt from local and state sales taxes (Kakalik, 1979). The Soldiers and Sailors Civil Relief Act permits members of the Armed Forces to claim residency in a state other than where they are assigned for duty. In such cases, the service member is also exempt from state income and personal property taxes (Pope & Shipley, 1984).

In addition to payments for federally connected children, special provisions of P.L. 81-874 authorize impact aid to LEAs having a partial loss of tax base as a result of removal of real property from the tax rolls through federal acquisition (Section 2), for LEAs experiencing a sudden and substantial increase in children resulting from federal activities (Section 4), and for LEAs to receive an amount for reduction in federally connected children by cessation or decrease of federal activity (Section 3 (e)). Payments are also authorized to local education agencies and other federal agencies to operate schools when local educational agencies are unable to provide a suitable free public education for federally connected children (Section 6).

The Impact Aid program has been highly controversial since its inception, and its geometric growth has raised philosophical questions (Savage, 1977). Critics argue that the indirect economic benefits received by a community as a result of the federal government's presence (increased employment, commercial activities, and expanded residential tax base), partially offset the cost of educating federally-connected children. Further, they find it totally unjustifiable that children of civilian workers who reside in the community and pay local income, property and sales tax, should be eligible for entitlements under the Impact Aid program (Pope & Shipley, 1984). Likewise, a community benefits from federal subsidies for low-rent housing, and impact aid payments represent a double benefit when payments are made for these children. A study conducted by the Battelle Memorial Institute in 1969 lent support to many of the criticisms. The Battelle study concluded that Impact Aid results in unjustified overcompensation to many LEAs, and payments are made to wealthy LEAs which could finance higher-than-average school costs without impact aid (Brown, Ginsburg & Jacobs, 1979).

Other major studies have examined the effectiveness and justification of the Impact Aid program, including the Stanford Research Institute, 1965, and the General Accounting Office in 1975. The Battelle and Stanford studies concluded

that the basic structure of the Impact Aid program was defensible and properly conceived in terms of providing payments for federally-connected children to relieve the financial burden imposed on LEAs by the federal government's presence. However, both of these studies, as well as the study conducted by the General Accounting Office (1975) identified aspects of the program which limited its effectiveness in compensating for these burdens.

Impact Aid Reforms

The Impact Aid program underwent major revisions in 1974. The Education Amendments Act of 1974 restructured categories of children and payment rates. The effect of these amendments increased the local contribution rate for some LEAs, and expanded the coverage of the program by broadening definitions of federal lands and types of federally-connected children, and by liberalizing eligibility requirements.

A major feature of the 1974 reforms was the introduction of the "tier system" which directs the way entitlements were pro-rated when the program is less than fully funded (Brown, Ginsburg & Jacobs, 1978). The several subcategories were prioritized. Payments rates ranged from 100% of entitlement for federally connected "A" children to 25% for children living in public housing.

The 1974 reforms eliminated entitlements for "B" children whose parents work outside the state in which the local educational agency is located, and reduced entitlements for "B" children whose parents work outside the county in which the local educational agency is located.

Additional changes were made in the Impact Aid program by the Education Amendments of 1978 by further broadening coverage and increasing payments. Heavily impacted areas were defined as those with 20% (formerly 25%) or more of their average daily attendance (ADA) comprised of "A" students. Entitlements for Indian children were raised to 125% of the local contribution rate, and payments for children living in public housing were made under Tier 2 (formerly under Tier 3). Postal facilities owned by the federal government, embassies and other properties owned by foreign governments were considered to be federal property for Impact Aid purposes. The "absorption" provision which did not provide LEAs with any payments for the first 3% of their federally-connected children was eliminated (Brown, Ginsburg & Jacobs, 1977).

Funding the Impact Aid Program

Every president since Truman has targeted the Impact Aid program for major cost reduction (Savage, 1977). However, the program has enjoyed wide support in Congress, mainly

because most congressional districts are beneficiaries of Impact Aid funds, and therefore, Congress was reluctant to reduce the program.

Appropriations for the program have risen from $29 million in FY 1951 to a peak of $801 million in FY 1980 (U.S. Department of Education, 1983). The President's budget for FY 1982 proposed reductions of 50% in appropriations and the elimination of all entitlements for category "B" children (Senate hearing, 1981). While Congress did not approve all of the reductions proposed in the President's FY 1982 budget, his goal has been largely achieved through a succession of annual reductions in appropriations and the lowering of entitlement rates. The amount appropriated for the Impact Aid program for FY 1986 was $665 million, subsequently reduced to $636 million by the automatic 4.3% reduction caused by the Gramm-Rudman-Hollings legislation (Department of Education Memorandum 86-2). The $636 million appropriated for FY 1986, adjusted for inflation since FY 1980, represents a reduction of more than 50%. In addition to reduced appropriations, the program has been impacted by the addition of subcategories excluded under the entitlement formulas previously used. For example, under current regulations certain subcategories of students living in low-rent housing receive entitlements, whereas under the "tier system" used in the past, these categories would have been ineligible

unless appropriations were sufficient to fully fund the entire Impact Aid program.

There is almost unanimous agreement that federal assistance for category "A" children is justified (Brown, Ginsburg & Jacobs, 1978). However, the necessity for payments for category "B" children has been controversial since inception of the Impact Aid program. Therefore, the authorized entitlement percentages for the various categories are frequently adjusted to reflect economic justification as well as budgetary constraints. Under the entitlement formula in use during FY 1986 (see Appendix A), the entitlement percentage of local contribution rate (LCR) for all military "A" children was 100% of LCR. However, appropriations (adjusted by Gramm-Rudman-Hollings legislation) for FY 1986 were 95.7% of LCR for super "A's", and 31.1% of LCR for "A's". The full entitlement percentage of local contribution rate for all military "B" children was 16.67% of LCR. Appropriations were 57.4% of full entitlement percentage for super "B's", and 9.5% for "B's" (U.S. Department of Education Memorandum, 1986).

Alarmed by the potential loss of all financial assistance under the Impact Aid program, several states enacted legislation authorizing tuition charges for the children of nondomiciled military parents residing on federal property (Congressional hearing 1984). The Commonwealth of

Virginia, in March 1981, passed an amendment to the Code of Virginia (Section 22.1-5) which permits local educational agencies to charge tuition to nondomiciled children residing on military or naval reservations, if federal funds received under the Impact Aid program falls below 50% of the total per capita cost of education (Salmon, Sewell & Fulp, 1982).

Tuition charges for students residing on federal property in Virginia were among the several alternatives evaluated in a study conducted by Salmon in 1982. The study concluded that denial of educational services to military-connected children residing on federal property might be counterproductive for some school districts. The state of Virginia provides LEAs with basic state aid, categorical aid, and other Standard of Quality (SOQ) funds. The amount of state aid to the LEA is determined by the division's local composite index (LCI), a measure of fiscal capacity. Average daily membership (ADM) and population are components of the LCI. A reduction in either or both components would have adverse fiscal implications for the LEA.

Humanitarian Assignment Programs and Policies of the Uniformed Services

Each branch of the uniformed services permits military members to request a delay or cancellation of reassignment

orders for various personal reasons. Requests are reviewed on a case-by-case basis and determinations are based on the merits of the individual case, and upon the needs of the services (W. M. Coffin, personal communication, June 11, 1986). In addition to this humanitarian policy, the services are required to maintain a formal program for the specific purpose of providing medical and educational services to meet the needs of handicapped members of military families.

The Defense Dependents Education Act of 1978 requires the U.S. Department of Defense to establish policies and procedures to provide a free appropriate education to handicapped children receiving, or entitled to receive educational instruction from Department of Defense Dependent Schools. Defense Department Instruction (1342.12) ordered each branch of the armed forces to establish and implement programs that comply with The Defense Dependents Education Act and which conform to the requirements of The Education for All Handicapped Children Act of 1975. Each service has established support activities to collect and disseminate data regarding the location and availability of civilian special education programs, and this information is available to the military member prior to reassignment to a new duty station.

U.S. Army - Exceptional Family Member Program

The Army's program, officially designated as the Exceptional Family Member Program (EFMP), establishes specific procedures to meet the needs of exceptional family members. It maintains a program to assess, document and code the special educational needs of eligible family dependents. It conducts family-find activities designed to locate children who might be in need of special education. The Army Community Service (ACS) centers collect data, maintain directories, and disseminate information regarding the availability of special education services in the local community.

The Army's personnel assignment policy states in part:

> ...consider the special education and medical needs of the EFM (Exceptional Family Member) during the assignment process and assign soldiers to an area where the special need can be accommodated provided there is a valid personnel requirement for the soldier's grade and specialty (Army Regulation 600-75).

In August 1986 the Army began implementing a screening program for all military personnel with overseas orders. Exceptional family members requiring substantial medical treatment or special education will be noted in an automated program which will alert Military Personnel Center (MILPERCEN) officials to assign these families to posts where

the necessary support services are available (L. C. Serio, personal communication, September 19, 1986).

U.S. Navy - Humanitarian Assignment/Hardship Discharge Policies

The Navy provides various services to parents of exceptional children through a network of Family Service Centers (FSCs). The Handbook on Special Education for Navy Family Service Centers (OPNAV 15-40), contains suggestions to enable FSCs to assist parents in providing optimal care and education for their exceptional children. A special education coordinator advises parents of appropriate resources available in the community. FSCs maintain libraries containing literature, journals, publications, and other material describing resources for meeting the special needs of exceptional children. An official publication, Exceptional Children - A Navy Family Handbook, (OPNAV 15-5), explains the legal rights of exceptional children, parents rights, and the due process procedures that ensure these rights (V. H. Corry, personal communication, September 30, 1986).

The Navy's humanitarian reassignment policies are administratively controlled by the Humanitarian Assignment/Hardship Discharge Section of the Naval Military Personnel Command (NAVMILPERSCOM). Commanding officers of

naval ships and shore facilities are required to establish an internal screening process (including members such as doctors, chaplains, senior officers and petty officers) to determine whether or not a request for humanitarian assignment is warranted. "Final determinations are based solely on the information/documentation submitted. A request for reassignment will not be disapproved because a member is needed in assigned duties" (Enlisted Transfer Manual, chap. 18-1).

U.S. Air Force - Children Have A Potential (CHAP) Program

CHAP (Children Have a Potential) is the official Air Force program for providing assistance to military members with handicapped children. Its purpose of improving the health, welfare and morale of the Air Force family is primarily achieved by locating and providing civilian and military resources to eligible dependents. Policies, procedures, and administrative responsibilities focus upon the need to make maximum use of state and community resources for care, education, treatment, recreation, and training of handicapped children (A.F. Regulation 168-8). CHAP services include counseling, referral, providing resource information, and liaison with on-base and off-base agencies.

The Air Force, like the other branches of the Armed Forces, considers humanitarian reassignment and deferment

requests on the merits of the individual case (A. Thompson, personal communication, November 7, 1986). All major commands are required to establish a coordinated procedure for the review, approval and assignments of CHAP applications (AFR 36-20, chap. 5; AFR 39-11, chap. 5).

Summary

Although there are administrative and procedural differences in the humanitarian reassignment policies of the individual branches of the armed forces, there are no significant differences in their purpose and objectives. Each service has established support activities to collect and disseminate data regarding the location and availability of civilian special education programs and this information is made available to the military member prior to his or her reassignment to a new duty station.

The Department of Defense officially recognizes the importance of providing special educational services to the handicapped dependents of military personnel. Programs have been implemented to address the special needs of these children. The amelioration of hardships faced by military parents of handicapped children continue to be a high-priority concern of military leaders.

Excess Costs of Special Education

While the actual costs of special education may be in dispute, there is almost complete agreement that The Education for All Handicapped Children Act (EHA-B) (1975) contributes significantly to the high and continually rising cost of educating handicapped children. Special education programs require more teachers because of smaller classes, and often require the services of other personnel such as psychologists, social workers, teacher aides, and speech, occupational, and physical therapists. Additional costs not associated with nonhandicapped children, but which are federally mandated for handicapped children are: special transportation where necessary, psychological evaluation, due process hearings and identification, evaluation, and proper placement. Hospitalized and homebound children must be furnished educational services when needed, and when required for an appropriate program, private placement at no cost to the parents (Turnbull, 1975). During the period of 1975-1980, local education agencies' budgets for special education rose almost twice as rapidly (14%) as instructional and operating budgets (7 to 8% per year) (Hartman, 1981).

During the school year 1984-85, there were 4,368,031 handicapped children (ages 3 through 21) counted as receiving special education and related services under The Education for All Handicapped Children Act and The Education and

Consolidation and Improvement Act - State Operated Programs (ECIA (SOP)). This represents a cumulative increase of 17.6% since the enactment of EHA-B in 1975--a period when overall school enrollment declined by 13.7%. The National Center for Educational Statistics (1985) predicts the number of handicapped children will continue to increase due to a reversal in the declining school population. The number of preschool and post-secondary-aged students being served under EHA-B and ECIA (SOP) will continue to increase as more states mandate special educational services to these age groups (U.S. Department of Education, 1981).

One problem in determining accurate costs of special education is the uncertainty of the number of handicapped children eligible for special educational services. The Department of Education estimates at least 12% of all public school pupils should be included in the handicap categories defined as EHA-B. Since only about 10% are now included, costs can be expected to rise as additional children are located and served by special education programs (Chambers & Hartman, 1983).

The literature indicates a wide variance in the reported incidence of handicapping conditions. Reports from LEAs of pupils identified as handicapped range from a low of 1% to a high of 22%. These differences may be due in part to the elastic nature of the concept of "handicap", and because of

different interpretations of the definitions of handicapping conditions contained in the regulations (National School Boards Association, 1979). There has been significant change in the handicap classifications reported to the Department of Education. The learning disabled category has increased by 131% since 1976-77, while the children reported as mentally retarded has declined by 26% during this period. One of the reasons suggested for the decline in the mentally retarded category was litigation (Larry P. v. Riles, 1974) which prohibited the use of individual intelligence tests found not valid for placement purposes (Eighth Annual Report to Congress).

Many policy factors and variables influence the cost of special education programs. Among these are: population density, individual educational needs, service delivery systems, governance structures, systems costs, and resources (Weintraub & Higgins, 1980). Therefore, actual costs are impossible to determine accurately. The Department of Education estimates that the average per pupil cost of educating handicapped children is approximately twice that of educating the nonhandicapped portion of the school population. A survey conducted for the National School Board Association (1979) found the cost ratio between the education of the handicapped and "regular" education was 1.96 to 1 for the sample studied. Another study (Kakalik, Furry, Thomas &

Carney, 1981) estimated the cost to be 2.17 times greater. The cost ratio widens to approximately 3 to 1 for lower prevalence handicapping conditions, and may reach 10 to 1 or higher when residential placement is required. Major studies of special education costs have been conducted by Rossmiller, Hale and Frohreich, 1970; Clemmons, 1977; Hartman, Hartman, Bernstein and Lavine, 1978; Hartman, 1979; and Kakalik, et al., 1981 (Larson, 1984). Their estimates of the cost of special education are within the range of 2 to 2 1/2 times the cost of regular education.

Sources of Funds

The federal, state and local governments are the major source of funds for providing special education services to handicapped children. According to The Report of the Commission on Financing a Free and Appropriate Education for Special Needs Children (March, 1983), the estimated average total expenditure per handicapped child was $3,500 in 1981. The federal contribution was slightly less than $250, the average state share was nearly $900, and the local share was $2,350.

Federal Funds

Federal funds for special education are provided to the state education agency (SEA) under the provisions of the

Education of the Handicapped Act, Part B (EHA-B). The formula for determining the federal contribution to the states is based upon an increasing percentage of the national average per pupil expenditure (NAPPE) in public elementary and secondary schools in the United States. The percentage of NAPPE authorized by EHA-B was 5% in fiscal year 1978, increasing to 10% in fiscal year 1979, 20% in fiscal year 1980, 30% in fiscal year 1981, and 40% in fiscal year 1982 and beyond. Federal contributions are made to the states with a pass-through provision that allocates 75% of the funds to local educational agencies. The LEAs may use funds provided by the federal government only to pay costs in excess of costs of educating children in the regular school program, and may not use them to supplant other educational funds (The Education of All Handicapped Children Act, 1975).

While EHA-B is a permanent authorization for expenditures, the appropriations to fund the law must be approved by Congress every year for each succeeding year. In an attempt to reduce overall federal spending, the President's budget requests have failed to propose full funding for the program. In fiscal year 1979, Congress appropriated 12.5% instead of the 20% authorized by law. In fiscal year 1980, appropriations were at the 12% level against the authorized level of 30%, and in fiscal year 1981, when the authorized level reached 40%, only 12% was

appropriated. When appropriated funds are less than required for full funding, the maximum amount that all states are entitled to receive for that fiscal year are ratably reduced. Eligibility for federal assistance is limited to 12% of the local education agencies' pupil population to avoid the potential problem of overcounting for the purpose of obtaining more federal funds (Kakalik, 1979). It is further limited by a $7500 minimum LEA entitlement before receiving financial aid (The Education for All Handicapped Children Act, 1975).

LEAs serving federally-connected children may receive additional federal financial assistance for handicapped children under the School Assistance for Federally Affected Areas Act (1950). This law, commonly known as the Impact Aid Program, provides financial assistance to LEAs impacted by the presence of military and naval activities. The amount of aid is determined by a complex entitlement formula (see Appendix A) which classifies pupils into various categories based on their parent's place of work, and/or residence, and by the ratio of military/civilian average daily attendance (ADA). The entitlement for handicapped children is one and one-half times the amount of entitlement for nonhandicapped children.

In FY 1986, the seven LEAs included in this study received per pupil payments of Super A, $2,573; regular A,

$835; super B, $257; and regular B, $43. Of the 3,140 military-connected special education pupils eligible to receive payments, 174 (5.9%) were super A's, 873 (29.7%) were regular A's, 1,898 (64.4%) were super B's. None of the LEAs contained regular B pupils.

State Funds

The largest amount of financial assistance received by LEAs is provided by the state. While all states provide financial assistance to LEAs for special education purposes, the amount of aid depends on the type of school financing formulas adopted by the individual states. Each state may develop its own system of providing funds for handicapped children without regard for financial equity among programs for the same type of handicap (Podemski, Price, Smith & Marsh, 1984). Some states use a noncategorical approach to funding special education and thus do not differentiate among handicapping conditions. Others have adopted a categorical approach with the number of classifications ranging from two in Massachusetts to fourteen in Florida.

A survey of the special education financing formulas in use in the fifty states during the 1980-81 school year was conducted by McQuain (1984). The formulas were classified into five major categories: (1) flat grant, (2) minimum foundation program, (3) percentage equalizing, (4) percentage

matching, and (5) full state funding of the excess cost of special education. Analysis of the data indicated a significant difference in the amount of funds provided under the various formulas. Other writers suggest that all special education formulas could be grouped into the broad categories of: (1) child based, (2) resource based, and (3) cost based, because funding was based on these factors (Hartman, 1980).

Virginia's school finance formula for special education uses the categorical grant approach. Standard of Quality (SOQ) Add-on disbursements to LEAs are based on handicapping condition. In school year 1986-87, the average per-pupil amounts provided to LEAs from Standard of Quality (SOQ) Add-on disbursements were: SED, $720; LD (self-contained), $720; EMR, $442; TMR, $589; and Speech impaired, $79. The amounts shown are based on the 1985-86 Child Count reports.

Chapter 3

Methodology

In Chapter 1 the need to study the impact of military connected handicapped children on the special education programs in the local educational agencies in the greater Hampton Roads area was established. It was noted that although a previous study had been conducted in the greater San Antonio area (Gray, 1973), federal and state legislation enacted since 1973 has vastly altered the nature and cost of special education programs currently mandated for public schools. This study addressed (1) the issue of excess costs of special education and (2) the financial impact on local educational agencies serving military-connected handicapped children.

The third purpose of this study was to determine the percentage of parents of military connected handicapped children that requested duty assignments in the Greater Hampton Roads area under the options permitted by the uniformed services' humanitarian reassignment policies.

In Chapter 2, literature related to the topic was reviewed. The review focused on the federal role in special education, school assistance for federally affected areas, excess costs of special education, and the humanitarian reassignment policies and programs of the uniformed services.

In this chapter the three-part methodology used to answer the research questions is described.

Population

The area included in this study was comprised of seven local educational agencies in the Greater Hampton Roads area: Norfolk, Virginia Beach, Portsmouth, Chesapeake, Newport News, Hampton, and York County. This area is similar in size and population to the area studied by Gray (1973), and similar to the San Antonio area, the Greater Hampton Roads area is heavily impacted by numerous military and naval installations and activities.

Data collected regarding percentages of military connected handicapped children conformed to the categorical programs designated by EHA-B.

Cost information was obtained from the Newport News School Division and was based on the enrollment and expenditures for the 1985-86 school year. Excess costs were determined for the following categorical self-contained programs: learning disabled, emotionally disturbed, educable mentally retarded and trainable mentally retarded. Excess costs, as determined by Kienas (1986) in the Norfolk Public School Division for the 1984-85 school year were used as a basis of comparison with the remaining categorical programs included in this study.

All school districts were reluctant to grant permission to conduct this study. LEA research directors required detailed proposals describing all aspects of the research project. Subsequent meetings and/or presentations to research committees were usually required before gaining final approval. Two LEAs, Virginia Beach and Hampton, refused to grant permission to conduct the research, despite repeated efforts to gain their cooperation. The reasons offered by the LEAs for their reluctance to participate in the study were (1) the confidential nature of the information being sought prevented unauthorized disclosure, and (2) the disruptive effect that would be caused by a data search of student records.

While the Virginia Beach and Hampton school districts did not directly participate in the study, relevant information regarding their special education programs, and data relating to military-connected enrollment were obtained from the U.S. Department of Education and the Virginia Department of Education, and were included in this study. Therefore, only two phases of the study (smaller sample size of parent survey, and smaller sample size of categorical programs) were affected by the omission of these two LEAs.

Data Gathering Procedures

In order to answer research question one: Do the LEAs in the greater Hampton Roads area serve a disproportionate number of military-connected handicapped children, specific data pertaining to special education enrollment by categorical programs were collected from the following five school divisions: Norfolk, Portsmouth, Chesapeake, Newport News and York County. All data were based on the 1985-86 enrollment in each LEA.

Information regarding military enrollment in each LEA was obtained from the Division of Impact Aid (U.S. Department of Education).

Data pertaining to special education programs included:

1. the total enrollment in each school division for the 1985-86 school year;
2. the total military-connected enrollment in each school division;
3. the total enrollment of all children served in special education programs;
4. the total enrollment of all military-connected children served in special education programs; and
5. military enrollment in categorical special education programs in the Norfolk, Newport News, Portsmouth, Chesapeake, and York County school divisions.

Enrollment data for the categorical special education programs for each of the five school divisions were verified by comparison with the child count reports of December 1, 1985 (Virginia Department of Education).

Information needed to identify the military-connected students by categorical special education programs required that the records of all students in each of the special education programs be individually examined. Due to the legal requirement to maintain confidentiality, direct access to individual student records was not permitted. However, arrangements were made with authorized school employees of five school divisions to review the individual records of all students in each of the special education programs included in this study. The necessary information was obtained without compromising confidentiality of student records.

Data to Determine the Cost of Special Education Programs

Data to determine the cost of special education programs were obtained from the Newport News Public School Division and were based on the 1985-86 school year. Data collection and calculation procedures duplicated the methodology used by Kienas (1986) in his study of the cost of special education programs in the Norfolk Public School Division for the 1984-85 school year. The Larson Framework for Descriptive and Comparative Cost Analysis of Public Special

Education Programs (1984) was used to collect relevant data in the following cost components: (1) discrete costs, (2) transportation costs, (3) overhead costs, (4) fixed asset costs, and (5) related services costs. Expenditures were allocated to the appropriate cost center within each component and aggregate costs were calculated in accordance with the Larson framework.

Expenditure data were gathered from the following sources: Newport News 1985-86 Annual School Report, Newport News Public Schools FY 86 Approved Budget, special education department financial records, reports, and invoices, and interviews with school finance officials and administrators. Collection of the data for this study was more time-consuming than had been anticipated and the information was often difficult to locate and retrieve.

In order to determine the excess costs of categorical programs, additional information was assimilated from various state and federal reports containing information pertaining to:

1. average annual pupil expenditure (AAPE);
2. LEA operating budget; and
    - % of budget from local sources,
    - % of budget from state sources,
    - % of budget from federal sources,
        - funds from EHA-B,

- funds from Impact Aid Program,
    - entitlement for military handicapped "A" students, and
    - entitlement for military handicapped "B" pupils.

Parent Survey

Research question three sought to determine what percentage of the parents of military connected children requested their current duty assignment as a result of the uniformed services' humanitarian reassignment policies. A survey instrument was designed by the researcher and reviewed by four special education administrators and one dissertation committee member. The questionnaire and letter explaining the project (Appendix B) were mailed to the randomly selected group of parents of military-connected children. A total of 146 questionnaires were mailed and delivered; 106 were completed and returned, representing a 73% response rate. In order to maintain confidentiality safeguards, the school district officials would not reveal the identity of the children included in the survey. The questionnaires were mailed by school employees and returned to each school district. Due to parent sensitivity regarding the special education classification of their children, school administrators would not allow follow-up questionnaires to

be sent. Therefore it was not possible to contact nonrespondents.

Data Analysis

In order to determine whether five LEAs in the greater Hampton Roads area served a disproportionate number of military-connected special education students, the data were analyzed to determine: (1) the total number of students enrolled in each LEA, (2) the percentage of the total enrollment that was comprised of military-connected children, (3) the total number of students enrolled in special education programs in each LEA, (4) the percentage of total special education enrollment that was comprised of military connected children, (5) the number of students enrolled in each categorical special education program offered in the five LEAs, and (6) the percentage of students in categorical special education programs that was comprised of military connected children.

Additional analysis compared the percentages of military connected handicapped children enrolled in categorical special education programs with the prevalence estimates of the U.S. Department of Education. This comparison was made to determine if the LEAs served a disproportionate number of military-connected handicapped children.

Analysis of Excess Cost Data

In order to determine the excess cost of special education programs, the average annual per pupil cost for LD, ED, EMR, and TMR programs in the Newport News School Division was calculated. Federal contributions under EHA-B and the Impact Aid program, and state contributions under SOQ and categorical grant programs were applied to the annual per pupil costs to determine if LEAs incurred additional costs in providing special education services to military-connected handicapped children.

Analysis of Parent Survey Data

Survey results were tabulated to determine:

- what percentage of the military parents of handicapped children were aware of the uniformed services' humanitarian reassignment policies
- what percentage of parents had consulted military officials regarding the special education needs of their handicapped child
- what percentage of parents had been granted or denied a transfer request based on their child's special education needs
- what percentage of parents have, or would have requested reassignment to a locality providing special education services appropriate to the unique needs of their

handicapped child, if they had been aware of the humanitarian reassignment program.

The results of this survey apply to the population under study. No attempt was made to generalize to a larger population.

Summary

Information needed to answer the research questions addressed in this study was gathered through an analysis of local, state, and federal reports, interviews with school administrators, and a parental survey.

An analysis and discussion of the findings are presented in Chapter 4. Recommendations and conclusions are presented in Chapter 5.

Chapter 4

Analysis of Results

In Chapter 1, it was stated that the study's purpose was to determine: (1) do the seven LEAs in the greater Hampton Roads area which offer day programs for handicapped children serve a disproportionate number of military-connected handicapped children? (2) do LEAs incur additional costs in providing special educational services to military-connected handicapped pupils? and (3) what percentage of military-connected parents of handicapped children are assigned to the Greater Hampton Roads area as a result of the armed forces' humanitarian reassignment policies?

In Chapter 2 the literature relating to the topic was reviewed. The review focused on the federal role in special education, school assistance for federally affected areas, excess costs of special education, and the humanitarian reassignment policies of the armed forces.

The population of the area under study was described in Chapter 3. The methodology used to collect and analyze the relevant data was also described.

The results of the analysis are presented in this chapter.

The estimates of prevalence of categorical handicapping conditions in the United States in 1983-84 (Seventh Annual Report to Congress) was used as the basis for comparison with the data collected in this study. The prevalence estimates used were considered to be the most appropriate data available because they represent the most recent and complete child count of handicapped children, and they include the entire nation.

The sample school districts included in this study were the LEAs of Norfolk, Virginia Beach, Portsmouth, Chesapeake, Newport News, Hampton, and York County.

Data pertaining to the Virginia Beach and Hampton Public School Divisions were limited to data available from the Virginia Department of Education and the U.S. Department of Education. Data pertaining to Norfolk, Chesapeake, Portsmouth, Newport News, and York County were obtained directly from the school districts.

Military Enrollment in Sample LEAs

The total military enrollment in the sample LEAs was 40,824 (see Table 1).

Military enrollment in the sample school districts ranged from 5.6% of total enrollment in the Portsmouth Public School Division to 36.5% in the York County Public School Division. The overall military enrollment of 40,824

Table 1

Total Enrollment by School Divisions, Military Enrollment by School Divisions, and Military Percentage of Total Enrollment During the 1985-86 School Year

LEA	Total Enrollment[a]	Military Enrollment[a]	Military Percentage of Total Enrollment (military enrollment ÷ total enrollment)
Norfolk	35,630	6,608	18.5%
Virginia Beach	59,932	20,491	34.2%
Portsmouth	18,418	1,024	5.6%
Chesapeake	25,360	2,319	9.1%
Newport News	25,872	4,526	17.4%
Hampton	20,086	2,670	13.3%
York County	8,739	3,186	36.5%
	194,037	40,824	21.5%

[a]U.S. Department of Education

represented 21.5% of the total enrollment of 194,037 in the sample LEAs.

The greater density of military population in some LEAs was due to their proximity to military bases. Outlying LEAs contained fewer military installations and activities and thus a smaller military population resided within their boundaries.

The total enrollment in the sample LEAs' special education programs was 18,885 (see Table 2).

The number of children served in special education programs in the sample LEAs was 18,885 (Table 2). This number represents 9.7% of the total enrollment of 194,037 and compares closely with the national average of approximately 10%.

Military Enrollment in Special Education Programs

The total military enrollment in special education programs in the sample LEAs was 3,140 (see Table 3).

The percentage of special education programs in the sample school districts that was comprised of military connected children ranged from 1.7% in the Hampton Public School Division to 42.3% in the Virginia Beach Public School Division. The total military enrollment of 3,140 in special education programs represented 16.6% of the total special education enrollment of 18,885 in the seven LEAs. When

Table 2

Total LEA Enrollment, Special Education Enrollment, and Special Education Enrollment as a Percentage of Total Enrollment

LEA	Total Enrollment[a]	Enrollment in Special Education Programs[b]	Special Education Percentage of Total Enrollment (special education enrollment ÷ total enrollment)
Norfolk	35,630	4,355	12.2%
Virginia Beach	59,932	5,255	8.8%
Portsmouth	18,418	1,676	9.1%
Chesapeake	25,360	2,266	8.9%
Newport News	25,872	2,604	10.1%
Hampton	20,086	2,072	10.3%
York County	8,739	657	7.5%
	194,037	18,885	9.7%

[a]U.S. Department of Education

[b]Virginia Department of Education

Table 3

Total Enrollment in Special Education Programs, Military Enrollment in Special Education Programs, and Military Percentage of Total Special Education Enrollment

LEA	Total Special Education Enrollment[a]	Military Special Education Enrollment[b]	Military Special Education % of Total Special Education Enrollment (military special education ÷ total special education enrollment)
Norfolk	4,335	177	4.0%
Virginia Beach	5,255	2,225	42.3%
Portsmouth	1,676	65	3.9%
Chesapeake	2,266	54	2.4%
Newport News	2,604	354	13.6%
Hampton	2,072	36	1.7%
York County	657	229	34.8%
	18,885	3,140	16.6%

[a]Virginia Department of Education

[b]U.S. Department of Education

considering that military-connected students comprise 21.2% of total enrollment in the sample LEAs, the percentage of military-connected students enrolled in special education programs was lower than expected.

Data displayed in Table 1 and Table 3 show a significant variance in the ratio of military handicapped/nonhandicapped students among school districts. For example, the Hampton School Division with 2,670 military connected students reported only 36 (1.3%) enrolled in special education programs. Norfolk Public School Division with a military connected pupil population of 6,608 reported 177 (2.7%) handicapped pupils, while Virginia Beach Public School Division with 20,491 military-connected students reported 2,225 (10.8%) enrolled in special education programs.

The mean percentage of military connected children enrolled in special education programs in the sample LEAs was 7.7% (see Table 4).

The military enrollment in special education programs varied from 1.3% of total military enrollment in Hampton Public School Division to 10.8% in the Virginia Beach Public School Division. The military special education enrollment of 3,140 represents 7.7% of the total military enrollment of 40,838.

Table 4

Total Military Enrollment, Military Enrollment in Special Education Programs, and Percentage of Military Students Enrolled in Special Education Programs

LEA	Total Military Enrollment[a]	Military Enrollment in Special Education Programs[a]	Percentage of Military Enrollment in Special Education Programs (military enrollment ÷ total military enrollment)
Norfolk	6,608	177	2.7%
Virginia Beach	20,491	2,225	10.8%
Portsmouth	1,024	65	6.3%
Chesapeake	2,319	54	2.3%
Newport News	4,526	354	7.8%
Hampton	2,670	36	1.3%
York County	3,186	229	7.2%
	40,824	3,140	7.7%

[a]U.S. Department of Education

Prevalence estimates were calculated and compared to the actual enrollment of military-connected students in special education programs (see Table 5).

The actual military connected enrollment in special education programs was significantly lower than the estimated enrollment (see Table 5). Only one school district, Virginia Beach, reported actual enrollments which closely matched the estimated enrollment.

Prevalence estimates were calculated and compared with actual military enrollment for categorical special education programs in five LEAs (Norfolk, Newport News, Portsmouth, Chesapeake, and York County) (see Table 6).

Comparison of estimated and actual enrollment of military connected students in categorical special education programs (Table 6) shows the actual enrollment. The five LEAs included in Table 6 were: Norfolk, Chesapeake, Portsmouth, Newport News, and York County. Categorical data for Virginia Beach and Hampton were unobtainable.

The enrollment data of the separate school districts were compared with nonmilitary special education pupils (see Table 7).

As shown in Table 7, the percentage of nonmilitary special education pupils is significantly higher in all LEAs except Virginia Beach. The large difference between LEAs in nonmilitary/military connected pupils receiving special

Table 5

Estimated Prevalence and Actual Enrollment of Military Connected Students in Special Education Programs

LEA	Estimated Prevalence[a]	Actual Enrollment[a]
Norfolk	713	177
Virginia Beach	2,213	2,225
Portsmouth	110	65
Chesapeake	250	54
Newport News	488	354
Hampton	288	36
York County	344	229
	4,406	3,140

[a]U.S. Department of Education

Table 6

Estimated Prevalence and Actual Enrollment in Special Education Programs in Five Sample School Districts

Special Education Categories	Estimated Military Special Education Prevalence[a]	Actual Military Special Education Enrollment[b]
Learning Disabilities	807	363
Speech Impaired	505	205
Mentally Retarded	324	105
Emotionally Disturbed	160	116
Deaf and Hard of Hearing	32	8
Multi-handicapped	12	20
Orthopedically Impaired	25	2
Visually Handicapped	12	1
Other Health Impaired	23	1
Deaf-Blind	2	0
	1,902	821

[a]U.S. Department of Education 1983-84 prevalence estimates

[b]Based on military connected student population of 17,663

Table 7

Percentage of Military and Nonmilitary Students in Special Education Programs of the Separate School Divisions

LEA	% of Nonmilitary in Special Education Programs	% of Military in Special Education Programs
Hampton	11.7	1.3
Chesapeake	9.6	2.3
Norfolk	14.4	2.7
Portsmouth	9.3	6.3
York County	7.7	7.2
Newport News	10.5	7.8
Virginia Beach	8.6	10.8

education cannot be explained by geographic or other factors. The contiguous school districts of Norfolk and Virginia Beach serve the same military population--primarily Naval personnel from the Atlantic Fleet and Naval shore establishments. However, only 2.7% of Norfolk's military-connected students are enrolled in special education programs, while in Virginia Beach, the military-connected enrollment is 10.8%. The adjoining LEAs of Hampton and Newport News serve Army and Air Force personnel from the same military organizations--Fort Eustis, Fort Monroe and Langley Air Force Base. Only 1.3% of military-connected children in the Hampton Public School Division were enrolled in special education programs while Newport News reported a military-connected enrollment of 7.8%.

Calculations were made for all military and nonmilitary connected students enrolled in special education programs in the sample LEAs to determine if the overall number of military connected students was disproportionate (see Table 8).

As shown in Table 8, the number of nonmilitary students enrolled in special education programs is 10.3% of nonmilitary enrollment. This number approximates the U.S. Department of Education's estimate of 10.8%. The number of military connected students (7.7%) was disproportionately lower than the national prevalence estimate.

Table 8

Percentage of Military and Nonmilitary Connected Students Enrolled in Special Education Programs

Categories	Total Enrollment	Enrollment in Special Education Programs	% of Enrollment in Special Education Programs (special education enrollment ÷ total enrollment)
Nonmilitary	153,215	15,745[a]	10.3%
Military Connected	40,824	3,140[b]	7.7%

[a]Virginia Department of Education

[b]U.S. Department of Education

Summary of Analysis of Civilian/Military Enrollment Data

One purpose of this research was to determine if the seven LEAs included in the study served a disproportionate number of military-connected handicapped children in their special education programs. Analysis of the data indicate the percentage of military-connected children enrolled in special education programs is 7.7% of the total military enrollment (Table 4). This percentage is significantly lower than the 10.3% of nonmilitary children enrolled in special education programs (Table 8). It is also substantially lower than the overall prevalence rate of 10.8% reported by the U.S. Department of Education (Eighth Annual Report to Congress).

While the overall number of military-connected students in the sample LEAs was lower than predicted by the national prevalence estimates, Virginia Beach reported a number that was slightly higher. Two other LEAs, Newport News and York County, were approximately 20% lower than expected. The remaining LEAs ranged from 40% to 85% below the predicted enrollment.

In order to determine the cause of inconsistencies in the number of military handicapped children reported, the researcher interviewed several school administrators to compare their reporting procedures. It was discovered that officials in some LEAs were unsure of the handicapping

conditions that should be reported and did not include speech impaired and learning disabled resource categories in their Impact Aid report. Others were unaware that military handicapped students receive a higher impact aid entitlement (150%) than regular military students, and therefore did not realize that the LEA would suffer a loss of revenue as a result of under-reporting military handicapped students.

As a result of interviews with school officials, it was concluded that the lower-than-expected number of military students in special education programs could be due in part to under-counting, incomplete record-keeping, and inaccurate reporting to the Impact Aid Division of the U.S. Department of Education.

Comparison With Previous Study

A previous study of military-connected children enrolled in low prevalence special education programs was conducted by Gray (1973) in the San Antonio area. The area studied was similar to the Greater Hampton Roads area in size and population and was heavily impacted by numerous military installations and a large military population.

The methodology and analysis procedures employed by Gray were followed in this study. The findings of the current study indicated that the percentage of military-connected children enrolled in special education programs in the

Hampton Roads area was significantly lower than was predicted by current prevalence estimates. The Gray study reached opposite conclusions. It found the number of military connected children enrolled in special education programs in the San Antonio area was significantly higher than was predicted by the prevalence estimates in use at that time.

An analysis of Gray's study was made to determine if reasons could be found to explain the different findings of the two studies. Among the possible explanations were:

1. The previous study (Gray, 1973) was completed in 1972, prior to enactment of EHA-B. Uniform classification standards were not in general use at that time. Diagnostic methods and evaluation procedures have since been revised and improved. Many children that would have been classified in low prevalence categories at the time of the Gray study (e.g., mentally retarded) would now be placed in the learning disabled category.

The U.S. Department of Education reported a 131% growth in the number of children classified as learning disabled since enactment of EHA-B. This category presently accounts for 42.2% of the 3 through 21 handicapped population. During the same period, significant decreases were reported in the MR, OHI, D&HH, OI, VH, and BD categories (Eighth Annual Report to Congress). Because of the changes in classification practices and procedures that have occurred

since the previous study, a valid comparison of the two studies was not possible and conclusions drawn from such comparisons would not be meaningful.

2. Different prevalence estimates were used in the two studies. Gray used prevalence estimates developed by the Wisconsin Department of Public Instruction in 1970. The current study used estimates of prevalence reported by the U.S. Department of Education in 1983-84.

The difference in the estimates of prevalence used in the two studies is shown in Table 9.

The current estimates of prevalence in ED, MR, and D&HH categories are from two to ten times higher than the estimates used in the previous study. Estimates of prevalence in OI and VH categories were significantly lower (see Table 9).

An analysis of how the results of this study would have changed by using the same estimates of prevalence used in the previous study is shown in Table 10.

If identical estimates of prevalence had been used in both studies, the percentage of military connected children enrolled in ED, MR, and MH programs in the Hampton Roads school divisions would be significantly higher than was anticipated, and therefore would closely match Gray's findings (see Table 10). The percentage in other low prevalence categories would have been significantly lower

Table 9

Estimates of the Prevalence of Various Types of Handicapping Conditions in the United States

Category of Exceptionality	Estimates Used in Gray's Study[a]	Estimates Used in Current Study[b]
Mentally retarded	0.18	1.84
Emotionally disturbed	0.05	0.91
Multi-handicapped	0.029	0.07
Orthopedically impaired	0.028	0.14
Hard of hearing and deaf	0.08	0.18
Visually handicapped	0.03	0.07

[a]Wisconsin Department of Public Instruction (1970)

[b]U.S. Department of Education (1983-84)

Table 10

Estimated and Actual Enrollments of Military Connected Students in Categorical Special Education Programs in Norfolk, Newport News, Portsmouth, Chesapeake and York County School Divisions - If Estimates of Prevalence Used in the Gray Study Were Used

Categorical Special Education Program	Estimated Military Special Education Enrollment[a]	Actual Military Special Education Enrollment[b]
Mentally retarded	32	105
Emotionally disturbed	9	116
Multi-handicapped	5	20
Orthopedically impaired	5	2
Deaf and hard of hearing	14	8
Visually impaired	5	1

[a]Wisconsin Department of Public Instruction

[b]Virginia Department of Education

than expected. However, as shown in Table 9, the different estimates of prevalence used in each study precluded the possibility of making reliable comparisons and reaching meaningful conclusions.

Analysis of Cost Data

Research question two sought to determine what additional costs would be incurred by LEAs if a disproportionate number of military-connected handicapped children were served in special education programs. In order to determine the additional costs, an analysis was made of four self-contained programs (LD, ED, EMR and TMR) in the Newport News Public School Division. Costs of special education programs determined by Kienas (1986) in a study of the Norfolk Public Schools were used as the basis of comparison with the results of this study.

The Newport News Public School Division served 25,787 pupils during the 1985-86 school year. The number of handicapped pupils enrolled in special education programs was 2,604 (Federal Child Count Report of 1 December, 1985). The LEA employed 1,306 regular teachers, 166 special education teachers and 54 special education aides. Special educational services were provided for educable mentally retarded, trainable mentally retarded, hard of hearing, specific learning disabled, multi-handicapped, visually handicapped,

severely emotionally disturbed, other health impaired, speech impaired, deaf, and developmentally delayed. Service models included regular class, resource, self-contained, separate facility and residential placement.

The LEAs budget for the 1985-86 school year was $98.7 million. The state provided 36% of revenue, federal sources accounted for 7%, and 57% came from city-county funds, loans, bonds, and sales tax receipts. Instruction accounted for 52% of expenditures, administration 2%, transportation 4%, and school plant and maintenance costs were 8%. Food services, attendance and health services, equipment, fixed charges, debt service and capital outlay accounted for the remaining 34% of expenditures.

During the 1985-86 school year, direct expenditures to provide special education and related services to handicapped children in the LEA were $6.8 million. The sources of funds were: local, 70%; state, 20%; and federal, 10%. Federal flow-through (EHA Part-B) funds amounted to $265 per handicapped pupil. Disbursement of Standard of Quality (SOQ) Add-on funds from the state is on a per pupil basis and varies according to handicapping condition, and whether classes employ teacher aides. The per-pupil payment ranges between $1,006 for severely/profoundly handicapped to $79 for speech impaired. Average state-provided, per pupil payments were

$531. Federal impact aid payments averaged $487 per military connected handicapped pupil.

Data Collection

Expenditure data to determine per-pupil special education costs were obtained from the LEA central administration office. Data were collected over a two month period.

The LEA accounting department was unable to identify and extract specific expenditures within special education programs. It was necessary to examine invoices and financial records to obtain data relating to some cost categories. Discrepancies were reconciled by cross-checking after consultation with knowledgeable parties.

Data for determining direct costs were provided by the special education department. Pupil enrollments by handicapping condition and environment were obtained from the Federal Child Count Report, the State Reimbursement Form, and the Annual School Report. Duties and allocation of time devoted to related services were obtained through interviews with personnel responsible for providing these services.

Expenditure data to determine indirect costs were provided by the accounting and budget office. A computer print-out listed aggregate categorical expenditures. Data

were extracted and allocated to appropriate cost centers. The Annual School report provided additional data.

Determination of Special Education Costs

Costs were calculated for four self-contained special education programs: learning disabled, severely emotionally disturbed, educable mentally retarded, and trainable mentally retarded. Costs obtained by Kienas (1986) in a study of special education costs in Norfolk Public Schools for the 1984-85 school year were used as a basis for comparing the results of this study. Salaries used in the Kienas study were increased by 8% to reflect the current year salary increase. Other expenditures were increased by 1.3%, the amount of increase in the consumer price index in 1986.

The data were analyzed using the Larson Framework for Descriptive and Comparative Cost Analysis of Public Special Education Programs (Larson, 1985).

Larson Model

The Larson framework provides a model for the systematic analysis of the costs of public special education programs by handicapping conditions and environment. The model design consists of five components: (1) discrete costs, (2) transportation costs, (3) overhead costs, (4) fixed asset

costs, and (5) related services costs. The cost components are further divided into cost centers and cost categories.

Discrete Cost Component

The discrete cost component includes costs which may be directly attributed to the special education program by handicapping condition and environment. This component consists of 3 cost centers: (1) administration/supervision, (2) support, and (3) instruction. Each cost center contains categories for position, salary, fringe benefits, materials/supplies/texts, equipment, travel, and contract services. Allocation of categorical expenditures is achieved by use of a multiplier based upon the proportionate number of positions assigned to each program and the percent of time spent performing duties within special education.

Transportation Cost Component

The transportation cost component allocates special education transportation costs by handicapping condition and environment. It is divided into 3 cost centers: (1) regular transportation, (2) special transportation, and (3) contract transportation.

The Overhead Cost Component

Overhead costs are costs that benefit all pupils, and which cannot be readily identified and attributed to a specific program. Two cost centers are included in the overhead cost component: (1) general overhead costs, and (2) special overhead costs. The overhead cost component includes expenditures for the indirect services of administration, maintenance and operation, and adult education.

Fixed Asset Component

The Larson model defines fixed assets as being the costs of capital depreciation. Larson (1985) divided the fixed asset component into two cost centers: (1) building depreciation, and (2) vehicle depreciation. Kienas (1986) added a third cost center for furniture and equipment depreciation because these items contributed to the value of school property. The furniture and equipment cost center was included in this study. Furniture and equipment amounted to $19.7 million.

Fixed asset depreciation is defined as the amount of devaluation from the current appraised value of the fixed asset over the course of 1 year due to usage, damage, decay, and/or decline in price. Buildings were depreciated on a 30 year schedule; vehicles, 12 years; and furniture and equipment, 8 years. A multiplier based on the number of

instructional personnel in the LEA was used to determine the total value of fixed assets which were attributed to special education.

Related Services Component

Related services are supportive services as are required to assist a handicapped child to benefit from special education. They include speech pathology and audiology, psychological services, physical and occupational therapy, recreation, early identification and assessment, counseling services, and medical services for diagnostic and evaluation purposes. Related services also include school health services, social work services in schools, and parent counseling and training (34 CFR 300.13).

The Larson model divides related services into two cost centers: (1) evaluation cost center, and (2) therapy cost center. Each related service is analyzed separately and the result yields a per-service, per-pupil cost.

Related services costs are determined by allocating expenditures to categories which include position, salary, fringe benefits, material/supplies/texts, equipment, travel and contract services. A multiplier is employed when a position is not devoted entirely to special education activities.

The costs of related services were calculated to provide a per-service, per-pupil cost. Related services costs were not included in aggregate per-pupil costs because in many instances, related services are provided by reason of handicapping condition and are unrelated to environment or program.

The LEA contracted with outside agencies to provide occupational and physical therapy services. Precise cost of these services were easily determined. Salaries and expenditures attributable to duties performed by psychologists, visiting teachers, and speech therapists were obtained from the annual school report. The percentage of time each position devoted to a particular related service was determined by interviews with the responsible parties. The costs of related services are shown in Table 12.

Aggregate Cost

Per-pupil aggregate cost is the total per-pupil cost for the special education program under analysis. It is determined by totaling the per-pupil cost components of (1) discrete costs, (2) transportation costs, (3) overhead costs, and (4) fixed assets costs. Related services costs are calculated separately and added to the appropriate special education program. The result yields an aggregate cost by handicapping condition and environment.

Comparison With Kienas Study

Per-pupil costs of the special education programs that were analyzed are shown in Table 11. Adjusted aggregate costs determined by Kienas in the Norfolk Public Schools are included. While the per-pupil aggregate costs were close in all programs except learning disabilities, significant differences were noted in some cost components, particularly in overhead and fixed assets costs. Fixed assets costs are based upon depreciation of fixed assets, and may result in wide variations between school districts due to non-uniform appraisal practices and differences in urban and rural property values.

Variations in overhead costs were attributable in part to the multipliers used in the two studies. The multiplier is based upon the number of regular/special education instructional personnel in the LEA. Changes in the ratio of regular/special education instructional personnel will produce different multipliers and therefore different results will be obtained. It was noted that instructional and supervisory positions were proportionally higher in Norfolk. For example, total per-pupil enrollment in Norfolk was 35% higher than in Newport News. However, instructional positions were 55% higher, instructional supervisor positions were 82% higher, and instructional aides were 92% higher. Administrative and supervisory positions were also

Table 11

Larson Model Per-Pupil Aggregate Costs for Self-Contained Special Education Programs for Educable Mentally Retarded and Trainable Mentally Retarded Pupils

Cost Component	EMR	TMR
Discrete costs		
Instruction		
Salaries	$2685	$5572
Miscellaneous	126	134
Administration		
Salaries	214	287
Miscellaneous	13	22
Support		
Salaries	79	79
Miscellaneous	6	5
Transportation	577	982
Overhead	433	433
Fixed Assets	334	334
Aggregate Costs	4477	7848
Kienas Aggregate Costs	$4458	$6923

Table 11 (continued)

Larson Model Per-Pupil Aggregate Costs for Self-Contained Special Education Programs for Severely Emotionally Disturbed and Learning Disabled Pupils

Cost Component	SED	LD
Discrete costs		
Instruction		
Salaries	$5425	$4541
Miscellaneous	120	118
Administration		
Salaries	296	158
Miscellaneous	18	22
Support		
Salaries	79	79
Miscellaneous	6	5
Transportation	755	338
Overhead	433	433
Fixed Assets	334	334
Aggregate Costs	7466	6028
Kienas Aggregate Costs	$6649	$3935

Table 12

Related Services Costs Using Larson Model

	Cost Per Pupil Served
Speech	
Salary	$606
Miscellaneous (travel, supplies, etc.)	20
Occupational Therapy	
Salary	1,093
Miscellaneous	0
Physical Therapy	
Salary	1,322
Miscellaneous	0
Psychologist	
Salary	409
Miscellaneous	7
Educational Diagnosis	
Salary	204
Miscellaneous	3
Social Workers	
Salary	429
Miscellaneous	9
Adaptive Physical Education	
Salary	282
Miscellaneous	15
Health	
Salary	$95

proportionally higher. The salary scale for comparable positions, other than teachers, tended to be higher in Norfolk.

Because of the many variables between LEAs, it would be inappropriate to generalize from a single study using the Larson model. Large differences in the cost of similar programs might be found between large and small, urban and rural, and wealthy and poor school districts.

Summary of Special Education Cost Analysis

Costs were calculated for four self-contained special education programs (LD, ED, EMR, and TMR) in the Newport News Public School division. The Larson model for determining special education costs by handicapping condition and environment was used. Relevant data were collected from a variety of sources. Where specific expenditures were unavailable, reasonable estimates were obtained from individuals responsible for administration and/or supervision of the activities.

Direct instructional expenditures accounted for 72% of the total cost of the programs analyzed. Salaries of administrative and supervisory personnel amounted to 5%. Transportation, overhead and fixed asset costs accounted for 22% of expenditures. Expenditures for these cost components were readily available and could be accurately identified.

Indirect expenditures requiring estimations or allocation by proration involved less than 1% of total special education costs.

Additional Costs Attributable to Military Connected Pupils

Additional costs are defined as those costs incurred by the LEA in providing special education services to military connected handicapped pupils which are above the costs of providing regular education to nonhandicapped pupils. Federal and state funds received by the LEA which were specifically earmarked for special education purposes were deducted from total program costs. The federal funds were provided by the School Assistance for Federally Affected Areas Act (Impact Aid) and from the Education of the Handicapped Act (EHA-Part B). State funds were Standard of Quality (SOQ) Add-on funds for special education. Federal and state funds received under various other aid programs were not considered because they are included in the regular education costs. The LEA reported the average per-pupil cost of regular education was $2948 in the 1985-86 school year.

Four self-contained special education programs were studied (EMR, TMR, SED, and LD). The analysis indicated that the LEA incurred additional costs for military connected handicapped pupils ranging from $86 to $3789. The additional costs for "A" classification children enrolled in SED

programs were $2979 are shown in Table 13. Additional costs for "B" children enrolled in SED programs were $3276 and are shown in Table 14. Additional costs for "A" and "B" children enrolled in LD, SED, EMR, and TMR are shown in Table 15.

Summary of Additional Costs Attributable to Military Connected Pupils

The additional costs incurred by LEAs in providing special educational services to military-connected handicapped children are the difference between special education costs and regular education costs, after deducting the sum of federal and state funds received for special education purposes. State-provided funds are SOQ Add-on disbursements determined by handicapping condition. Federal funds are provided under the provisions of EHA Part-B and the School Assistance for Federally Affected Areas Act (Impact Aid program).

Substantial variations were found between programs. Additional costs ranged from $86 to $3789. It should be noted that the handicapping conditions included in the analysis were high-cost programs and represented only 27% of the handicapped student population. LEAs receive an equal amount of federal funds (EHA-Part B and Impact Aid) for all handicapped pupils, irrespective of handicapping condition. Therefore, low-cost programs such as speech impaired and

Table 13

Additional Per-Pupil Cost to LEA for Military Connected "A" Children in Self-Contained Special Education Programs for Severely Emotionally Disturbed Children

Funds Provided by:	Per-Pupil Cost
	$7466
Federal	
Impact Aid (P.L. 81-874)	836
EHA Part-B	265
	1001
State	
SOQ Add-on	720
Total Federal and State Funds	1721
Cost to LEA	5745
LESS: Average per-pupil cost of regular education	2948
Additional per-pupil cost to LEA	$2797

Table 14

Additional Per-Pupil Cost to LEA for Military Connected "B" Children in Self-Contained Special Education Programs for Severely Emotionally Disturbed Children

Funds Provided by:	Per-Pupil Cost
	$7466
Federal	
Impact Aid (P.L. 81-874)	257
EHA Part-B	265
Total Federal Funds	522
State	
SOQ Add-on	720
Total Federal and State Funds	1242
Cost to LEA	6224
LESS: Average per-pupil cost of regular education	2948
Additional per-pupil cost to LEA	$3276

Table 15

Additional Cost to LEA for Military Connected Pupils Enrolled in EMR, TMR, SED and LD Self-Contained Special Education Programs

Handicapping Condition	Additional Cost for Military "A" Pupils	Additional Cost for Military "B" Pupils
Educable Mentally Retarded	$86	$565
Trainable Mentally Retarded	3,304	3,789
Severely Emotionally Disturbed	2,797	3,276
Specific Learning Disabled	$1,359	$1,838

other programs where special education is provided in regular classrooms (31%), and resource rooms (35%) would produce smaller additional costs than those found in self-contained programs. However, low-cost programs would also produce lower state-provided SOQ Add-on disbursements, thereby partly offsetting gains from federal funds.

Analysis of Parent Survey

Research question three sought to determine what percentage of the parents of military-connected children requested their current duty assignment as a result of the armed forces' humanitarian reassignment policies. A survey instrument was designed by the researcher and reviewed by four special education administrators and one dissertation committee member.

The questionnaire and letter explaining the purpose of the survey (Appendix B) were mailed to a randomly selected group of military parents of children enrolled in special education programs in the LEAs of Newport News, Portsmouth, Chesapeake, and York County. All three branches of the armed forces, Army, Navy, and Air Force had approximately equal representation in the selected LEAs.

A total of 146 questionnaires were mailed. This number represented 23% of the special education enrollment in the five LEAs. Nine percent of the letters were returned

undelivered, indicating that the service member may have been transferred from the area. The normal duty assignment is approximately 3 years, therefore it was expected that a large number of transfers would have occurred due to normal rotation.

One hundred six survey questionnaires were completed and returned, representing a response rate of 73% of the letters mailed and delivered. Analysis of the responses indicated:

1. Twenty-three percent of the respondents indicated that selection of their current duty assignment was due to the availability of appropriate special education services in the Hampton Roads area.

2. Forty-five percent of the parents of military handicapped children were not aware of the uniformed services' humanitarian reassignment policies.

3. Of the 55% of military parents of handicapped children that were familiar with the humanitarian reassignment policies, 41% had requested their current duty assignment because of the availability of special education programs appropriate to their child's unique needs.

4. Seventy-one percent of all respondents indicated that the availability of appropriate special education services for their handicapped children would be the determining factor in the location of future duty reassignments.

Analysis of the Survey Data

While only 55% of the military parents of handicapped children were familiar with the humanitarian reassignment policies, 41% of this group did request duty assignments in the Greater Hampton Roads area because of the availability of special education programs appropriate for their children's needs. An examination of the survey data lead to the assumption that the percentage of military connected children in special education programs would be disproportionately higher than non-military children. However, special education enrollment data (Table 5) show the military percentage to be disproportionately lower. Only 7.7% of the total military connected students were enrolled in special education programs, whereas 10.3% of nonmilitary students were enrolled in these programs.

Of the military parents of handicapped children who were not aware of the humanitarian reassignment programs, 83% indicated that they would have requested duty assignments in areas providing appropriate special educational services, if they had been familiar with the program. Therefore, as information regarding the options available under the humanitarian reassignment programs become more widely disseminated, an increasing number of military duty assignments could be influenced by the availability of appropriate special educational services.

Although the Virginia Beach and Hampton Public School Divisions were not included in the survey of military parents, there is no reason to suspect that their omission had a material effect on the findings. The seven LEAs in the Hampton Roads area are contiguous and all branches of the armed forces are represented by the homogeneous military population residing within the sample area.

Chapter 5

Discussion, Conclusions, and Recommendations

The purpose of the study was to determine: (1) do the seven LEAs in the greater Hampton Roads area which offer day programs for handicapped children serve a disproportionate number of military-connected handicapped children? (2) do LEAs incur additional costs in providing special educational services to military-connected handicapped pupils? and (3) what percentage of military-connected parents of handicapped children are assigned to the Greater Hampton Roads area as a result of the armed forces' humanitarian reassignment policies? Each question will be discussed separately, conclusions drawn from the analysis will be presented, and recommendations for further research will be offered.

A free appropriate public education is guaranteed for every handicapped child, aged 3 through 21. Federal and state legislation, affirmed by court rulings, have clearly established that education is a right that must be available to all children on equal terms. The educational services must be provided at no cost to the parent or guardian.

Educating a handicapped child costs more than educating a nonhandicapped child. Smaller classes require more teachers and often require additional personnel such as

psychologists, occupational, physical and speech therapists, and teacher aides. Identification, evaluation and proper placement, psychological evaluation, and due-process hearings involve additional costs. Special transportation must be provided when necessary. Expensive equipment and special services are sometimes required to provide the handicapped child with an appropriate education. Educational services must be provided to homebound and hospitalized children when needed, and when required for an appropriate program, private placement provided at no cost to the parent (Turnbull, 1975).

The number of handicapped children receiving special educational services has increased each year since enactment of The Education for All Handicapped Children Act in 1975. It was estimated that 4.3 million children received special education and related services in school year 1985-86. This number represents an increase of 17.6% since enactment of EHA-B in 1975 (U.S. Department of Education, 1986).

The cost of providing special educational services to handicapped children is estimated to be 2.17 times greater than providing regular educational services to nonhandicapped children (Kakalik, Furry, Thomas & Carney, 1981). During the period of 1975-1980, local educational agencies' budgets for special education rose almost twice as rapidly (14%) as

instructional and operating budgets (7 to 8% per year) (Hartman, 1980).

The incidence of handicap and level of handicapping conditions is not distributed equally among school districts. Reports from LEAs of pupils identified as handicapped range from a low of 1% to a high of 22% of the student population (National School Boards Association, 1979). Studies have found that a LEA offering exemplary special education programs may create a magnet effect and attract pupils from areas where such programs are unavailable, or of lesser quality (Weintraub & Higgins, 1980). Another study (Gray, 1973) found that a disproportionate number of handicapped children may result where a LEA serves a large military-connected population. While Gray studied selected LEAs impacted with military-connected handicapped children, no other known study has addressed the question of what additional costs are incurred by LEAs under such conditions.

Do the LEAs in the Greater Hampton Roads Area Serve a Disproportionate Number of Military Connected Handicapped Pupils

Discussion

The military-connected children in the LEAs of Greater Hampton Roads were the sample population for this study. The

area includes seven LEAs which are heavily impacted by dependent children of military personnel: Virginia Beach, Norfolk, Portsmouth, Chesapeake, Newport News, Hampton, and York County. Total enrollment in the sample LEAs was 194,037. Military-connected pupils represented 40,824 (21.5%) of the sample population.

Total enrollment in special education programs was 18,885 (9.7%). Military-connected handicapped pupils totaling 3,140 comprised 7.7% of special education enrollment in the sample LEAs.

Nationwide, 10.8% of all pupils receive special educational services because of a handicapping condition (Eighth Annual Report to Congress). The percentage of military-connected handicapped pupils reported in the sample LEAs (7.7%) was a significantly smaller percentage than would be predicted based on estimates reported by the U.S. Department of Education.

The analysis revealed a wide variance in the percentage of military-connected handicapped children reported by comparable LEAs. For example, the contiguous LEAs of Virginia Beach and Norfolk, both heavily impacted by dependents of Navy personnel, reported 10.8% and 2.7% respectively. Newport News and Hampton, adjoining LEAs serving Army and Air Force dependents, reported 7.8% and 1.3%

of the military-connected population received special educational services.

Conclusions

Further investigation, which included interviews with school officials, determined that the large difference in the percentage of military-connected handicapped children reported by various LEAs was partially attributable to incomplete record-keeping and inaccurate reporting procedures. In some cases, LEAs were not aware that all handicapping conditions were eligible for Impact Aid payments and therefore did not include speech impaired and other categories receiving special education in regular classrooms. Not all LEAs understood that handicapped pupils were entitled to larger Impact Aid payments (150%) than nonhandicapped pupils received, and that the under-reporting of handicapped pupils resulted in a substantial loss of revenue to the LEA. Consequently, due attention to accuracy was not always exercised when reports were submitted to the U.S. Department of Education for reporting and reimbursement purposes.

One LEA (Virginia Beach) reported a higher proportion of military-connected handicapped pupils than nonmilitary (10.8% v. 8.6%). However, the inconsistencies in record-keeping and reporting procedures found in some LEAs

would cast doubt on the reliability and validity of conclusions drawn from an analysis of the sample population.

Recommendations

Further research based on present record-keeping and reporting procedures would be unproductive. LEAs should place greater emphasis on the importance of a complete, accurate survey of military-connected handicapped pupils, and the value of this information to the school district. Under-reporting of military connected handicapped pupils by the LEAs results in a loss of revenue from the Impact Aid program.

Do LEAs Incur Additional Costs in Providing Special Educational Services to Military-Connected Handicapped Pupils

Discussion

The costs of providing special educational services to handicapped children are estimated to be more than twice the cost of providing educational services to nonhandicapped pupils (Eighth Annual Report to Congress). One purpose of this study was to determine if LEAs serving a disproportionate number of military-connected handicapped

children incurred additional costs due to the presence of these children.

The School Assistance for Federally Affected Areas Act, more commonly known as the Impact Aid Program, compensates LEAs for the cost of educating children when enrollment and availability of revenues from local sources are adversely affected by federal activities (Kakalik, 1979). The per-pupil amount of aid is determined by a complex entitlement formula (Appendix A) which classifies pupils into various categories based on their parents' place of work and/or residence, and by the ratio of military/civilian daily attendance (ADA). Military-connected handicapped pupils receive entitlements one and one-half times greater than nonhandicapped pupils. In FY 1985 the per-pupil amounts received by LEAs for military-connected handicapped children ranged from $2,537 to $43. The average per-pupil entitlement for handicapped pupils was $564.

LEAs receive additional federal funds under the provisions of the Education of the Handicapped Act, Part B (EHA-B). Federal contributions are made to the state education agency (SEA) with a pass-through provision that allocates at least 75% of the funds to LEAs. The funds can only be used to pay excess costs of providing special education and related services, and may not be used to

supplant other educational funds (34 C.F.R. 300.182). The per-pupil payment under EHA-B in FY 1985 was $265.

The largest amount of financial aid received by LEAs is provided by the state. Virginia's school finance formula for special education uses a supplemental categorical grant approach. Standard of Quality Add-on disbursements are based upon handicapping condition and range from $1007 for severely and profoundly handicapped pupils in special class placement to $79 for speech impaired pupils in regular class placement.

The additional costs to a LEA for providing special educational services to military-connected handicapped children were defined as the difference between special education costs and regular education costs after deducting the sum of federal and state funds that were specifically earmarked for special education purposes. The additional per-pupil cost in the Newport News Public School Division ranged from $86 for military connected "A" pupils in EMR programs to $3654 for military connected "B" pupils in TMR programs.

Conclusions

The findings show that the LEA incurred additional costs in providing special educational services to military connected children in the four self-contained programs included in the study. It is noted that the handicapping

conditions included in the analysis were high-cost programs which represented only 27% of the LEAs' handicapped population. LEAs receive an equal amount of federal funds (EHA-B and Impact Aid) for all handicapped pupils, irrespective of the handicapping condition. Low-cost programs such as speech impaired and other programs where special education is provided in a regular classroom or resource room, would produce smaller additional costs than those found in the programs under study.

The amount of state-provided aid for special education varies significantly between states (McQuain, 1984). Federal Impact Aid varies between school districts. Special education costs differ widely between LEAs. Therefore it was concluded that the findings of this study would be applicable only to the Newport News Public School Division and to the programs and settings that were investigated.

Recommendations

Additional research is recommended to determine the additional costs of providing special education to military connected children in all handicapping conditions and environments.

What Percentage of Military Parents Selected Their Current Duty Assignment as the Result of the Armed Forces' Humanitarian Reassignment Policies

Discussion

A study by Gray (1973) found that a disproportionate number of handicapped children may result where a LEA serves a large military-connected population. One possible reason was attributed to the armed forces' humanitarian reassignment programs. These programs permit members to request duty assignments in localities where the LEAs offer special education programs appropriate for their handicapped children's needs.

Department of Defense Instruction (1342.12) requires the separate branches of the armed forces to maintain formal programs for the specific purpose of providing medical and educational services to meet the needs of handicapped members of military families. The Army's program is designated as the Exceptional Family Member Program. CHAP (Children Have A Potential) is the official Air Force program. The Navy's program consists of a network of Family Service Centers to assist parents in providing optimal care and education for their exceptional children.

Specific procedures have been established to collect and disseminate data regarding the location and availability of

civilian special educational services. The military member is permitted to request reassignment to a locality where appropriate educational services are offered.

One purpose of this study was to determine what percentage of military parents of handicapped children residing in Greater Hampton Roads requested their current duty assignment because the LEAs offered special education programs suitable for their children's needs. A survey questionnaire was used to obtain these data. The sample population included 23% of the parents of military connected children enrolled in special education classes in four LEAs. The response rate was 73%.

The survey results indicated: (1) 55% of the parents were familiar with the armed force's humanitarian reassignment programs, (2) 41% of the parents who were familiar with the programs (23% of respondents) did request their current assignment because appropriate special education services were available in Greater Hampton Roads, and (3) 71% indicated that their current duty assignment would have been determined by the availability of special educational services, had they been aware of the humanitarian transfer policies of the armed forces.

Conclusions

A large percentage of military parents who were familiar with the armed forces' humanitarian reassignment policies (41%) requested duty assignments in the Greater Hampton Roads area. Further, 71% of the respondents indicated they would have requested assignments in localities which offered appropriate special education programs, had they been aware of the humanitarian reassignment policies.

Based upon the findings, it is concluded that an increasing number of military parents of handicapped children will consider the availability of special education services for their children as the determining factor in requesting future duty assignments. LEAs which are impacted by a large military population, and which offer a full range of special education programs are likely to receive a disproportionately higher percentage of military-connected handicapped pupils.

Recommendations

Additional research data could be useful to LEAs for budgetary planning, planning and implementing special education programs, and in supporting requests for additional state and federal financial aid. However, only a relatively small percentage of LEAs are heavily impacted by military connected handicapped pupils. The need for further research

would depend upon the circumstances of the particular LEA, and whether the research data could be used effectively.

Author's Commentary

The remainder of this chapter contains comments and suggestions that may be helpful to future researchers who wish to replicate this study in whole or in part. Fore-knowledge of the problems experienced during this study may help prepare others to avoid or minimize similar difficulties.

1. It is not uncommon for LEAs to receive many requests each year from post-graduate students desiring to conduct research projects. While sympathetic to the researcher's wishes, the LEA may be unable to approve all requests. LEAs may be particularly reluctant when data collection involves invasion of school records, interference with school employees, and is otherwise upsetting to established administrative routine.
2. Information relating to special education pupils is of a confidential nature and disclosure to unauthorized personnel is a violation under EHA-B. Access to required data may be impossible, or at best, extremely difficult to obtain.
3. Data collection was very time consuming because of the necessity to obtain information from a large variety of

sources. In this case, local, state and federal agencies were involved, as well as departments of the Army, Navy, and Air Force. A long lead-time is suggested in order to compensate for delays caused by information requests lost in the bureaucratic quagmire.

REFERENCES

Alexander, K. (1980). School law. St. Paul: West Publishing.

Ballard, J., & Zettel, J. J. (1978). Fiscal arrangements of Public Law 94-142. Exceptional Children, 44, 333-337.

Beattie v. Board of Educ. of City of Antigo, 169 Wis. 231, 172 N.W. 153, 154 (Wis. 1919).

Bergoff, D., & Veltman, E. (1979). Public Law 94-142: Legal implications for the education of handicapped children. Journal of Research and Development in Education, 4, 13-18.

Board of Educ. of the Hendrick Hudson Cent. School Dist. v. Rowley, 458 U.S. 176 (1982).

Brewer, G. D., & Kakalik, J. S. (1979). Handicapped children, strategies for improving services. New York: McGraw-Hill.

Brown v. Board of Educ., 347 U.S. 483 (1954).

Brown, L. L., Ginsburg, A. L., & Jacobs, M. (1978). Impact aid two years later. An assessment of the program as modified by the 1974 Education Amendments. Technical analysis paper 5, Washington, DC: U.S. Department of Health, Education, and Welfare.

Brown, L. L., Ginsburg, A. L., & Jacobs, M. (1979). A proposal to rationalize the federal program of impact aid assistance to school districts. Journal of Education Finance, 4, 223-294.

Chambers, J. G. (1980). The development of a cost of education index: Some empirical estimates and policy issues. Journal of Education Finance, 5, 262-281.

Chambers, J. G., & Hartman, W. T. (1983). Special education policies, their history, implementation, and finance. Philadelphia: Temple University Press.

Chicago, IL, Mun. Code, Sec. 36-34 (1966) (repealed 1974).

Clark, D. L., & Amiot, M. A. (1981). The impact of the Reagan administration on federal education policy. Phi Delta Kappan, 63, 258-262.

Cremins, J. (1983). Legal and political issues in special education. Springfield: Charles C. Thomas.

Defense Dependents Education Act of 1978. P.L. 95-561.

The Education for All Handicapped Children Act of 1975, 20 U.S.C. 140: et. seq. (1976).

Gibbon v. Odgen, 22 U.S. (9 Wheat) 1 (1924).

Goldberg, S. (1982). Special education law, a guide for parents, advocates, and educators. New York: Plenum Press.

Gray, P. P. (1973). Special education and the handicapped child. Unpublished doctoral dissertation, Indiana University, Bloomington.

Hartman, W. T. (1980). Policy effects of special education funding formulas. Journal of Education Finance, 6(2), 135-159.

Hartman, W. T. (1981). Estimating the costs of educating handicapped children: A resource-cost model approach--Summary report. Educational Evaluation and Policy Analysis, 3(4).

Helvering v. Davis, 301 U.S. 619, 57 S.Ct. 904 (1937).

Jones, P. R. (1981). A practical guide to federal special education law. New York: CBS College Publishing.

Kakalik, J. S. (1979). Interrelationships of federal programs for education of handicapped children. Washington, DC: U.S. Department of Health, Education, and Welfare.

Kakalik, J. S. (1979). Issues in the cost and finance of special education. In David Berliner (Ed.), Review of Research in Education (vol. 7).

Kakalik, J. S., Furry, W. S., Thomas, M. A., & Carney, M. F. (1981). The cost of special education N-1972-ED, Washington, DC: The U.S. Department of Education.

Kienas, K. (1986). A comparison of the efficiency and effectiveness of two models for determining the cost of special education programs. Unpublished doctoral dissertation, Virginia Polytechnic Institute and State University, Blacksburg, Virginia.

Larry P. v. Riles, 497 F.Supp. 926, 968-73 (N.D. Cal. 1979).

Larson, J. (1985). Framework for descriptive and comparative cost analysis of public and nonpublic special education programs. Unpublished doctoral dissertation, Virginia Polytechnic Institute and State University, Blacksburg, Virginia.

Learner, S. (1978). P.L. 94-142: Related federal legislation for handicapped children and implication for coordination. Washington, DC: National Education Association.

Levine, P., & Wesler, E. (1981). P.L. 94-142: An act of Congress. New York: MacMillan.

Malakoff, E., & Gittens, N. (Eds.). (1983). Schools and the law of the handicapped--update. Washington, DC: National School Boards Association Council of School Attorneys.

McQuain, S. (1984). An analysis of state special education finance formulas. Unpublished doctoral dissertation, Virginia Polytechnic Institute and State University, Blacksburg, Virginia.

Mills v. Board of Educ. of District of Columbia, 348 F.Supp. 866 (D.D.C., 1972).

National Center for Educational Statistics. (1985). Characteristics of high school students who identify themselves as handicapped. Washington, DC: Government Printing Office.

National School Boards Association. (1979). A survey of special education costs in local school districts. Washington, DC: National School Boards Association. (ERIC Document Reproduction Services EO 181 577).

Pennsylvania Association for Retarded Children v. Commonwealth of Pennsylvania, 334 F.Supp. 1257 (E.D. Pa. 1971), 341 F.Supp. 279 (E.D. Pa. 1972).

Podemski, R. S., Price, B. J., Smith, T. E. C., & Marsh, G. E. (1981). Administration of special education. Rockville, MD: Aspen Systems.

Pope, S. S., & Shipley, T. R. (1984). An overview of impact aid: An alternative source of funding. School Business Affairs, 5(2), 12, 44-45.

The Rehabilitation Act of 1973, 29 U.S.C. (Sec. 794).

The Report of the Commission on the Financing of a Free and Appropriate Education for Special Needs Children. (1983). Committee on Education and Labor, U.S. House of Representatives. Washington, DC: Government Printing Office.

Rossmiller, R. A. (1982). Program patterns and expenditures for special education in smaller school districts. Journal of Education Finance, 7, 381-402.

Salmon, R. G., Sewell, W., & Fulp, K. (1982). The impending loss or reduction of federal impact aid in Virginia: The problem and alternatives. Unpublished manuscript, Virginia Polytechnic Institute and State University, Blacksburg, Virginia.

Savage, D. G. (1977). Education laws 1978: A guide to new directions in federal aid. Arlington: National School Public Relations Association.

Savage, D. G. (1978). Educating all the handicapped: What the law says and what the schools are doing. Arlington: National School Public Relations Association.

School Assistance for Federally Affected Areas Act, P.L. 81-874.

Thomas, S. (1985). Legal issues in special education. Topeka: National Organization on Legal Problems of Education.

Turnbull, R. (1975). Legal aspects of educating the developmentally disabled. Topeka: National Organization on Legal Problems in Education.

U.S. Department of Defense. CHAP reassignment and deferments AFR 36-20, AFR 39-11. Washington, DC: Department of the Air Force.

U.S. Department of Defense. Children have a potential (CHAP). AF Regulation 168-8. Washington, DC: Department of the Air Force.

U.S. Department of Defense. (1981). Education of handicapped children in D.O.D. schools. (D.O.D. Instruction 1342.12). Washington, DC: U.S. Department of Defense.

U.S. Department of Defense. Enlisted transfer manual, (NavPers 15909C ch. No. 21). Reassignments for Humanitarian Reasons. Washington, DC: Department of the Navy.

U.S. Department of Defense. (1986). Exceptional family member program. Army Regulation 600-75. Washington, DC: Department of the Army.

U.S. Department of Defense. (1981). Family Support Program branch (op-152). (1981). Exceptional children--A Navy parent handbook. Washington, DC: Department of the Navy.

U.S. Department of Defense. (1981). Handbook on special education for Navy family service centers. Family Support Program Branch (op-152). Washington, DC: Department of the Navy.

U.S. Department of Education. (1983). Annual evaluation report: Fiscal Year 1983. (cfba no. 84.027). Washington, DC: Office of Planning, Budget, and Evaluation.

U.S. Department of Education. (1986). Memorandum #86-2. Washington, DC: U.S. Department of Education.

U.S. Department of Education. (1984-1986). To assure the free appropriate public education of all handicapped children. Washington, DC: U.S. Department of Education.

U.S. Department of Health, Education and Welfare. (1975). Assessment of the impact aid program. Office of Education, Washington, DC: U.S. Department of Health, Education and Welfare.

U.S. House of Representatives Committee on Education and Labor. (1985). Impact aid: Hearing before the subcommittee on elementary, secondary, and vocational education of the committee on education and labor, House of Representatives, ninety-eighth Congress, second

session. Hearing held in Washington, DC, on March 27, 1984. Washington, DC: Government Printing Office.

U.S. Senate Committee on Armed Services. (1981). Effects of reduction of impact aid on military. Hearing before the committee on armed services, United States Senate, ninety-seventh Congress, first session, June 24, 1981. Washington, DC: Government Printing Office.

Watson v. City of Cambridge, 157 Mass. 561, 32 N.E. 864 (Mass. 1893).

Weintraub, F., et. al., eds. (1976). Public policy and the education of exceptional children. Reston, VA: Council for Exceptional Children.

Weintraub, F., & Higgins, S. (1980). Local special education variables necessary for consideration in developing state special education fiscal policies. Reston, VA: Council for Exceptional Children.

Appendix A

Fiscal Year 1986 Funding for School Assistance for Federally Affected Areas Act (P.L. 81-874)

Fiscal Year 1986 Funding for Impact Aid Program

Category of Child	Full Entitlement % of Local Contribution Rate	% of Full Entitlement Allowed in Appropriations Act and Reduced Under GRH
LEAs with 20% or more A's		
Civilian	100.0	95.7
Military	100.0	95.7
Indian	125.0	95.7
Low-rent Housing	100.0	14.3
Military Special Education	150.0	95.7
LEAs with less than 20% A's		
Civilian	90.0	31.1
Military	100.0	31.1
Indian	125.0	31.1
Low-rent Housing	100.0	4.7
Military Special Education	150.0	31.1
LEAs with 20% or more B's		
Civilian	15.0	57.4
Military	16.7	57.4
Low-rent Housing	15.0	57.4
Military Special Education	25.0	57.4
LEAs with less than 20% B's		
Civilian	15.0	9.5
Military	16.7	9.5
Low-rent Housing	13.3	9.5
Military Special Education	25.0	9.5

Note. As authorized by Section 3(d)(1)(A) of Public Law 81-874 and the 1986 Appropriations Act, Public Law 99-178 as Effected by the Gramm-Rudman-Hollings Legislation.

Source. U.S. Department of Education Memorandum 86-2, 1986.

Appendix B

Letter to Parents of Military-Connected Handicapped Pupils

(DATE)

Name _____
Address _____
_____

Dear _____:

The _____ School Division is working with a doctoral student from Virginia Polytechnic Institute on a study regarding handicapped children of military families. One aspect of this study relates to the Armed Force's humanitarian reassignment policy. She is attempting to determine if military parents are aware of this program, and whether its availability played a part in your assignment to this locality.

Each branch of the Armed Forces has reassignment policies, known as humanitarian transfers, or compassionate reassignments. Military parents with family members needing special education or medical services can request duty assignment to areas where these services are available.

We believe the information gathered in this study will benefit military connected children with special needs. The survey will require only a few minutes of your time to complete and can be returned in the enclosed envelope. Please complete and return it as soon as possible. Your cooperation will be most helpful and will be greatly appreciated.

All responses are confidential. No names are required, or have been released to the graduate student. If you have any questions, Ms. Greiner can be reached at 599-8706 from 7:30 AM to 4:30 PM.

Thank you for your cooperation.

(School Official Signature)

Appendix C

Survey Questionnaire for Parents of Military Connected Handicapped Pupils

1. What are the unique special educational needs of your child? (Mark only one)

   _____ learning disabled: ___ self-contained ___ resource
   _____ educable mentally retarded
   _____ trainable mentally retarded
   _____ hard of hearing/deaf
   _____ orthopedically impaired
   _____ multi-handicapped
   _____ visually impaired
   _____ emotionally disturbed
   _____ other: Specify _____

2. Were you aware of the humanitarian transfer program (compassionate reassignment) for children's educational needs? _____

3. Have you ever consulted with any military personnel (i.e., CHAP officer, etc.) regarding the special educational needs of your child? _____

4. Have you ever requested a transfer to a locality where educational programs appropriate to your child's needs were available? _____

5. Have you ever been denied a transfer that was requested because of your child's educational needs? _____

6. Was the current location of your assignment made due to the availability of educational programs appropriate to your child's unique needs? _____

7. Have appropriate educational programs been available to meet the special needs of your child in each locality to which you have been assigned? _____

8. If you had been aware of the humanitarian transfer program prior to your last relocation, would you have requested special assignments under it, due to the unique educational needs of your child? _____

Comments (optional): _____

_____

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