

DOCUMENT RESUME

ED 226 445

EA 015 373

AUTHOR Moore, Mary T.; And Others
TITLE Finetuning Special Education Finance: A Guide for State Policymakers.
INSTITUTION Educational Testing Service, Princeton, N.J.
SPONS AGENCY National Inst. of Education (ED), Washington, DC. Educational Policy and Organization Program.
PUB DATE Jul 82
CONTRACT 400-80-0041
NOTE 131p.; Portions of text and tables may reproduce poorly due to small print of original document. For a related document, see EA 015 374.
PUB TYPE Guides - Non-Classroom Use (055) -- Reports - Research/Technical (143)

EDRS PRICE MF01/PC06 Plus Postage.
DESCRIPTORS Ancillary School Services; *Disabilities; Elementary Secondary Education; Eligibility; *Financial Support; Income; Policy Formation; *Program Costs; *Special Education; State Aid; *State Programs; Tables (Data)
IDENTIFIERS *State Aid Formulas

ABSTRACT

To assist state policy makers concerning elementary and secondary special education, this handbook assembles information on what states have experienced and what research has found about special education funding, cost and service changes, and funding source management. Chapter 1 considers defining student eligibility for special education, including the characteristics of handicapped children, ages for eligibility, estimates of the number of disabled children, and four strategies for clarifying eligibility boundaries. In chapter 2 the authors outline the range of special education services and discuss (1) state policies on reimbursement, assessment, class size, and school year length; (2) state definitions of related services; (3) legal opinions on state policies; (4) special education effectiveness; and (5) five strategies for clarifying the range of services. Chapter 3, on special education costs, suggests weighing the costs of programs, policies, and factors affecting costs (such as population or salary changes) and getting adequate cost information. Revenue sources are considered in chapter 4, including state, local, federal, and private funds, policy considerations, and the structure of state aid. Chapter 5 examines six types of financial formulas used by states, reviews criteria for assessing formulas, and notes formulas' strengths and weaknesses. Eight appendices present further data and discuss definitions and legal issues. (RW)

 * Reproductions supplied by EDRS are the best that can be made *
 * from the original document. *

X This document has been reproduced as received from the person or organization originating it.
Minor changes have been made to improve reproduction quality.
Points of view or opinions stated in this document do not necessarily represent official NIE position or policy.

SCOPE OF INTEREST NOTICE

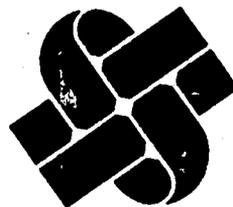
The ERIC Facility has assigned this document for processing to: EA EC

In our judgement, this document is also of interest to the clearinghouses noted to the right. Indexing should reflect their special points of view.

ED226445

Finetuning Special Education Finance:

A Guide for State Policymakers



EA 015 373

Finetuning
Special
Education
Finance:

*A Guide for
State Policymakers*

Mary T. Moore
Lisa J. Walker
Richard P. Holland

July 1982

This publication was prepared with funding from the National Institute of Education U.S. Department of Education under Contract No. 400-80-0041. The opinions expressed in this publication do not necessarily reflect the positions or policies of NIE or the Department of Education.

©Copyright 1982 by Educational Testing Service. All rights reserved.

Table of Contents

Introduction	1
Chapter I: Defining Student Eligibility for Special Education	5
Deciding Who Is Eligible for Special Education Services	6
Defining the Characteristics of Handicapped Children	7
Defining the Ages of Handicapped Eligibility	9
Estimating the Number of Handicapped Children	10
Why Incidence Estimates Are Imprecise	11
Nationwide Estimates of Handicapped Incidence: 10 to 12% of the School-aged Population	11
Interpreting Uncertain Estimates of the Target Population	12
State Strategies to Clarify the Boundaries of Student Eligibility	14
Chapter II: Establishing the Range of Appropriate Services	23
What Services Comprise Special Education	24
Reimbursement Policies	24
Assessment Policies	26
Class Size Policies	26
Length of School Year Policies	27
State Definitions and Interpretation of Related Services	28
Legal Opinions Concerning State Policies Regarding Special Education and Related Services	30
The Effectiveness of Special Education Services	33
State Strategies to Clarify the Range of Special Education Services	35
Chapter III: Determining the Costs of Special Education	45
Major Cost Questions of State Policymakers	47
What Should Special Education Cost?	47
What Do Current Special Education Programs Cost?	48
What Will Special Education Cost If Present Policies Are Fully Implemented?	51
What Will Special Education Cost If Different Policies Are Adopted?	52
Why Do Special Education Costs Vary?	53
What Factors Will Influence Future Costs?	55
Expansion of the Mildly Handicapped Population	55
Expansion of the Secondary School Population	56
Increase in Special Education Teachers' Average Salary Grade	57
Expanded Interpretations of Appropriate Education and Related Services	57
Will Mainstreaming Decrease Special Education Costs?	57
Getting Adequate Cost Information	58

Chapter IV: Revenue Sources for Special Education.....	59
State, Local and Federal Revenues for Special Education.....	60
Additional Revenues for Special Education.....	62
State Funds for General Education.....	63
Revenue Support from Other Agencies.....	63
Private Sources of Revenue.....	67
Policy Considerations Pertaining to State Support of Special Education.....	68
Equity.....	68
Local Control.....	70
Efficiency in Service Delivery.....	71
Federal Fiscal Requirements.....	71
The Structure of State Special Education Aid.....	72
Categorical and Noncategorical Aid.....	72
The Flow of State Aid to Different Agencies and Service Providers.....	75
The Desirability of Expenditure Controls.....	76
Chapter V: Characteristics of Different Financial Formulas.....	77
Basic Funding Formulas.....	78
Funding Formulas Used Across the States.....	80
Is There A Best Formula? Criteria for Assessing Funding Formulas.....	83
Major Strengths and Weaknesses of Different Funding Formulas.....	96

Appendixes

Appendix A:	
State Special Education Policies and the Dynamic of Growth.....	99
Appendix B:	
1980-81 State-Child Counts: Percent of Children Ages 3-21 Served Under P.L. 89-313 and P.L. 94-142.....	104
Appendix C:	
State Growth Rates: Annualized Growth Rate In Handicapped Children Served for School Year 1977-78 through 1980-81.....	105
Appendix D:	
Federal Definitions of Handicapping Conditions.....	107
Appendix E:	
Incidence Estimates: Range of Estimated National Rates by Major Handicapping Disability for Children of School Age (Ages 6-17 Inclusive).....	110
Appendix F:	
Select Legal Cases Relating to Special Education Finance.....	111
Appendix G:	
State Revenues for Special Education.....	115
Appendix H:	
Summary of State Finance Formulas for Special Education.....	116

List of Figures

Figure 1:	Continuum of Special Education Placements.....	25
Figure 2:	Range in Class Size or Case Load for State Programs.....	27
Figure 3:	Degree of State Consensus Regarding Related Services That May Be Required By P.L. 94-124 and Section 504.....	29
Figure 4:	Direction of Court Decisions Under P.L. 94-142 and Section 504 Concerning Special Education and Related Services Requirements.....	31
Figure 5:	Comparison of Expenditure-Based and Resource-Utilization-Based Ratios of Special Education Costs to Regular Education Costs Per Child.....	50
Figure 6:	Annualized Percentage State Revenue Growth for Special Education and General Education, 1975-76 to 1978-79.....	61
Figure 7:	State Agencies and Federal Programs Potentially Contributing to the Support of Special Education.....	64
Figure 8:	Types of Special Education Finance Formulas.....	79
Figure 9:	States Using Different Funding Formulas.....	81
Figure 10:	Comparison of Funding Formula Types Across Dimensions Important to Policymakers.....	89

Acknowledgements

Many individuals and groups assisted in the preparation of this policy guide. The Education Policy and Organization Division of the National Institute of Education originally recognized the need for this guide and provided the financial support to make it possible. James Fox, our project officer, provided invaluable assistance throughout the course of the project and especially in reviewing the final document.

Additionally we would like to acknowledge the time and knowledge that the following individuals contributed to this effort: Charles Blaschke (Education Turnkey); Stephen Smith (Decision Resources, formerly Applied Urbanetics); Martin Gerry (Pickard and Gerry); Margaret Goertz (ETS/ EPRI); James Kakalik (Rand Corporation); Dorothy Routh (Policy Resource Center); Edward Sontag, Max Mueller, Martin Kaufman, and Martin Abramson (Special Education Programs, U.S. Department of Education); William Schipper and Gary Snodgrass (National Association of State Directors of Special Education); Marian Stearns (SRI International); and Frederick Weintraub and Josephine Barresi (Council for Exceptional Children).

We want to thank the New England Regional Resource Center and policymakers from the states of Colorado, Illinois, Maine, Nevada, New Hampshire, South Carolina, Utah, and Vermont for their assistance in shaping and reviewing the contents of this guide.

Finally, we are indebted to Rowena Gear for her skill and patience in typing the many iterations of this manuscript.

Introduction

Special education presents unique challenges to state policymakers deciding issues of resource allocation for at least three reasons. First, the federal government, states and the courts together have instituted a mandate that school systems provide "free and appropriate public education" to all school-aged handicapped children. This obligation is unique in education because it embodies the notion of individually designed services prescribed for each handicapped child. While educators for some time have encouraged instruction that focuses on individualization, to date, special education is the only area of education where individualized services are required by law. Designing a funding system to address individual needs of students with diverse requirements presents a challenge to policymakers accustomed to funding systems that support a standard program for the average child.

Second, special education asks policymakers to make decisions about matters that are extremely fluid and to some extent subject to forces beyond their control. Defining the handicapped population and determining what constitutes an appropriate education is no mean task. Even uncovering the costs of services for a particular type of program is fraught with difficulty. Further, court decisions can and do change the basic assumptions on which funding systems are built. The courts currently are dealing with questions about the definition of appropriate education, related services and the length of the school year for handicapped students -- all issues that significantly affect state and local special education budgets.

Third, special education challenges policymakers to make sense out of a complex organizational world of multiple funding sources and a wide array of government agencies and local service providers. The dollars involved in providing special education (over \$10 billion nationwide in 1980-1981¹) as well as the more general demand for efficiency in government spending have combined to force the difficult issues inherent in interagency coordination to the forefront of policy debate. Due both to historic methods of operation and to needs far outstripping available resources, public agencies and private providers serving handicapped children rarely compete for students; rather they tend to parcel out their service responsibilities to a particular subpopulation of handicapped students. Hence, policymakers are faced with carving out reasonable budgets and service boundaries for a number of state and local agencies that frequently have acquired a political independence of their own.

These three issues — designing a funding formula that is responsive to an individualized service model, coping with fluid costs and changing definitions of services, and managing the interaction of multiple funding sources — confront state policymakers with questions for which there are no easy answers. While the resolution of these issues ultimately will rest on policymakers' best guesses, values and personal convictions, policymakers can profit from the experience of other states and pertinent findings from research. This guide seeks to assist that process.

While the Education for All Handicapped Children Act (P.L. 94-142) and Section 504 of the Rehabilitation Act have established a framework for state action,² the states enjoy some latitude to pursue different policies in providing education to handicapped students. States vary in the definitions and eligibility criteria they prescribe for handicapped children, the instructional and

¹ Kakalik, James, Furry, W.S., Thomas, M.A. and Carney, M.F. The Cost of Special Education. R-2858 ED, Santa Monica, Calif.: Rand Corporation, 1981.

² Federal requirements imposed on the states through law and regulation are susceptible to change. In the spring of 1982, several policy changes were proposed by the Reagan Administration that aimed at modifying the latitude permitted states in implementing special education programs. The nature and fate of these changes remain uncertain at this writing. But regardless of shifts in the federal role, states will continue to confront the difficult policy issues treated in this guide.

support services they provide with state funds, the methods for distributing state funds, the extent of state support and the requirements and constraints they impose on local program decisions. These different policy approaches reflect in large measure the states' involvement in the field of special education prior to the enactment of federal legislation.

While states pursue different special education policies, they exhibit a remarkable similarity in the questions they ask as they approach these policy choices. Accordingly, we have organized this guide around a common set of policy areas that state policymakers around the country have identified. These include:

- defining student eligibility for special education,
- establishing the range of appropriate services,
- determining the costs of special education,
- developing funding sources for special education, and
- instituting formulas for distributing special education funds.

Each issue forms a major chapter of the guide. Individual policymakers may wish to pursue some issues more than others. Organizing the guide by issues permits policymakers to read those chapters most appropriate to their needs. We have cross-referenced those subjects that are discussed in greater detail in other chapters so that policymakers can find information relevant to their concerns without having to read the entire guide.

State policymakers know that simple answers do not exist. All policy solutions contain trade-offs: most policy options score high on some criteria and low on others. Where we can, we have emphasized these trade-offs. But rather than promoting any solutions, this guide provides state policymakers a basis for generating and for comparing alternative approaches to the issues they share.

The guide does not answer directly the important value questions before state policymakers. Rather it lays out the choices available and brings to bear information and considerations pertinent to those questions. Hopefully this orientation -- describing

As a prelude to developing the guide in the fall of 1980, the authors conducted this assessment by reviewing the relevant literature, interviewing state special education personnel, and reviewing identified issues with an expert panel of state legislators and special education policymakers.

state approaches, bringing together available research and legal information, and emphasizing the trade-offs among funding schemes -- will expand state policymakers' knowledge as they make decisions concerning special education finance.

Chapter I: Defining Student Eligibility for Special Education

The ultimate policy questions that state policymakers confront are: "How much should we spend on special education?" and "How much would an adequate special education program cost in our state?" The answer to either of these questions depends on two basic considerations: (1) the children who will be provided special education, and (2) the services those children will receive. This chapter explores policy questions about student eligibility for special education. The next chapter examines issues surrounding the range of services necessary for handicapped students.

Deciding which students are eligible for special education represents a major policy step for a state. The critical nature of this decision has become evident in recent years as virtually all states have witnessed unanticipated enrollments of students in the milder handicapping categories of learning disabled and emotionally disturbed. While expansion of the numbers of students served by special education constituted the major goal of federal and state policy for much of the last decade,¹ policymakers at both levels recently have turned their attention toward what they fear are ambiguous eligibility standards.

Although federal law and regulations define eleven categories of handicapped children,² states have and practice a fair degree

¹See Appendices A, B, and C for more thorough description of the uneven numbers of handicapped students served at the state and national levels.

²Appendix D lists the federal definitions of these eleven categories.

of discretion when establishing their own definitions and eligibility criteria for handicapped children. Those definitions must merely be compatible with federal categories and be capable of conversion into the requisite federal child count necessary for the receipt of P.L. 94-142 funds.

States establish eligibility definitions for two purposes: (1) to determine who qualifies for services, and (2) to establish categories of children to serve as a basis for distributing funds. Importantly, these definitions need not be the same. For example, the state of Washington uses 14 categories of handicapping conditions to determine eligibility (these include preschool handicapped, seriously behaviorally disabled, orthopedically impaired, etc.), but the state funds students according to five categories measuring the students' educational delay. Across the states it is important to distinguish handicapping eligibility categories from special education funding categories.

Deciding Who Is Eligible for Special Education Services

Defining who is a handicapped child for purposes of special education is critical to setting boundaries for the receipt of services and for directing resources to intended beneficiaries. Defining who is eligible for special education encompasses more than drafting a statement describing who is handicapped. It also involves developing eligibility criteria that provide a means for assessing whether an individual child falls within the definition -- for example, how many decibel levels constitute a hearing impairment that requires special instruction or related services. Definitions and eligibility criteria ultimately must be applied and interpreted by teams of special educators, psychologists and teachers in the schools. In the final analysis, the determination of whether a child meets the state's definitions and eligibility criteria often reduces to the informed judgment of a team of professionals interpreting the educational needs of a particular child. Local judgments and interpretations particularly influence enrollment decisions in the less precisely defined handicapping areas.

Children, like all human beings, are complicated; their problems and educational needs do not easily conform to precise measurement. If definitions and eligibility criteria are overly rigid and restrictive of the judgments of local practitioners, they can subvert the delivery of special services for children in need. On the other hand, if local discretion is too broad, equally

undesirable consequences can ensue with judgments being colored by fiscal reimbursement schemes and local agendas to reduce class size and to remove unruly children from regular classes.

States have used the policy levers of definitions and eligibility criteria for special education in several ways, but their actions can be summarized as either broadening or narrowing which children qualify for special education services. States have adopted these policies mainly in decisions pertaining to the characteristics (disability or educational) that define a handicapped child. The states have also adopted eligibility policies that limit services to a specific age range of students. Each of these policy areas is discussed below.

Defining the Characteristics of Handicapped Children

To determine eligibility some states have chosen to define handicapped students by behavioral descriptors that are much broader than those contained in the P.L. 94-142 statute and regulations. For example, a number of states collapse the 11 disability categories contained in the federal definition to a smaller set of broad descriptive groups: children requiring special education services because of physical, mental, social, emotional or educational characteristics. California uses four broad categories for reporting purposes: communicatively handicapped, physically handicapped, learning handicapped and severely handicapped. Massachusetts departs from categories for special education eligibility altogether defining an exceptional child as one who

...because of temporary or more permanent adjustment difficulties or attributes arising from intellectual, sensory, emotional or physical factors, cerebral dysfunction, perceptual factors, or other specific learning disabilities, or any combination thereof, is unable to progress effectively in a regular school program and requires special classes, instruction periods or other special education services in order to successfully develop his individual educational potential.

Many of these broad state definitions are viewed as a progressive step to combat the stigmatizing effects that previous handicap labels imposed on children. Additionally, many professionals argue

¹ California as a result of SB 1870 changed the learning handicapped category to the narrower term "specific learning disability" for school year 1981-82.

that disability conditions per se are of little help in prescribing treatment for children. While some states have altered the eligibility definitions to reflect this view, an even greater number of states have shifted their funding categories for handicapped children to severity or educational placement categories, attempting to remove any direct relationship between funding and stigmatizing labels. Further, some proponents of this approach argue that service delivery funding categories more closely reflect program costs. Recent cost information suggests, however, that program costs can vary as much within service delivery categories as they do within disability categories. For example, a resource room placement for a blind child is estimated to cost \$9,874, yet a resource room program for a speech impaired child costs about \$3,500 per year.

In contrast to broadening eligibility definitions, some states have added greater specificity to the federal definitions and eligibility criteria. The areas of mental retardation and learning disabilities provide illustrations of this practice. Federal regulations have not established quantitative criteria for determining when a child's intellectual functioning is "significantly subaverage" to qualify as mentally retarded. The majority of states, however, attempt to quantify this criterion either by establishing an IQ range, a standard deviation range or by specifying fractional levels of normal intelligence. Similarly, federal regulations require learning disabled children to exhibit a "severe discrepancy" between achievement and intellectual ability, but the regulations do not specify what constitutes a severe discrepancy. Some states further define severe discrepancy as achievement that falls at or below 50% of a student's expected achievement as measured by mental age.² Even in areas that appear subject to more precise measurement, state definitions vary markedly. For example, in the area of the hearing impaired -- a handicap that

¹Kakalik, James, et al. The Cost of Special Education. Op.cit.

²Craig, Patricia A. and Malgoire, Mary A. Analyses of the Office of Education's Proposed Rules for the Identification of Children with Specific Learning Disabilities Under the Education for all Handicapped Children Act (P.L. 94-142). Menlo Park, Calif.: Stanford Research Institute, 1977. This definition was proposed and rejected by the federal government because it failed to overlap with other assessment approaches.

many consider more subject to accurate measurement -- eligibility criteria among states can differ by as much as 20 decibel levels.

States have followed similar broadening or narrowing approaches in defining children qualifying as "seriously emotionally disturbed." In some instances, states have both broadened federal definitions and refined the eligibility criteria contained in federal regulations by omitting some criteria and adding different ones of their own. The federal eligibility criteria require that a student demonstrate a list of behavioral characteristics that adversely affect educational performance over a long period of time and to a marked degree. Socially maladjusted students are specifically excluded unless they also exhibit the characteristics defined as seriously emotionally disturbed. A recent review of 45 states' definitions and eligibility criteria for this group of students revealed that only 12 states employ all these federal criteria. Two states (Delaware and Kansas) appear to include socially maladjusted children in their definition of emotionally disturbed children, and three states (Florida, Iowa and South Dakota) define socially maladjusted children as a separate category. Presumably none of these children were counted for purposes of receiving federal funds. On the other hand, 19 states (including Delaware and Kansas) added additional behavioral characteristics to the federal characteristics in their state definitions. Examples of these additional characteristics include "severe disturbance in thought processes" (California), "ineffective coping behavior" (Mississippi), and "acting out behavior, withholding, defensive, disorganized behavior" (Delaware).

Defining the Ages of Handicapped Eligibility

In addition to defining eligibility by handicapping conditions or educational deficits, states also have latitude in defining the ages of eligibility for special education. While P.L. 94-142 requires that states have a policy goal that all handicapped children from birth to 21 receive special education and related services, the law only mandates services to children aged three through 21. Moreover, states are not required to provide special education services to children between the ages of three through five or 18 through 21 if this is contrary to state policy and practice. Given this leeway, states use a variety of age ranges

¹Mack, J.H. An Analysis of State Definitions of Severely Emotionally Disturbed. Reston, Va.: The Council for Exceptional Children, 1980.

at which they mandate and/or permit districts to provide special education services. Almost half the states have laws that permit, but do not mandate, special education programs for students in preschool or over 18. All states mandate special education services for children over five and under 18.

From 1973 to 1980, several states extended their permissive policies for preschool children. During the same period, however, 12 states eliminated their mandatory service requirements for this age group, while only seven states extended mandatory services to the preschool population.¹ The pressure of federal mandates for serving the six-through-seventeen age group may have served as an incentive for states to roll back mandates for the preschool populations in order to concentrate funds on the school-aged population. Cost/benefit studies of early childhood special education interventions, however, suggest that this retraction of preschool mandates may ultimately prove counterproductive for states, as they incur higher costs when handicapped children who have not benefitted from early special instruction reach school age. Several states may have recognized this possibility in the last two years by again extending mandates to the preschool handicapped population.² At the same time it is important to note that while some states have withdrawn service mandates for preschool children and shifted to permissive programs, the actual numbers of handicapped preschool children and students over 18 served have increased nationwide since 1973.

Estimating the Number of Handicapped Children

Once policymakers have defined the characteristics and ages of students to receive special education, the next step is to estimate the number of children who qualify for services in a state. These numerical estimates help policymakers determine the state's fiscal requirements for special education and establish a guide for assessing statewide progress in the provision of special education.

¹Smith, Barbara J. Policy Options Related to the Provision of Appropriate Early Intervention Services for Very Young Exceptional Children and Their Families. Reston, Va: The Council for Exceptional Children, 1980.

²Remarks made by Barbara J. Smith of the Council for Exceptional Children at an Institute for Educational Leadership seminar, May 5, 1982.

Why Incidence Estimates Are Imprecise

Will incidence estimates based on studies of other states yield an accurate estimate of the number of handicapped children in a particular state? Probably not. First, the qualifying definitions and eligibility criteria are probably different for the state in question than in the states included in the incidence study. Second, the age ranges covered in the incidence studies may be different than the eligible ages in the state. And finally, the proportion of children actually handicapped may differ between a specific state and the states that served as the basis for the incidence estimate. In short, the compatibility of a state's definitions, eligible age levels and demography with those contained in incidence studies of handicapped children significantly affects the accuracy of an external incidence estimate for a specific state.

Nationwide Estimates of Handicapped Incidence: 10 to 12% of the School-aged Population

The Education for All Handicapped Children Act (P.L. 94-142) originally projected that a total of 12% of the school-aged population (5-18) was handicapped within the definitions of the law. Federal legislators, apparently concerned about the breadth in the law's definitions of handicapped children, placed a child funding cap of 12% on each state for purposes of calculating P.L. 94-142 funding. Since children between the ages of three through 21 can be counted toward this 12%, the effective federal funding limit for the school-aged population is slightly lower than 12%. Interestingly, to date no state has exceeded this funding cap in its federal P.L. 94-142 child count.

The 12% estimate of handicapped children used in federal law was based on a range of surveys attempting to assess the incidence of handicapping conditions nationwide. For reasons previously mentioned, these surveys produced imperfect measures of handicapped incidence rates, but the majority of them suggested that incidence was likely to fall somewhere between 10 and 12%. Subsequent research yielded a wider band of incidence, ranging from 6 to 13% of the population, and argued that this range would constitute a better benchmark for federal assessment of state compliance with P.L. 94-142.

¹ Kaskowitz, David H. Validation of State Counts of Handicapped Children, Volume II - Estimation of the Number of Handicapped Children in Each State. Menlo Park, Calif.: Stanford Research Institute, 1977. These incidence estimates appear in Appendix E.

The 10-12% incidence estimate is the sum of separate incidence estimates for different subcategories of handicapped students. A comparison of the incidence ranges by federal definition of handicapping condition appears in Appendix E. The categories of speech, emotional disturbance and mental retardation usually are pegged at between 1 and 4% of the school-aged population. Vision, hearing, orthopedic, special health and multiply handicapped conditions incidence levels are typically much lower, from .1 to 1.5% of the school-aged population.

Estimating the incidence of the learning disabled population causes great controversy. Depending on the definition and eligibility criteria selected, the prevalence can range widely. For example, different studies of incidence place these children anywhere from 1 to 26% of the school-aged population.¹ Responding to this issue, drafters of P.L. 94-142 originally incorporated a 2% funding cap on state learning disabilities counts until the Office of Education could establish more precise eligibility regulations. Subsequently, federal regulations were issued that did not add greater precision to the definition of learning disabilities but relied heavily on procedures to insure appropriate assessment. The last estimate commissioned by the federal government² placed the upper bound of the learning disabled population at 3%. But the fact that learning disabled students now constitute 2.9% of the school-aged population brings this upper bound into serious question.

Interpreting Uncertain Estimates of the Target Population

Policymakers are often dismayed by the imprecise nature of estimates of the handicapped population. But compared to no estimates at all, the available incidence benchmarks have some utility in suggesting a numerical range of a state's special education target population. Any estimates of the handicapped child population must be considered in the current context: many handicapped definitions and eligibility criteria are inherently vague and cannot be designed to be mutually exclusive. Moreover, definitions and criteria must be interpreted by individuals at the service delivery level. In short, real counts of handicapped children will inevitably vary from incidence estimates. Extremely wide variation requires more attention than do modest differences.

¹ Ibid.

² Ibid.

A few rules of thumb can assist policymakers concerned about the numerical uncertainty they confront. We describe some of these below in order that incidence estimates can be used judiciously in the policy process.

- Making some estimate is probably better than making none. A failure to estimate the service population removes an essential element from the cost equation. To overlook cost estimates makes state budget decision-making fairly capricious. Asking for the source of incidence projections and the assumptions they contain will provide guidance on their potential accuracy and reasonableness.
- National incidence estimates are more accurate when a state's definitions are similar to the definitions used in the estimate and when applied to the school-aged population -- not younger or older students or grade-level breakdowns.
- National incidence estimates are likely to be more accurate when a state's child population reflects the national child population along ethnic and economic dimensions.
- National incidence estimates of handicapped children at the district level are generally not very accurate unless the district is large and reflects the heterogeneity of the state and nation.

Ultimately, the number of handicapped children found in any state is a product of several factors that extend beyond definitions, eligibility criteria and incidence estimates. These factors include local interpretations, fiscal resources and traditions of service. Districts vary even more than states in the proportion of students served by special education. For example, in the majority of states, districts frequently exhibit a range of 15 percentage points or more in the percent of total enrollment they report as served.¹ While policymakers may legitimately push for a narrower range in district service rates, at a certain point individual district differences may make this impossible to attain. Some districts have a strong reputation for special education services; other districts have unique population characteristics. Cultural

¹National data from Elementary and Secondary Schools Civil Rights Survey, Fall, 1978. Prepared for the Department of Education, Office of Planning and Budget, AUI Policy Research, July 21, 1981.

traditions may change the way in which handicapped children are perceived. All of these factors can alter expected incidence rates. State regulations and guidelines can clearly influence and encourage a greater uniformity in identifying handicapped students, but it is unlikely that districts will ever serve completely identical proportions of students.

State Strategies to Clarify the Boundaries of Student Eligibility

State policymakers frequently face the unenviable task of finding sufficient fiscal resources to meet the relatively broadly defined special education and related service needs of a handicapped population of uncertain magnitude. As responsible officials, policymakers are obligated to implement the law in a prudent manner. Consequently, state policymakers feel compelled to institute policies that clarify the student eligibility boundaries of special education.

We have identified four policy strategies that states may pursue:

- (1) refining state definitions and eligibility criteria for handicapped students,
- (2) instituting caps on the numbers of children eligible for state funds,
- (3) refining funds reimbursement policies to remove incentives to expand programs, and
- (4) improving implementation schemes to reduce misclassification errors.

For each strategy we discuss the general approach, relevant state experience and the trade-offs associated with it. No strategy is fool-proof, but by explicitly considering the advantages and disadvantages beforehand, policymakers can make more informed choices.

Strategy 1: Refine state definitions and eligibility criteria to determine who will receive special education.

Approach: Given the variability in state definitions and eligibility criteria for handicapped students, states can adopt

definitions and criteria that reduce the vagueness and open-ended nature of some definitions. For example, states might:

- adopt more definitive criteria for identifying mildly handicapped students such as learning disabled or emotionally disturbed;
- add criteria specifying that a handicapping condition must result in educational problems; and/or
- exclude categories, e.g., socially maladjusted, not included in federal law.

**Relevant
State
Experience:**

Anecdotal evidence suggests that several states have embarked on this strategy; however, we uncovered little documentation of state efforts to refine handicapped definitions with one exception. In the 1981-82 school year, California shifted its broader category of learning handicaps back to the federal definition used for specific learning disabilities.¹

Advantages:

More explicit definitions and criteria provide tangible guidance to administrators and teachers for identifying handicapped children. States can better monitor district interpretations of criteria if they are more explicit.

Disadvantages:

Many experts question whether more precise definitions and eligibility criteria are possible within the current

¹ Craig, Patricia A., Hershberger, Ann, Machover, Michael, Myers, Eleanor, L., Wujek, Mary. Independent Evaluation of the California Master Plan for Special Education. (Third Annual Report) Menlo Park, Calif.: SRI International, March. 1981.

state of the art. Many educators conclude that handicapped children share more educational characteristics in common than they exhibit as separate subgroups. Moving to more restrictive definitions and eligibility criteria can engender significant political opposition from subgroups previously eligible. Finally, additional criteria may prove equally difficult to interpret. For example, knowing how to distinguish "socially maladjusted" students from emotionally disturbed students may be difficult in practice.

Strategy 2: Institute caps on the number of children eligible for state funds.

Approach:

This strategy requires placing funding caps on the handicapped population as a whole or on subcategories of handicapped children. The caps can be drawn from incidence studies tempered by past state experience and expert opinion. Importantly, state funding caps will not relieve districts of their obligations to serve handicapped students; they merely place a ceiling on how much the state will contribute should a district's enrollment exceed the cap. States can allow districts to request waivers for exceeding the limits as a result of a district's unique circumstances.

**Relevant
State
Experience:**

The federal statute uses a 12% cap on handicapped children eligible for federal funds and once used a 2% cap on learning disabled students. Several states currently use caps. These include:

- California: 10% of total student enrollment and program placement caps: special classes (2.8%),

resource rooms (4%), and designated instructional service (4.2%). (More than 2/3 of the Master Plan districts exceeded the 4% limit on resource rooms in 1979-80.)

- Utah: caps on average daily membership for 11 handicapping conditions; waivers allowed.
- Florida: districts cannot exceed caps placed on program categories by more than 30%; waivers allowed.

Advantages:

Caps offer policymakers a tool for containing unwarranted population expansion. They provide guidelines to district personnel of how many children generally should be eligible for special education services. As new evidence becomes available, states can alter or remove the caps. Caps can offer some stability to the state special education budget, protecting special education programs from potential budget backlash. Finally, when local districts share the cost of a particular program with the state, caps can confine the growth of the program in those wealthier districts that have the resources to expand their share of the program. This, in turn, allows poorer districts an opportunity to benefit from limited state resources.

Disadvantages:

The major drawback of caps is that we do not know if they are correct. Their accuracy for particular districts may be extremely questionable. Furthermore,

¹Ibid

they run counter to the fundamental notion that the incidence of handicapped populations varies across districts. Caps on subcategories of handicapped children can produce counterproductive tendencies at the district level such as inappropriately placing students in categories where the limit is not yet attained or, as Utah experienced, inflating child count numbers to avoid the fiscal reductions necessitated by end-of-year funding adjustments to enforce the caps.

Strategy 3: Refine funds reimbursement policies to change incentives for enrolling students in special education.

Approach:

This approach includes two major options: (1) making funding formula reimbursements more closely reflect actual district costs for serving specific types of students, and (2) placing on districts some share of the cost burden for serving special education students. States might also require districts to bear more of the costs of serving students in handicapped categories that are least subject to precise definition. Financial incentives for districts to over enroll students in special education programs occur when districts bear little or none of the costs of providing special services or when certain classifications of students net proportionately greater state revenues relative to district costs. For example, flat grant payments for each handicapped pupil served can lead to unwarranted population growth in the lower cost programs such as those for mildly handicapped pupils because

¹Leppert, Jack and Routh, Dorothy. Weighted Pupil Education Finance Systems in Three States: Florida, Utah and New Mexico. Washington, D.C., Government Printing Office, 1980.

districts will accrue higher net revenues by serving these types of students.

**Relevant
State
Experience:**

Several states suspect that their finance schemes create undesirable incentives to identify students as mildly handicapped. California in 1979-80, distributed state Master Plan funds on a flat grant basis, providing overfunding for low-cost services and underfunding for high-cost services. California now distributes funds through a cost/resource formula that distinguishes among different program placements. South Carolina revised its pupil weighting factors to correct for what it perceived as overly generous funding of speech and emotionally disturbed programs.

Advantages:

Financial resources are powerful incentives. Many believe they are a major force behind the significant increases in the learning disabled population. Finance formulas that are finely tuned to closely reflect actual cost and that require districts to carry a portion of program costs can to some extent reverse overenrollment patterns.

Disadvantages:

Ascertaining accurate program costs is a difficult and expensive task. Some districts will always find cheaper program strategies to improve their return on state dollars leaving policy-

¹ Office of the Auditor General of California. Financing and Administration of Special Education Programs for Handicapped Pupils. Prepared for the Joint Legislative Audit Committee, Sacramento, Calif.: January 1980.

² Leppert, Jack and Routh, Dorothy. A Framework for Educational Finance Act Revision in South Carolina. McLean, Va.: Policy Resource Center, 1981.

makers uncertain about whether to use average costs or the lowest cost estimates. Also, the most finely-tuned reimbursements are likely to lead to highly complicated formula breakdowns. Moreover, requiring districts to share special education program costs can be unfair to districts with minimal local resources and to those with large proportions of students needing special education. Calling for districts to share more in the finance of less precisely defined pupil categories may be perceived as inequitable treatment of a special education subgroup.

Strategy 4: Improve program implementation.

Approach:

This strategy relies on emphasizing techniques to improve the decisions made by school personnel about who should receive services. These techniques include:

- o teacher in-service training programs,
- o local technical assistance,
- o pre-referral screening programs,
- o monitoring, and
- o enforcement sanctions.

**Relevant
State**

Experience:

Most states already use some of these techniques but their effectiveness may be less than desired. Teacher in-service training in many areas has focused primarily on special educators and the writing of individual education programs (IEPs). Less frequently has it helped regular classroom teachers gain skills in diagnosing students' problems and assessing particular needs.

Advantages:

Research has shown that policies are regularly altered and changed as district and school personnel implement

them.¹ More assistance in this process can reduce unnecessary referrals and misclassifications. Sanctions have proven to be powerful tools to gain district adherence to policy.

Disadvantages: Improved implementation efforts are worthwhile as long as clear policies exist but these techniques are unlikely to overcome the shortcomings of vague definitions and eligibility criteria or the lack of placement standards. This strategy may expand the role, size, and intrusiveness of the state bureaucracy. Additionally, monitoring and enforcement efforts can increase districts' reporting and data burdens.

¹Berman, Paul and McLaughlin, Milbrey. Federal Programs Supporting Educational Change: The Findings in Review. Santa Monica, Calif.: Rand Corporation, 1975; Weatherly, Richard A. Reforming Special Education: Policy Implementation from State to Street Level. Cambridge, Mass.: The MIT Press, 1979; and Hargrove, Erwin G. "School Systems and Regulatory Mandates: A Case Study of the Implementation of the Education for All Handicapped Children Act." In Bachrach, Samuel B. (ed.). Organizational Behavior in School and School Districts. New York, Praeger, forthcoming.

Chapter II: Establishing the Range of Appropriate Services

The second major determinant of how much a state's special education program costs is the range of services that eligible students receive. Deciding which special education and related services are required by law is a much contested area for state policymaking. This controversy largely stems from the basic educational principle contained in both P.L. 94-142 and Section 504. Briefly stated, this principle holds that once an eligible handicapped child is identified, the determination of what services are necessary for that child's education emerge from the unique educational needs of the child. Most policy efforts to establish a priori limitations on special education and related services to be considered part of an individual child's program run a high risk of colliding with this basic instructional principle.

Nevertheless, states have adopted a number of policies through state statute, regulations and guidelines to specify those services that can be called special education and related services. Most states define special education in a manner similar to P.L. 94-142: specially designed instruction to meet the unique needs of a handicapped child, however, states show considerable variety in the range of policies (e.g., assessment procedures, class size and case load requirements, school year limitations) that influence the particular form that special instruction takes at the district and school levels. Similarly, most state definitions of related services conform closely to the P.L. 94-142 definition: developmental, corrective and other supportive services necessary for a child to profit from special education. States vary in the services that they include within this definition; for example, specific psychological and medical services are classified differently across states for purposes of reimbursement.

What Services Comprise Special Education?

Special education as currently defined by federal law encompasses services that fall into four major groups: (1) individual assessment and diagnosis, (2) individualized education programs (IEPs), (3) educational programs or placements, and (4) due process procedures. Additionally, federal law and court decisions require that assessments be nondiscriminatory and that special education take place in the least restrictive environment (often described as mainstreaming).

From a financial perspective, the core of special education is the instructional program, although assessment and due process services also have noteworthy financial implications.¹ Federal legislation and regulations require states to ensure that instructional program options are available across the state to meet the unique educational needs of handicapped children. As a consequence, all states have sought to implement what is commonly called a continuum of services.² This continuum (Figure 1) ranges from programs that teach a handicapped child in the regular classroom to those that provide instruction in the home, hospital, or full-time work setting. Figure 1 also shows the percentage of the public school handicapped population in each program in the 1977-78 school year.

States exert influence over the special education services that actually are delivered through policies regulating fiscal reimbursement, assessment procedures, class sizes, and the length of the school year.

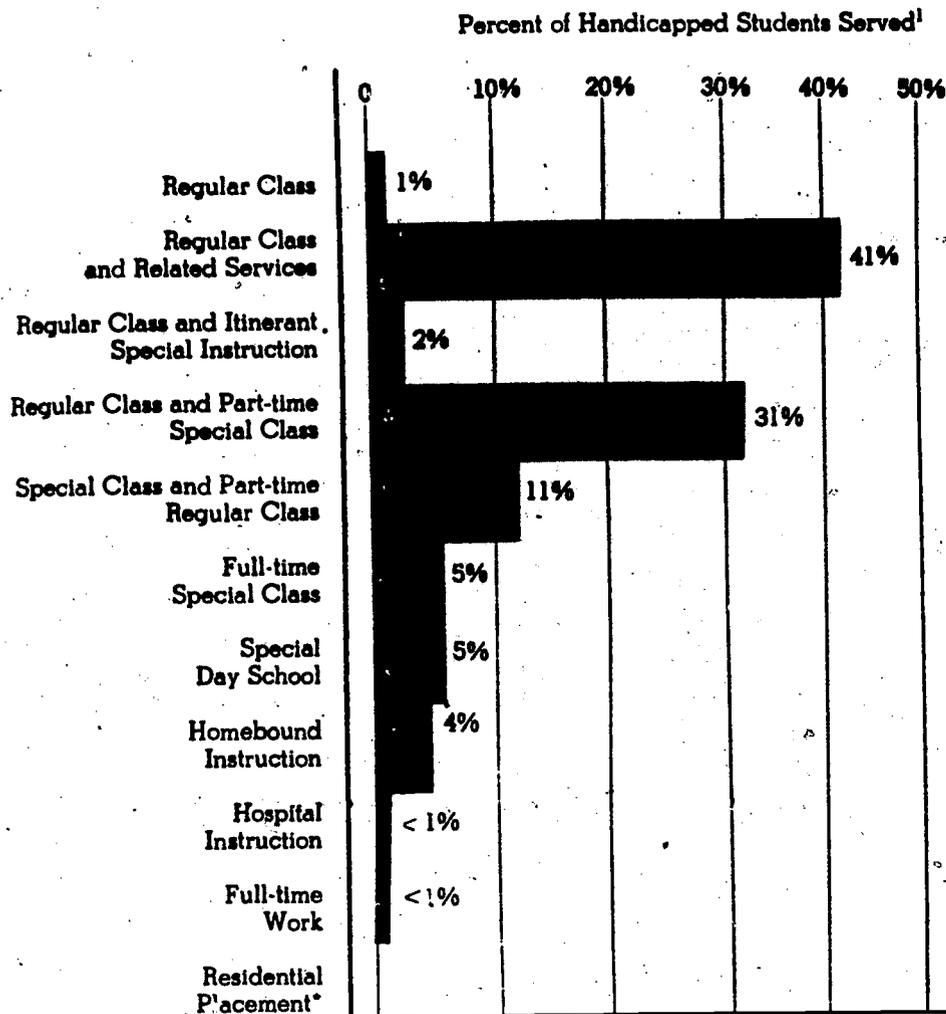
Reimbursement Policies

While state reimbursement formulas vary considerably (see Chapter V), every state faces decisions about which program costs

¹A recent cost estimate prepared by the Rand Corporation estimates that handicapped assessment costs (separate of IEP development and placement costs) averaged approximately \$100 per handicapped child in 1977-78. We could locate no studies that analyzed the costs of due process procedures. Kakalik, J.A., et al. The Cost of Special Education. Op. cit.

²Code of Federal Regulations, Sec. 121a.551, Assistance to States for Education of Handicapped Children.

Figure 1
Continuum of Special Education Program Placements



¹Based on results from a nationally representative sample of school districts, 1977-78.

*Residential placements excluded from national sample.

Source: Kakalik, J., Furry, W.S., Thomas, M.A. and Carney, M.F. *The Cost of Special Education*. Santa Monica, Calif.: Rand Corp., Prepared for the U.S. Department of Education, November 1981.

will be allowed. States using resource unit and cost-based formulas especially confront this issue. But even states using student-based funding arrangements (e.g., pupil weighting formulas) must decide which specific cost elements to include in establishing formula weights. States vary in their inclusion of direct and indirect program costs. For example, Missouri allows districts to use state funds only for teacher salaries. Relatedly, state reimbursement policies for classroom aides can significantly shape the staff ratios and program placements available to different categories of handicapped children.

Assessment Policies

State assessment policies vary with respect to the particular participants who must attend IEP meetings and the number of participants necessary. For example, Massachusetts until recently, established assessment policies that varied the number of placement team participants according to the severity of a child's handicap, existing placement and parent preferences. This practice allowed districts more flexibility in assessing the wide range of mild, moderately and severely handicapped children -- permitting those children with more complex problems the services of a larger, more diverse team. Other states have adopted similar approaches in their requirements for assessment and placement.

Class Size Policies

Class size limitations vary significantly across states both in terms of the maximum number of children allowed in a class and the basis on which these determinations are set, e.g., handicapping condition, grade level, severity level or type of placement. State case loads and class sizes for placement of speech impaired students appear to show the greatest variation across the states. Figure 2 compares the lowest and highest allowed class size or case load limits for three types of speech placements across the states.

Class size limits contribute significantly to the costs of special education. The subsequent chapter on costs offers a more detailed discussion of their impact. Class size limits probably influence the quality of services some children receive although research is not available to compare the effects of different class sizes on different handicapped students.

Figure 2

Range in Class Size or Case Load for State Speech Programs

State Class Size/Case Load Limits:	Speech Placements		
	Self-Contained	Resource Room	Itinerant Teachers
Lowest	5	15	50
Highest	60	100	100

Source: Mack, J.H., Barresi, J. and Bunte, J. *Special Education Class Size*. Reston, Va.: The Council for Exceptional Children, March 1980.

Length of School Year Policies

A number of states have attempted to place limits on the number of days that nonhandicapped and handicapped children may receive education services. This practice, colloquially known as the "180-day school year" requirement, has been justified as conforming with equal educational opportunity requirements because all children, handicapped and nonhandicapped, are permitted equal access to schooling. State policies applying the 180-day school year to handicapped students have been attacked on grounds that handicapped children may require different or special treatment and that service delivery must respond to their individual differences.

State policies prohibiting an extended school year for handicapped pupils take a number of forms. In some states these limits are contained in state statutes; in others they are articulated in state agency policy directives, funding reimbursement policies, and due process policies and procedures. While many states attempt to limit the school year, Georgia, New York, Pennsylvania, Oregon, Wisconsin and New Hampshire have been subject to suit over extended school year prohibitions for handicapped students.

Reluctant to allow full-year programs for all handicapped children, some states have sought a middle ground and have established policies that set standards for determining when a handicapped child's needs require the provision of services beyond the normal school year. These standards include requiring assessment teams to determine whether a child will suffer irreparably diminished educational progress (learning regression) without year-round special instruction. Other standards for an extended year program require parents to show convincing evidence or exceptional circumstances affecting their child.

State Definitions and Interpretation of Related Services

P.L. 94-142 defines related services quite broadly as "transportation, and such developmental, corrective and other supportive services... as may be required to assist a handicapped child to benefit from special education..." The federal regulations implementing the law provide an illustrative list of related services but include the caveat that the list is not intended to be exhaustive. Section 504 and court interpretations have added to the concept of related services by requiring that supplementary aids and services must be provided if they are necessary for handicapped students to profit from their special or regular education programs.

Faced with these broad definitions, many states have established more specific policies concerning which services are related to education and which clearly are not. Beyond the test that a service relate to a child's educational needs, P.L. 94-142 provides another potential basis for determining whether certain services are excluded as related services: P.L. 94-142 does not require "medical" services except for purposes of diagnosis and evaluation.

Using P.L. 94-142 as a guide, several states have adopted policies that declare a number of services as medical and hence not required as related services. These services include occupational therapy, physical therapy, administration of drugs by school nurses, catheterization, clinic or hospital-based treatments and psychotherapy for behavioral or emotional disturbances. In other instances, states have declared certain categories of services as unrelated to education. These include many of the above as well as social work and parent counseling.

A list of related services contained in federal law and regulation is displayed in Figure 3 along with our assessment of the extent of across-state consensus over whether specific services constitute related services. Some service categories show widespread agreement (e.g., audiology, counseling, speech pathology) but many (e.g., medical/health treatments, and psychotherapy) remain the focus of legal and federal/state dispute.

¹Ibid. Sec. 121a.1. Section 504 regulations do not distinguish medical services from "medical services for diagnosis and evaluation," leaving the legal status of the P.L. 94-142 exclusion of purely medical services somewhat unclear.

Figure 3

**Degree of State Consensus Regarding Related Services
That May Be Required By P.L. 94-142 and Section 504**

<u>Related Services</u>	<u>Consensus</u>
Audiology	High
Counseling services	High
Medical services:	
• diagnostic or evaluative purposes	High
• medical/health treatment	Low: many states contend these services constitute medical exclusions, especially catheterization
Occupational therapy	Moderate: some states contend this is a medical or noneducational exception under the law
Parent counseling and/or training	Moderate
Physical therapy	Moderate: some states contend this is a medical or noneducational exception
Psychotherapy	Low: several states view psychotherapy and other such psychological services as a medical or noneducational exception under the law
Recreation	High
School health services	High
Social work services	Moderate
Speech pathology	High
Transportation	High

Source: Responses of 34 states to a survey conducted by the National Association of State Directors of Special Education, Fall-Winter 1980-81, and anecdotal reports.

Legal Opinions Concerning State Policies Regarding Special Education and Related Services

Significant litigation has taken place over state policies that specify restrictions on the range of special education and related services handicapped children in a state may receive. The states, school districts, advocacy groups, and parents have repeatedly locked horns over how much policy discretion is available to states to regulate these matters. To date the courts have indicated that states may be quite limited in their policy latitude, although the courts have never questioned state class size limits or case load. Figure 4 summarizes the direction of relevant court decisions on service boundaries.

The general thrust of court opinion has been to restrict state policy discretion in placing a priori boundaries on special education and related services. The courts generally take a broad view of education and related services, and where educational and medical or emotional needs intertwine, the courts usually refuse to draw distinctions. In most court decrees the exceptions allowed are few and far between, although some leeway appears to remain for states to specify criteria for consideration in prescribing extended school year programs and in deciding whether the special services provided handicapped students are appropriate in terms of adequacy. Fiscal arguments have rarely persuaded judges that financial ability is an important element in determining whether services should be provided to a child.

While court opinions may change and specific cases may shed new light on the service boundaries for handicapped students, state policies that restrict the range of available services appear fairly limited from the perspective of existing legal opinion.

¹Appendix F provides a summary of "illustrative" court decisions (organized by topic) that formed the basis of this summary.

²See, McCarthy, Martha M. "Judicial Interpretations of What Constitutes Appropriate Educational Programs for Handicapped Children." Draft report for the International Council of Administrators of Special Education. Bloomington, Indiana: University of Indiana, April 1981; and Coley, Relan. "Education for All Handicapped Children Act (EHA): A Statutory and Legal Analysis." Journal of Law and Education, Vol. 10, No. 2, 1981, 137-162.

Policy Areas	Direction of Court Opinion	Noteworthy Exceptions and Conditions
Defining Appropriate: What Level of Services Are Required?	Court opinions are mixed. Decision in Ark. and Pa. have held adequacy of child's program is sufficient. Other cases in Mass., Pa. and Del. have held programs must maximize handicapped children's learning opportunities. Cases in Ken. and Ind. require optimum programs.	The U.S. Supreme Court's ruling in <i>N.Y. Board of Education v. Rowley</i> indicates that P.L. 94-142 does not require "any greater substantive educational standard that would be necessary to make access (to education) meaningful."
Extended School Year	Court opinions generally prohibit state policies that limit handicapped children to a 180-day school year but have allowed state standards (e.g., the extent that the children's learning will regress without summer programs) for deciding which children need year-round services. The standards cannot be so strict as to preclude consideration of year-round programming.	U.S. Supreme Court in July 1981 refused to review the Pa. appeal of <i>Armstrong v. Kline</i> letting stand a lower court finding that states must provide extended year programs to handicapped students who need them.
Fiscal Limitations	Court opinions are preponderantly unsympathetic to fiscal limitation arguments as a justification for service restrictions (relevant opinions from 1972 through 1981 in D.C., N.Y., Pa., Ind., Ore., Calif. and Mass.).	The U.S. Supreme Court allowed cost considerations in two decisions outside elementary and secondary education. <i>Southeastern Community College v. Davis</i> (1979) limited the application of the Section 504 accessibility requirement to a postsecondary nursing program. <i>Pennhurst v. Halderman</i> (1981) reduced state obligations under the Developmental Disabilities Act. The Court ruled the language of the Act too broad to require states at their own expense to provide certain kinds of treatment.

Figure 4
Direction of Court Decisions Under P.L. 94-142 and Section 504
Concerning Special Education and Related Services Requirements

Policy Areas

Direction of Court Opinion

Noteworthy Exceptions and Conditions

Related Services: Non-Educational Exceptions

Court opinions adopt a very broad concept of "education" and the term "related;" consequently, court opinions construe noneducationally related exceptions quite narrowly (cases decided in Pa., Md., D.C., Tex. and Ill.).

It is still possible that some services clearly are not related to educational needs, e.g., counseling services to deal with depression when a student is progressing well in school. The problems arise in demonstrating a clear lack of relationship.

Related Services: Medical Exceptions

Court opinions generally construe medical exceptions narrowly. Courts appear reluctant to try to separate medical from related services if they are necessary for a child's educational attendance.

State policies that determine medical services based on who provides the service, where the service is rendered, and the nature of the equipment are not clearly resolved. The tide of the court opinions appears to go against these everyday definitions of medical, especially when educational attendance is at stake.

Specific Related Services:

- occupational and physical therapy

Court opinion in Md. found these services within the definition of special education and related services. Federal regulations cite them as related services.

Must be necessary for the child to benefit from the educational program.

- catheterization

Court opinions have found this a related service whenever necessary for the child to attend special or regular class (cases decided in W. Va., Tex., and Pa.).

If necessary for the child to attend school, it qualifies as a related service.

- psychotherapy

Court opinions have generally ruled that psychotherapy and psychological services constitute related services (cases decided in D.C., Mont., Ill. and Mass.).

Must be necessary for a child to benefit from educational program. High probability that in most cases a child's emotional and educational needs will not be clearly separable.

State policymakers will have to choose where to concentrate future policy attention -- whether to invest more energy in state standards for related services, in pressing legal questions for final resolution of difficult service boundary decisions, or in deciding whose budget (social service, health or education) will pay for the wide range of related services that may be deemed necessary for handicapped children as a consequence of current law and regulatory protections.

The Effectiveness of Special Education Services

Legal interpretations strongly influence the range of special education services that state policymakers must account for when considering present and future financial commitment to handicapped students. Policymakers also want to know, however, whether the instructional programs provided under the rubric of special education actually benefit handicapped children. Moreover, they wish to know which specific approaches and classroom procedures are on the whole most effective.

Special education, like other program areas, is being called upon to justify its share of federal, state and local dollars in terms of student and societal outcome measures. Most research about the effectiveness of special education focuses on clinical assessments of particular teaching strategies for different categories of handicapped children. But policymakers today are equally concerned about the instructional effectiveness of the range of special education programs supported by public funds. In short, what do the services accomplish for the children participating in these programs?

This question places tough demands on the tools of evaluation. Handicapped children span a wide spectrum of ability levels for which traditional learning assessment measures are frequently inappropriate. Additionally, the familiar evaluation problems of attributing student outcomes to particular educational practices complicate program evaluations in special education. The goals of education in general are diverse and subject to controversy. Special education adds a dimension of further complexity. The goals of a program for severely handicapped individuals may be greater self-sufficiency, whereas the goals of a program for hearing impaired children may be to permit them to compete on an equal basis with their nonhandicapped peers.

Much of the value of special education services in the past has been based on cost/benefit reasoning applied to a variety of criteria - economic, quality of life of the handicapped child and

family, and society in general. Studies that focus on the economic dimension demonstrate significant economic returns over the mild-to-moderately handicapped student's lifetime as a result of special education. This reasoning could be extended to more severely handicapped pupils if the economic cost of institutionalization and general quality of life factors for the parent and child are taken into account.

Other research is suggestive of the benefits of special education primarily in the early childhood years:

- Preschool programs for children "at risk" of becoming handicapped result in benefits that far outweigh the costs. Benefits include less costly services as the children progress through school and higher projected lifetime earnings based on their educational progress.²
- Handicapped children participating in early intervention programs demonstrate unexpected gains across a range of developmental areas. Furthermore, the postponement of services may result in secondary handicapping conditions.³
- Studies indicate that the more time retarded children spend in preschool programs, the more significant their gains.⁴

¹ Conley, R. The Economics of Mental Retardation. Baltimore: The Johns Hopkins Press, 1973.

² Weikart, D.P., Bond, J.T., and McNeil, J. T. The Ypsilanti Perry Preschool Project. Preschool Years and Longitudinal Results Through Fourth Grade. Ypsilanti, Mi.: High/Scope Educational Research Foundation, 1978.

³ Smith, B.J. Policy Options Related to the Provision of Appropriate Early Intervention Services for Very Young Exceptional Children and Their Families. Reston, Va.: Council for Exceptional Children, 1980.

⁴ Moore, M.G., Anderson, R.A., Fredrick, H.D., Baldwin, V.L., and Moore, W.G. (eds.). The Longitudinal Impact of Preschool Programs on Trainable Mentally Retarded Children. Monmouth, Oregon: Exceptional Children Dept., Teaching Research Division, Oregon State System of Higher Education, 1979.

Based on these findings, the likelihood is high that special education, especially for the younger child, results in states saving funds that otherwise would be expended for more intensive services later in a child's life -- services that are likely to include institutionalization and correctional programs.

At the same time, however, few research studies document the effectiveness of the current range of special education programs supported by federal, state and local funds. While some states and districts have begun evaluation efforts to determine which specific programs and instructional practices are effective, these efforts are relatively recent and represent a new frontier in special education. More of this evidence will be sought by policymakers in the future as they consider questions of program efficiency.

Clearly special education is a valuable instructional approach for students with handicapping conditions. In many cases, it can reduce future expenditure demands on a state and locality; however, for many students the need for special instructional programs will not disappear. Policymakers should not expect handicapped children to be "cured" by special education. Also, policymakers need to remember that the returns on investments in special education are not immediate. In many cases they extend over the lifetime of a student and involve the whole community and society of which that student is a member.

State Strategies to Clarify the Range of Special Education Services

A clear cut resolution of the range and extensiveness of services required by law to meet the educational needs of handicapped children may take years in the courts and the Congress. At the moment, services provided as part of a free appropriate education vary across the states in kind, shape and content. Hence, the services a handicapped child receives in one state may differ markedly from those that a similarly handicapped youngster receives in another state. The degree of uniformity desired across the states is an issue that does not lead to easy resolution.

Meanwhile, state policymakers as part of their inquiry into the costs of special education inevitably confront the issue of what instructional and related services their state must provide and should provide. To assist this inquiry, we have identified five strategies for states to pursue in clarifying the boundaries of special education services. The five strategies are aids for considering state policy; they do not resolve the question of which services are required to provide handicapped children with a free appropriate public education. The five strategies are:

- 1) developing standards for determining the services necessary to meet handicapped students' unique needs,
- 2) modifying special education program and reimbursement policies to encourage more cost-effective service practices,
- 3) clarifying interagency obligations to pay for required special education and related services,
- 4) undertaking research and evaluation of program practices to illuminate more effective approaches, and
- 5) improving program implementation.

These strategies are not mutually exclusive; they can be jointly or singularly pursued. All the strategies, however, have advantages and disadvantages associated with them. We explore these below.

Strategy 1: Develop standards for determining the services necessary to meet handicapped students' unique needs.

Approach:

This strategy calls for the development of standards for placement teams and appeal boards to use in interpreting individual student service needs. While the courts have typically taken a broad view of education and related services, the courts have not precluded standards such as a child's potential regression as a means of assessing a student's need for full-year services. Individual state standards that are written, reasonable, part of the normal IEP process, and developed with public involvement have a good chance of surviving court scrutiny.

Relevant State Experience:

The amount of legal activity surrounding the questions of appropriateness of services and limits to related services testifies to states' past efforts to set standards for services. These policies, however, have not always been written or

subjected to public scrutiny before they were instituted.

Advantages:

Standards can assist school personnel who have to make individual decisions about student needs that are hard to measure and interpret. Without guidance and interpretation school personnel will have to rely on subjective determinations. Adequately developed, reasonable, written standards are likely to survive legal scrutiny and reduce the provision of unwarranted services.

Disadvantages:

Most state standards about appropriate programs and related services run the risk of conflicting with existing federal law because they are likely to restrict the services considered for a child. As a result, such standards may not pass court scrutiny. Subjecting proposed standards to public hearings requires time and energy and runs the risk of opinions being polarized.

Strategy 2: Modify special education program and reimbursement policies to encourage more cost-effective service practices.

Approach:

This strategy involves a range of steps to ensure more cost-effective service prescriptions and practices at the school level (e.g., setting class size ratios that are based on more objective evidence; reimbursing teacher aides as well as teachers to encourage more diversified, less expensive staffing arrangements when feasible; requiring locals to share in the costs of all services to prevent the misapplication of services that cost the district nothing).

Relevant State Experience:

Documentation of state experience with these approaches is non-existent.

However, many states readjust their class size ratios largely as a result of expert opinion or the need to cut costs. Obviously, more objective information would provide a better basis for these choices. Reimbursement schemes of several states are biased in favor of certificated teaching staff. This bias functions as a disincentive to less costly but possibly equally effective service approaches that rely on aides and equipment. Fully reimbursing the cost of a specific service (e.g., transportation) can lead to overprescription of the service by local officials.

Advantages:

By removing biases against more cost-effective approaches and requiring districts to bear a fair share of the cost burden, state policy will reduce the unwarranted application of specific services. The wide variation that currently exists in class size and case load requirements demonstrates that states have a fair degree of policy latitude to exercise in this area.

Disadvantages:

Objective studies of the most effective service mix and class size ratio are unlikely to appear in the near future. In the absence of such information states are likely to expand allowed class sizes simply to reduce costs at the possible risk of sacrificing quality. Similarly, placing cost burdens on districts can favor cheap programs, not necessarily effective programs. Moreover, the courts have looked with disfavor on state reimbursement levels that are so low that they deter districts from providing services.

Strategy 3: Clarify interagency obligations to pay for required special education and related services.

Approach:

This strategy shifts state attention from establishing boundaries on special education and related services toward reducing the financial burden on education agencies to support all the related services required by a handicapped child. The state needs to establish when other health and social service agencies must pay for a service. This approach calls for more than an inter-agency agreement; it calls for state policymakers to require agencies to contribute financially when certain related services are involved. This may require rewriting laws and regulations that prohibit such cost sharing and enforcing agreed upon arrangements.

**Relevant
State
Experience:**

Virtually all states have interagency agreements in place. Commonly, these agreements emphasize standards, monitoring and general responsibilities of various agencies. To date they have not resulted in comparable funds transfers nor have they always facilitated actual cooperation at the local level. Policymakers in many states have yet to identify and rework the specific statutes and regulations that control the funding obligations of state agencies.

Advantages:

This strategy brings together the array of state financial resources that can

¹Greene, David. Local Implementation of P.L. 94-142: Education Agency Responsibility for Related Services. Menlo Park, Calif.: SRI International, 1980; and Mid-Atlantic Regional Resource Center and New England Regional Resource Center. Compendium of Practice Profiles: Comprehensive Services for Handicapped Children. (Inter-agency Collaboration), Burlington: George Washington University/University of Vermont, 1981.

assist in the provision of services to handicapped children. The lack of education funds frequently is a major factor in decisions to restrict the scope of related services. Agency officials do not always possess the authority to resolve the statutory and regulatory barriers that preclude cost sharing.

Disadvantages: State agencies' governing laws and regulations are drawn up for specific reasons: to target funds on a needy clientele and to mesh with fiscal realities. Changing these arrangements can have political and economic costs in many directions. Enforcing interagency agreements requires legislators and other high state officials to take on a politically unpopular task.

Strategy 4: Undertake research studies and evaluations of program practices to illuminate effective approaches.

Approach: States can initiate objective studies of the various approaches and services employed in the education of handicapped children both to understand what works but also to consider more efficient ways of achieving the same outcomes. A group of states might collaboratively pool resources to investigate a particular practice of policy concern (e.g., mainstreaming) or secure federal or foundation resources to add to their own funds.

**Relevant
State
Experience:**

Related state studies of program implementation may serve as models. California sponsored a longitudinal study of implementation of the California Master Plan. Each year specific topics were highlighted for study such as the role

of the resource specialist.¹ Massachusetts recently undertook a broad evaluation of its special education requirements.² Some large districts like Dallas have explored the effectiveness of different program models used for special education.³

Advantages:

A more objective basis for state policy determinations about the shape, content and type of services required by different handicapped children is needed to replace the varying opinions submitted by interest groups and experts. Policy-makers cannot be expected to support programs for very long if they cannot see results or ways to improve practice. Knowledge of effective approaches serves as the first step in comparing the cost-effectiveness of different approaches.

Disadvantages:

Studies of effective program practices are complicated for education in general and even more so for special education where the abilities of individual children and their learning goals vary greatly. As an example, class size research in general education has never yielded the policy benefits many researchers hoped for and is unlikely to do so in special education. Expert or interest group opinion will still count heavily in making these determinations.

¹ Craig, Patricia A., et al. Independent Evaluation of the California Master Plan for Special Education. Op.cit.

² Massachusetts Dept. of Education, Division of Special Education. Multi-Study Evaluation of the Effects of Chapter 766. Boston, Mass.: 1982.

³ Reisman, Karen C. and Macy, Daniel J. "Eight Years of Special Education Research in a Large Urban School District." Dallas, Texas: Dallas Independent School District, Department of Research and Evaluation, April 1981.

Strategy 5: Improve program implementation.

Approaches: As with policies regarding student eligibility, states can provide various forms of technical assistance (e.g., teacher and administrator training, programmatic advice) to improve decisions about the range of services individual handicapped children require and the types of treatments that are most promising for various groups of children.

**Relevant
State**

Experience: While many states already provide technical assistance, it has been largely oriented at correcting compliance problems and less focused on achieving interagency cooperative programming arrangements, deciding whether a child requires year-round services, and maintaining quality programs. Iowa provides a positive example. There the state has developed a number of self-evaluation instruments to enable district administrators and teachers to assess the quality and results of the special education services provided.¹

Advantages: Since decisions about services occur at the district and school level, efforts to improve the quality of these decisions are likely to result in a more appropriate specification of services. This in turn will at least give some assurance that dollars are expended for services both necessary and effective for responding to a child's educational problems.

¹Department of Public Instruction, Special Education Division. "Instruments and Procedures to Identify Program Quality." (Draft), Des Moines, Iowa: 1981.

Disadvantages: Implementation efforts can translate into expanded bureaucracies in the state education agency or in intermediate education units. Moreover, if the knowledge base is limited and the providers of technical assistance have less expertise than the practitioners they are assisting, the effort is likely to fail.

Chapter III: Determining the Costs of Special Education

Most policy discussions about the cost of special education overlook the dynamic nature of special education program costs. As a consequence special education costs frequently are treated as givens. In fact, however, the cost of special education programs depends on: (1) the various program arrangements that state and local officials decide constitute special education; (2) the local price of goods and services, and finally; (3) the revenues a district has and chooses to spend for special education. As a result, the costs that districts and states incur in providing special education reflect a variety of choices and constraints. While experts can develop estimates of the cost of special education, these costs are neither fixed nor totally impervious to the decisions of state and local policymakers.

Accurate estimates of the costs of special education and related services rank high on state policymakers' lists of information needs for obvious reasons. Accurate cost projections allow state policymakers to make more informed, less arbitrary choices in allocating state funds to the special education budget. Cost forms the basis of many finance formulas. A lack of accurate cost information can lead to inappropriate weightings or reimbursement ceilings. Knowledge of individual district costs enables policymakers and agency officials to assess expenditure equity across districts and to monitor required special education expenditure levels.

Comprehensive cost information provides the opportunity for cost effectiveness analyses that compare the effects of different educational programs on similar students. Finally, information about the costs of different programming policies (e.g., class size limits and mainstreaming) can permit policymakers to assess the cost trade-offs involved in a policy change.

But acquiring accurate, comprehensive, timely and meaningful cost information is not easy. States have two options for obtaining cost estimates: to require district reports or to extrapolate from national studies of cost. Both present problems. District personnel often balk at reporting cost information to state education agencies for state policy purposes. District independence plays a part in this reluctance, but also involved is the issue of data burden. District financial records primarily exist for purposes of daily operation and financial control of the district and frequently do not conform to the financial breakdowns and cost categories needed by the state.

In theory, state policymakers could use available national estimates of special education costs. Unfortunately, most past estimates are of mixed quality and usually have been based on district expenditure information that has been reduced to an average estimate of cost. Consequently, it has been difficult to tell how closely a state special education program corresponds to those on which the national estimates are based. Fortunately, more recent higher quality cost information is now available from a government-sponsored study by the Rand Corporation. Research completed by Hartman at the Institute for Research on Educational Finance and Governance at Stanford University may also aid the states in considering cost questions and making rough cost projections.

But national cost estimates are unlikely to substitute fully for a state's own cost information. States are unique. Their special education policies and practices vary considerably as do their geographic and economic conditions. Consequently, national cost estimates are rarely sufficient for answering state policymakers' major cost questions.

¹ Kakalik, James, et al. The Cost of Special Education. Op. cit.

² Hartman, William T. Projecting Special Education Costs. Stanford, California: Institute for Research on Educational Finance and Governance, 1981.

Major Cost Questions of State Policy Makers

Six major cost questions occupy the attention of most state policymakers:

- 1) What should special education cost?
- 2) What do current special education programs cost?
- 3) What will special education cost if present policies are fully implemented?
- 4) What will special education cost under different policies?
- 5) Why do special education costs vary?
- 6) What factors will influence future special education costs?

Prior to discussing each of these questions, two points need emphasis. First, while all these cost questions are related, each has a distinct focus. A failure to specify the precise cost question can lead to erroneous answers. For example, if policymakers assume that current special education programs reflect fully implemented policies, they may fail to anticipate the costs that non-discriminatory assessment requirements may entail once they are fully in operation.

Second, the phrases "cost of special education" and "excess cost of special education" are often confusing. The "cost of special education" usually refers to the dollars used to support particular special education programs. Excess costs refer to the additional costs incurred by a district, state or nation over and above the costs if handicapped students received a regular education. Excess cost estimates deduct the equivalent regular education costs from the cost estimate for education of handicapped children. Unless specified, the estimates in this chapter are not excess cost estimates but rather estimates of the cost of special education.

What Should Special Education Cost?

There are two underlying issues to this question. The first involves a determination of the level of services that eligible students should receive. This is a political judgment which must consider either explicitly or implicitly, both the limitations on, and the competing demands for, public funds. The second issue, usually directed toward experts in child development and special

education, asks about the most appropriate and effective mix of classroom resources and instructional practices that will enable children with different handicapping conditions to acquire a desired range of skills. Currently, professionals disagree about most effective practices, and generalizable evidence does not exist to establish those instructional techniques that are most effective. Until more conclusive information is available to answer this question, policymakers will have to rely on the professional judgments of experts tempered by their understanding of the educational process.

What Do Current Special Education Programs Cost?

This question asks for a determination of the dollar cost of educational programs and related services handicapped children currently receive. This focus on existing service arrangements differs considerably from a focus on most effective service cost or what society should spend for special education. Two approaches dominate attempts to answer the current services cost question. The first approach relies on analyzing records of financial expenditure for special education and related services. The second approach, called a resource-utilization approach, relies on documenting the mix of resources that are used to educate handicapped children. This approach then translates these resources into dollar costs. In theory, these two different approaches result in somewhat different estimates of costs. Generally, finance experts prefer the resource-utilization approach because it removes the difficulties involved in relying on district budgets and fiscal reports.

While the resource-utilization method may be preferred, the great majority of cost estimates rely on measures of district expenditures. These estimates average several districts' expenditures and then compare the result with regular education expenditures. This comparison provides a ratio or an index of special education costs to regular education costs. The most well-known estimate of this kind, developed by Rossmiller in 1970 for the National Education Finance Project, found that although special education expenditures varied widely among districts, they averaged about twice as high as regular education expenditures. Several

¹ Rossmiller, R.A., Hale J.A., and Frohreich, L.E. Educational Programs for Exceptional Children: Resource Configurations and Costs. Madison: The University of Wisconsin Department of Educational Administration, 1970.

states have used a similar approach in estimating statewide costs of special education. Results of a 1979 New York survey of district expenditures indicate that the average cost of special education services per full-time equivalent pupil was three times the cost of a regular pupil.¹

Expenditure-based estimates of special education costs have particular problems that weaken their credibility:

- District accounting practices frequently are inconsistent from one district to the next resulting in districts reporting different categories of expenditures under the heading "special education."
- Districts in study samples are often skewed toward "exemplary programs" or are not representative of the range of geographic and socioeconomic characteristics in the state or nation.
- The specific educational practices used by districts frequently are not specified; consequently, estimates cannot be analyzed to uncover how much different treatments cost or how treatments vary.

Resource utilization studies attempt to counteract many of these weaknesses. These studies collect district information on all cost elements involved in providing different groups of handicapped children with special education and related services. For example, they record the time that children are exposed to regular and special class instruction as well as transportation and other related services received by those children. A range of techniques is available to translate these services and other cost elements (e.g., building maintenance, equipment and school administration) into dollars.² Once dollar estimates are computed they can be

¹ State Education Department of the State of New York. Classification Standards and Program Services for Children with Handicapping Conditions: A Summary of Program and Funding Provisions. Prepared for the New York State Legislature, Albany, New York: 1979.

² For example, dollar costs can be standardized or actual. Standard costs average the prices paid for specific items such as teacher salaries across a representative sample of districts. Actual costs use the price paid by each district. Standard costs are useful for national projections, while actual costs are useful for knowing specific district or state costs.

compared with similar dollar estimates for regular education, producing cost ratios.

A recent Rand Corporation resource-utilization study of special education costs found that special education and related services per handicapped child cost 2.1 times more than the cost of regular education per nonhandicapped child. For the 1980-81 school year this translates into a total educational cost of \$4,898 per handicapped child nationwide. The Rand study also provides costs and cost ratios broken down by disability group, educational placement and specific resources. The target year of the study was 1977-78. Consequently, these cost estimates do not capture any changes in service that may have occurred since that time. Figure 5 compares the per student cost ratios that emerged from the 1970 Rossmiller study and the 1981 Rand study.

Figure 5
Comparison of Expenditure-Based and Resource-Utilization-Based Ratios of Special Education Costs to Regular Education Costs Per Child

Handicapping Conditions	Expenditure-Based Rossmiller 1970	Resource-Utilization-Based Kakalik 1981
EMR	1.87	2.30
TMR	2.10	3.34
Auditorily handicapped ¹	2.99	3.09 (4.43)
Visually handicapped ¹	2.97	2.74 (5.86)
Speech handicapped	1.18	1.37
Physically handicapped	3.64	2.15
Neurological and special learning disorders ¹	2.16	2.74
Emotionally disturbed	2.83	3.81
Multiply handicapped	2.73	4.63

¹We have used the Rossmiller disability categories. Kakalik used different categories separating deaf student costs from hearing impaired costs, and blind student costs from visually impaired costs. The figures in parentheses indicate these cost ratios. Presumably, Kakalik's learning disabled category equates with Rossmiller's "neurological and special learning disorder" category.

Sources: Rossmiller, R.A., Hale, J.A., and Frohreich, L.E. *Educational Programs for Exceptional Children: Resource Configuration and Costs*. National Educational Finance Project Study No. 2, Madison, Wisconsin: University of Wisconsin, Department of Education, 1970.

Kakalik, J., Furry, W.S., Thomas, M.A. and Carney, M.F. *The Cost of Special Education*. Santa Monica, Calif.: Rand Corp., Prepared for the U.S. Department of Education, November 1981.

We present these comparisons only to show that while the two approaches used in these studies led to a very similar conclusion about handicapped children as a group (i.e., that handicapped children on average cost twice as much to educate as regular children), they did not yield identical cost ratios for different groups of handicapped children. Policymakers should remember, however, that the studies are separated by almost ten years and probably reflect different program arrangements. Equally important, policymakers should be cautious about immediately adopting gross national average cost ratios. The Rand study indicates that these ratios vary significantly by student age levels and educational placement categories. Even when children share similar handicaps, the total cost per child varies widely depending on educational placement (e.g., the costs of a mentally retarded child placed in a special class full-time are quite different from the costs of a mentally retarded child placed in a resource room part time). Similarly, the total cost for a handicapped student varies significantly within an educational placement category depending on a student's handicapping condition (e.g., a blind child in a resource room costs more than a learning disabled child in the same setting).

What Will Special Education Cost If Present Policies Are Fully Implemented?

Cost estimates that describe the costs districts actually experience do not tell policymakers what the costs of fully implemented federal and state policies would be. This is not to say that districts are out of compliance with federal and state law. Rather, it acknowledges the grey area between meeting the letter of the law and fully implementing the spirit of policies such as least restrictive placement and appropriate education programs for handicapped children. Most studies of special education report that full policy implementation in special education has not been achieved. Some handicapped children, though in school, remain unserved or underserved in terms of the instructional programs and related services needed. In order to appropriate funds that foster full policy implementation, policymakers need to know the costs of the special education programs and services they intend districts to deliver.

¹U.S. Comptroller General. Disparities Still Exist in Who Gets Special Education. Report to the Chairman, Subcommittee on Select Education, Committee on Education and Labor, U.S. House of Representatives, Washington, D.C.: September 1981.

A cost model developed by Hartman called the Special Education Finance Model addresses this particular question from a national perspective. Using information from 28 states this model estimates that if special education policies were fully implemented, they would result in costs of between \$7.3 billion and \$12.4 billion in the 1980-81 school year, with the most likely cost being \$9.0 billion. When expressed in constant dollars per handicapped student and compared to 1976-77, this estimate reflects a decrease in per child special education costs from \$1,524 in 1976-77 to \$1,440 in 1980-81; however, because Hartman assumes an increase in the number of handicapped children served, he estimates the total cost of special education in constant dollars to increase by about 16%.

It must be emphasized that Hartman's cost estimates are for the nation as a whole and are based on both empirical and speculative information from 28 states. The accuracy of the estimates depends on how accurate these states' assumptions were about child counts, service patterns, resource requirements and related service requirements. Interestingly, the Rand study estimates that over \$10 billion were actually spent on special education in 1980-81 suggesting that Hartman's estimates of full implementation may be conservative.

What Will Special Education Cost If Different Policies Are Adopted?

Estimates of current costs or costs under fully implemented policies give policymakers assistance in understanding the effects of policies already in place. They fall short of helping policymakers know the effects of alternative policies they might wish to adopt. If adequate knowledge is available about the variables that contribute to costs (e.g., children to be served, placements used, quantities of resources required, standard prices of resources, inflation rates), cost projections can be made about the cost effects of future policies. The major problem in estimating the costs of alternative policies is, however, inadequate knowledge. For example, it is not easy to predict the number of students whose placements will be changed or in what way these placements will be changed as a result of an increased emphasis on mainstreaming. In these circumstances a number of educated guesses should probably be included to produce a likely range of cost estimates for policymakers to consider.

Analyses of the information contained in Hartman's Special Education Finance Model give some indication of those policy

¹Hartman, William, Projecting Special Education Costs. Op.cit.

changes most likely to influence total special education costs in a state. According to this research, the following variables, arranged in descending order of impact, proved significant in influencing the cost of special education.

1. *Number of handicapped children*
2. *Student/teacher instructional ratios*
3. *Teacher salaries*
4. *Use of aides*
5. *Special day-school costs per student and residential program costs*
6. *Inflation*

In short, policy changes that influence the number of children entering and leaving special education and that alter the size of classes or teacher case loads are likely to have significant implications for costs.

Why Do Special Education Costs Vary?

Policy decisions involving the distribution of special education funds require knowledge about how costs vary across districts and intermediate units within a state. Obviously, individual district costs will vary as a result of the numbers and severity levels of the handicapped students they serve and the particular district preferences for using different instructional strategies (e.g., more special education aides versus more special education teachers). Costs systematically vary along an additional set of dimensions that are important to acknowledge: the mix of students, their age, the district size and the price of services.

Mix of Students

The number of handicapped children requiring particular placements will vary from district to district. Districts may be able to operate fully filled classes in some program areas, but fall short of capacity levels in others, pushing the costs per child higher in the low capacity areas. One severe and profoundly handicapped child requiring a residential program can account for particularly high costs in average-sized or small districts.

Age

Preschool special education costs are generally higher than elementary because the handicapped children in preschool programs are generally more

severely handicapped. Secondary school teachers' salaries are higher than elementary salaries, hence secondary handicapped education costs are higher than elementary handicapped education costs.

District Size

The size of a district may influence its special education program costs. Very small, usually rural districts often experience high transportation costs and lower class sizes because enough students are not available to fill classes to their maximum. Relatedly, some speculate that very large, usually urban districts suffer related economy of scale problems. While they can fill class sizes to the maximum limit, these districts serve massive numbers of children who exhibit a wider span of needs and who each require an individual assessment, placement, and re-evaluation. In large urban districts, coordinating multiple agencies external to the school and transportation can add significantly to costs. Evidence conflicts on how district size and economies of scale actually influence costs.

Prices

Teacher and administrator salaries, facilities and gasoline prices typically vary considerably across a state and the nation. Averages often obscure the price ranges that exist. Relatedly, teachers in some districts concentrate at the top of the

¹ Kakalik, James, et.al. The Cost of Special Education. Op. cit.

² A 1979 National School Boards Association study found that small-(less than 2500 students) and large-(greater than 25,000 students) sized districts spent more than medium-sized districts. The Rand study found that medium-sized districts (2500 to 15,000 students) spent more. Neither study's findings control for district wealth. National School Boards Association. A Survey of Special Education Costs in Local School Districts. Washington, D.C.: June 1979; Kakalik, James, et.al. The Cost of Special Education. Op.cit.

salary scale, while those in other districts are in the middle. The length of teachers' work days also can vary across districts. As a result the same salary can purchase more teacher time in some districts than in others.

Cost variations often lead districts to demand funding adjustments in the distribution of state aid. Consequently, policymakers need to know how costs vary in their state and how these variations conform to patterns found elsewhere in the nation. Additionally, policymakers need to address the factors behind the pattern of cost variations in their state. For example, are some districts simply choosing more expensive instructional programs or do the program arrangements reflect a more severely handicapped population in those districts? Without adequate cost information and a review of district practices, these distinctions are impossible to make.

What Factors Will Influence Future Costs?

Policymakers also want to know the likely source of future special education costs independent of present or changed policies. Briefly stated, what aspects of the special education system will significantly influence future statewide costs? We identify four such aspects that are likely to increase future costs:

- 1) expansion of the mildly handicapped population,
- 2) expansion of the secondary school handicapped population,
- 3) an increase in the average salary grade of special education teachers, and
- 4) expanded interpretations of appropriate education and related service mandates.

Expansion of the Mildly Handicapped Population

As noted in the preceding chapter, the lack of clear boundaries for the mildly handicapped population presents the potential for sizable growth of this population. Because assumed incidence rates have the strongest effect on costs, even a slight expansion

¹Kakalik, James et.al. The Cost of Special Education. Op.cit.

of this population can significantly influence state costs. Less than half a percentage increase in California's mildly handicapped population requiring a resource specialist was projected to result in an additional \$14 million in special education costs state-wide.¹ Whether the mildly handicapped student population will continue to expand is a matter of speculation. Some experts predict that federal and state concerns about unwarranted growth coupled with declining fiscal resources will stem growth in these areas. Alternatively, the stronger protections afforded handicapped children may lead to the incorporation of more children in these categories in times of fiscal retrenchment.

Expansion of the Secondary School Population

Data from 1977-78 suggest that once speech impaired children are excluded, the handicapped population as a whole is relatively evenly divided between elementary and secondary schools.² The learning disabled population, however, which exhibits the fastest growth rate, is slightly skewed toward the elementary grades.³ An independent evaluation of California's special education system indicates that newly identified handicapped children are disproportionately found at the elementary level.⁴ Other studies report the expansion of secondary school service options.⁵

These patterns suggest that more students will be served in special education programs at the secondary level. In the past, secondary student incidence rates tended to be considerably lower for most handicapped groups with the exception of mental retardation and orthopedic impairments. Many experts suspect that this was as much the result of a lack of service options as it was the remediation of students' problems. With more options and more

¹ Craig, Patrick A., et.al. Independent Evaluation of the California Master Plan for Special Education. Op.cit.

² Ibid.

³ Kakalik, James, et.al. The Cost of Special Education. Op.cit.

⁴ Ibid. Approximately 55% of this group was in the elementary grades in 1977-78.

⁵ Wright, Anne R. Local Implementation of P.L. 94-142. Second Year of a Longitudinal Study. Menlo Park, Calif.: SRI International, 1980.

children being identified in the early grades, secondary handicapped student enrollment is likely to increase. Because secondary student costs are typically higher, such expansion is likely to increase total special education costs.

Increase in Special Education Teachers' Average Salary Grade

Because they have fewer years of teaching experience, special education teachers as a group earn slightly less in salary than do regular education teachers. In 1978 special education teachers earned an average annual salary of \$13,877, while regular education teachers earned \$14,949; special education teachers averaged seven years' experience, while all teachers averaged ten years' experience. As special education teachers remain in the system, their increased years of experience will move them into higher pay categories resulting in somewhat higher costs for special education. This will result in some cost increases over the next decade, but after that, policymakers can expect a leveling-off as teachers reach pay ceilings.

Expanded Interpretations of Appropriate Education and Related Services

As the preceding chapter suggests, federal and state policies coupled with court decisions can influence significantly the costs of some special education programs. If courts move to a "more than adequate" interpretation of the mandate to provide appropriate education and if they expand the related services category, special education costs will increase. The New York case of Board of Education v. Rowley recently decided by the U.S. Supreme Court posed these two issues by asking the Court to decide if a deaf student requires a sign language interpreter under the law even when the child performs adequately in school. The Court in a 6-3 opinion decided that an interpreter was not required. The extent to which this decision becomes a precedent for other such cases remains to be seen.

Will Mainstreaming Decrease Special Education Costs?

Many observers have speculated that greater mainstreaming of handicapped children will reduce the costs of special education because less intensive placements are less expensive. The Rand findings do not support this assumption. That study foresees no

¹ Kakalik, James, et.al. The Cost of Special Education. Op.cit.

particular cost savings from mainstreaming policies because the two primary "mainstream" placements (regular class with part-time special class and special class with part-time regular class) are nearly as expensive as a full-time special class. Under mainstreaming policies, however, a large share of special education costs may be transferred to the regular education budget.

The cost implications of mainstreaming are difficult to predict because the methods used to implement mainstreaming can span a wide spectrum. Some critics allege that districts frequently use regular classrooms as a "dumping ground" for handicapped children while calling it mainstreaming. Programs such as these doubtlessly cost the districts very little. In other cases, however, mainstreamed children may receive individualized services from specialists, aides and teachers, the cost of which may surpass those received in self-contained special education classrooms.

Getting Adequate Cost Information

To answer their cost questions, policymakers have to decide what source of cost information they will use. Because a state's unique conditions can produce cost configurations different from those in the nation as a whole and because national estimates may lose currency, state level information is usually preferable for state policy purposes. Getting this information, however, raises troublesome issues of paperwork burden and local control. Clearly, states can plan without annual re-estimates of cost, but the issues involved are larger than timeliness. State policymakers must determine when national estimates or those based on expert opinion will suffice and when district cost reports and surveys are necessary. Answers to this information issue will vary according to the political culture, traditions and policy needs of the state as well as by how uniform and sophisticated fiscal record-keeping practices are among districts in the state. The development of new standard-cost accounting schemes may help solve the state's cost information problem in the long run but instituting a new system can be costly. Sampling may substitute for universal district reporting requirements, but some information needs may require data from every district. Policymakers will have to weigh these tradeoffs as they devise cost information systems that allow them to estimate the cost of special education in their states.

¹ Ibid.

Chapter IV: Revenue Sources for Special Education

A major question for state policymakers is what share of the total cost of special education the state should bear. Neither P.L. 94-142 nor Section 504 specifies a financial role for the states beyond requiring them to match the portion of discretionary funds (up to 20% of the total allocation) reserved specifically for state use in providing special education services. While the federal government is authorized through P.L. 94-142 to contribute 40% of the national average per pupil expenditure to assist state and local agencies in supporting special education services, federal contributions have never exceeded 12%. But the law does state explicitly that the special education and related services required by a handicapped child must be provided at public expense. Consequently, deciding who pays is one of the most significant and controversial public policy issues.

The first part of this chapter discusses various patterns that exist across states with respect to who pays for special education. This discussion also reviews the policy considerations that are pertinent to decisions regarding state aid for special education -- considerations about equity, local control, alternative sources of support, and court decisions delineating the financial responsibilities of state and local education agencies.

The second half of this chapter addresses issues related to the structure of state support for special education. The following questions illustrate these concerns. Should special education aid exist as a separate categorical program? Are several

special education categorical programs necessary to address the variety of services and children covered by special education? Should state aid flow directly to all service providers? Should states require districts to spend special education funds only on special education students?

State, Local and Federal Revenues for Special Education

Estimates from 1979-80, place state revenue for special education at about \$3.4 billion or about \$858 for each pupil served.¹ In the same year the federal government made available through P.L. 94-142 approximately, \$804 million for special education or \$218 per pupil served.² Because the amount of local revenue allocated to special education is unknown in many states, it is virtually impossible at this time to report accurately local support levels. We estimate that local contributions may total almost \$5 billion.³

Nationwide totals and averages obscure the great range of fiscal support patterns across the states. Among those states reporting for 1978-79, the range of fiscal support patterns varied from a high of 98% in Montana to a low of 17% in Oklahoma. At least 22 states reported contributing 50% or more of the total fiscal resources for special education.⁴

¹Odden, Allan and McGuire, C. Kent. "Financing Educational Services for Special Populations: The State and Federal Roles" Working Paper #28. Denver, Colorado: Education Finance Center, Education Commission of the States, May 1980.

²Office of Special Education, U.S. Department of Education. "To Assure the Free Appropriate Public Education of All Handicapped Children." Second Annual Report to Congress on P.L. 94-142, Washington, D.C.: 1980.

³Kakalik, James, et al. The Cost of Special Education. Op.cit. The local estimate was derived by subtracting federal and state estimates from Kakalik's \$10 billion total expenditure estimate.

⁴Based on state-reported figures to the National Association of State Directors of Special Education, 1980-81.

These estimates of fiscal support for special education are imprecise. In many cases, state reports are based on estimates of state legislative budget marks (not actual marks) and include different categories of support. For example, some state estimates include special education transportation revenues, while others omit them. Generally speaking, these estimates exclude funds contained in general education programs and revenues available from other state and federal sources such as those from mental health, medicaid and social security.

The growth of special education revenue at the state level has been spectacular. From 1975-76 to 1978-79, 34 states reported an increase in special education's share of total state revenues for education. During the same period, 41 states reported a positive annual growth rate in revenues allocated to special education. Eight states' annual growth rates in revenues for special education exceeded 20%, while only five states indicated a negative annual growth. Figure 6 compares annual growth rates in revenue for general education with those in special education.

Figure 6
Annualized Percentage State Revenue Growth
for Special Education and General Education,
1975-76 to 1978-79

Annual Rate of Growth	Special Education	General Education
	(number of states in each category)	
Greater than 20%	8	0
Between 10 and 20%	18	10
Between 0 and 10%	15	35
Less than 0	5	3
Not available	4	2

Source: Tron, Esther. *Public School Finance Programs, 1975-76 and 1978-79.* Washington, D.C.: U.S. Government Printing Office, 1977 and 1980.

Comparable state estimates for more recent years are not available.¹ Consequently, we cannot document the impression of many state policymakers that this period of dramatic growth in state revenue for special education has ended. Clearly, many states are confronted with a declining fiscal picture that may

¹ Estimates of state revenues for special education for 1979-80 are displayed in Appendix G. Because they were not compiled

herald a leveling-off or even decline in special education revenues. A number of states now cap state appropriation levels for special education.

Federal revenues for special education have not grown in absolute dollars as they have at the state level. But in terms of percentage growth, federal revenues have increased appreciably -- 147% from 1975-76 to 1978-79. Much to the dismay of many states that anticipated federal revenues to match the P.L. 94-142 authorization levels, actual federal budget appropriations have remained at a far lower level. In contrast to the \$1.2 billion authorization, Congress appropriated only \$804 million in 1979-80. This gap has widened as the authorized funding level has reached the full 40% of average per pupil expenditure, while actual appropriations have risen only modestly. This discrepancy between federal authorization and appropriation levels, though common across many federal programs, (and state programs as well) has caused considerable friction between state and federal policymakers.

Additional Revenues for Special Education

Revenues beyond those budgeted for special education also contribute to the support of programs for handicapped children. These revenue sources include general education state aid, other state and federal agency budget categories and private sources of support. The extent to which additional revenue sources are a factor in supporting special education programs undoubtedly varies by state and locality. Tracking these additional revenues can prove particularly difficult since sums allocated or expended specifically for special education frequently are not so reported. Consequently, little is known about the magnitude of financial assistance derived from these sources. The following paragraphs describe some of the more typical additional sources of revenue for special education and the patterns they follow.

for the same purpose as those derived for 1975-76 and for 78-79, we did not use them to compute annual growth rates for more recent years. Notably, only eight states show an absolute decline in revenues for special education when 1978-79 and 1979-80 figures are compared.

1. Adams, E. Kathleen. A Changing Federalism: The Condition of the States. (Report No. F82-1), Denver, Colo.: Education Finance Center, Education Commission of the States, 1982.

State Funds for General Education .

Frequently state aid for general education includes funds that may contribute to the education of handicapped children. For example, some state aid formulas include handicapped children as one of several pupil weighting factors used to generate state revenues for districts. New York, a case in point, previously used two formulas to aid districts in paying for special education services. School districts received general aid double weighted by their handicapped count as well as additional special education aid from an excess cost formula for public schools. Under New York's new excess cost finance formula, the handicapped double weighting is eliminated from the general aid; however, handicapped students still contribute to general aid for districts because they are part of the weighted pupil count used in the property wealth index of the general aid formula. Hence, districts with large numbers of handicapped and other weighted pupils will appear poorer, raising the share of state aid to such districts.

States that support only the excess costs of special education usually include handicapped pupils in any basic foundation support they make available to schools. In some instances, these general aid formulas give consideration to cost differences that affect both general and special education -- for example, sparsity indices and cost-of-living adjustments. Funds reaching districts through these channels can provide additional support for special education services. Additionally, some states providing aid on the basis of classroom units include both general and special education administrative and classified personnel units as part of the basic support formula. Clearly, any statewide assessment of revenues available for special education must include a consideration of possible contributions from the general education aid formula.¹

Revenue Support from Other Agencies

In theory, several federal and state agencies share responsibility for the special education and related service needs of handicapped children. Translation of this theory into practice has often resulted in bureaucratic fragmentation, duplication, and retreat. For example, mental health agencies frequently provide psychological or counseling services but they may lack adequate

¹ These assessments should also explore other education funding sources such as special allocations to districts for the purpose of student testing or assessment, equipment allocation funding, and transportation funding.

financial and staff capacity to meet the needs of handicapped students. Sometimes these agencies will serve some handicapped children but leave the school district responsible for providing the same services for other handicapped. Districts often complain that public agencies that once met some of the needs of handicapped students now claim that the schools must pay for all such services for handicapped students because of legal mandates contained in federal and state law. But federal law intentionally does not prescribe that the education budget bear all the costs of special education. According to P.L. 94-142, as long as an appropriate special education program is provided at public expense, the local education agency and the state have met their obligations.

A large number of federal and state agencies potentially could help support the costs of special education. The following programs and agencies represent those most commonly involved. The specific pattern of involvement, however, varies considerably among states and localities.

Figure 7

State Agencies and Federal Programs Potentially Contributing to the Support of Special Education

State Agencies

Department of Public Welfare
 Department of Mental Health
 and Mental Retardation
 Department of Health Services
 Department of Education
 Department of Human Resources
 Department of Children and
 Family Services
 Department of Labor

Federal Programs

Medicaid (includes Early and
 Periodic Screening, Diagnosis,
 and Treatment)
 Social Security Act, Title V,
 Maternal and Child Health
 and Crippled Children's Services
 Social Security Act, Title XVI,
 Supplementary Security Income,
 Disabled Children's Program,
 and Aid to Families with
 Dependent Children
 Vocational Rehabilitation
 Aid to Educationally Disadvan-
 taged Children, Chapter I
 (previously ESEA Title I)
 P.L. 89-313, State-Supported
 Schools for Handicapped Children
 Headstart
 CETA
 Vocational Education
 Developmental Disabilities

While the specific programs available and the bureaucratic entities charged with administering them varies, the states share a number of common issues related to interagency cooperation in the financial support of special education and related services. Most agencies and programs focus on a portion of a child's needs; few have the obligation of total care for the child. In those court cases where agencies have argued about fiscal obligations, the courts have refused to settle the interagency fiscal stand-off. Rather, they have chosen to place the costs of services at the doorstep of the educational agency if policymakers cannot delineate fiscal responsibilities among different agencies.

Because of the significant financial sums involved in the education of handicapped children, policymakers must grapple with the issues of interagency support for these services. In addressing these issues, four questions provide some guidance:

- How do the agencies or programs interpret "handicapped" and eligibility?

The answer to this question is critical in determining the overlap in target groups. Age levels for eligibility, specific physical and mental conditions and income status often place different boundaries around the target group of an agency. Once these distinctions are made explicit, policymakers can explore the latitude available and the desirability of changing these policies.

- How much policy latitude does the state have in shaping individual program authorities?

While the states have wide freedom to influence the design and priorities of state programs that impact on services for handicapped children, their discretion with federal programs varies. A Connecticut review of funding sources for health and related services to children reports that states have considerable flexibility in developing plans for federal assistance in Child Health and Crippled Children's Services. In contrast, state discretion in using federal aid for disadvantaged children (originally Title I of the Elementary and Secondary Education Act) to meet the needs of handicapped children has been the subject of considerable federal debate. State policymakers need to explore the actual degrees

of freedom available to them in bringing together alternative public funding sources.

- How useful is the "last dollar" policy requirement?

A number of programs are restricted to paying the last dollar of needed service costs. This policy forces service providers and beneficiaries to make maximum use of available revenues before turning to the program's scarce fiscal resources. Program resources are infused only when other resources are unavailable. This policy device is disadvantageous, however, when a number of programs require that their resources will come into play as the "last dollar;" the result is confusion and a reluctance to pay. Connecticut, for example, estimated that if Medicaid funds were used to pay for child health services on a first dollar basis with the public schools, savings to cities and towns would amount to \$12.6 million.² Both federal and state policy-makers need to address those programs where a "last dollar" requirement is truly necessary and those where it creates excessive bureaucratic obstacles and payment stalemates.

- Should arrangements for multi-agency cost sharing for handicapped children be established at the state or local levels?

Many analyses point to the difficulties encountered from top-down solutions to service problems.³ At the same time, other studies document the limitations faced by local service providers when federal and

¹ Connecticut State Department of Education and The Network of Regional Educational Service Centers in Connecticut. Feasibility Study Regarding the Funding of Health and Related Services to Children in Connecticut. Hartford, Connecticut, June 1981.

² Ibid.

³ See for example Hargrove, Erwin G., et al. "School Systems and Regulatory Mandates: A Case Study of the Implementation of the Education for All Handicapped Children Act" in Organizational Behavior in School and School Districts edited by Bacharach, Samuel B. New York: Praeger, forthcoming.

faced by local service providers when federal and state rules and regulations present barriers to interagency coordination.¹ Many practitioners have the best vantage point to array services to meet the needs of children in their attendance area. The enthusiasm of school practitioners and service providers, however, will not single handedly overcome statutory and regulatory incompatibilities. Some states, to avoid the pitfalls of top-down solutions, have constructed a framework for cost-sharing at the state level. For example, Connecticut has initiated a statewide cost-sharing approach to medicaid reimbursement for health related services.²

Private Sources of Revenue

Obtaining revenues for special education and related services from private sources remains a hotly contested issue. Private revenue sources include health insurance companies as well as the parents of handicapped children. Many group health insurance plans cover diagnostic and treatment services performed not only by physicians, but also by audiologists, psychologists, speech therapists, physical therapists and occupational therapists. While parents cannot be held financially responsible for the special education and related services required in their child's individualized education program, parental responsibility for all the costs of private placement is far from resolved by the courts or federal regulations.

How and when local education agencies can tap these private sources of revenue are likely to remain uncertainties for the near future. At issue is whether handicapped students' rights to special education and related services would be jeopardized by requirements for third-party contributions from families with insurance policies.³

¹ Greene, David. "Local Implementation of P.L. 94-142: Education Agency Responsibility for Related Services." Menlo Park, California: SRI International, October 1980.

² Connecticut State Department of Education, Op.cit.

³ The 504 regulations explicitly state: "Nothing in this section shall be construed to relieve an insurer or similar third party from an otherwise valid obligation to provide or pay for services provided to a handicapped person," but the federal government has

Parental responsibility for the costs associated with private placements also remains in judicial limbo. The recent trend in court decisions has been to assign all costs of private placement to the school district and not the parents. In a noteworthy case, a school district was required to pay private placement costs for room, board, and tuition.¹ This decision contrasts to earlier decisions that upheld parental contributions for their child's maintenance costs. A more recent New Jersey case, however, has challenged the trend of holding districts responsible for all costs by requiring parents to pay according to their ability for custodial care and maintenance costs.²

Policy Considerations Pertaining to State Support of Special Education

Beyond the highly significant factors of a state's fiscal base and its political traditions, several considerations influence a state's level of contribution toward the education of handicapped children. These considerations encompass the issues of equity, local control, efficiency in service delivery and federal fiscal requirements regarding state and local expenditures for special education.

Equity

Equity is a major justification for state support of a significant portion of special education costs. Because handicapped children are not randomly distributed across districts (due to the variety of factors discussed in the first chapter), many argue that state assumption of the financial obligations of educating these children is a more equitable approach than placing the cost burdens on individual districts. If districts must carry the major fiscal burden of supporting special education programs, district fiscal capacities are likely to influence the quality and type of services available to handicapped children. While states can attempt to

vacillated on the issue of permitting states and districts to require payments where insurance exists. (Section 84.33(c)(1)).

¹Mahoney v. Administrative School District No. 1, 601 P.2d.826 (Or. Ct. App. 1979).

²Levine v. State Department of Instruction and Agencies, 418 A.2d 229 (N.J. Sup. Ct. 1980).

equalize special education fiscal resources by adjusting state aid according to a district's property or income wealth, an adequate amount of state aid must be forthcoming in the first place to give districts the capacity to provide appropriate programs. For example, an average state support level of \$100 per handicapped child is unlikely, even if equalized, to give poorer districts the fiscal capacity to serve all handicapped children appropriately. Moreover, many argue that states are in a better position than districts to protect the special education needs of handicapped children because districts face such strong political pressures to meet the needs of regular students.

An ironic twist on the equity argument holds that states have fostered equity for handicapped students at the expense of the regular student. Special education's alleged drain of resources from regular education in many instances is more fear than substance. Such fears are often fed by state budget figures that reflect declining enrollments for the general population at the same time special education populations are increasing. This situation leads to an impression of low spending for regular education and high spending for special education. To date, no analytic studies demonstrate whether special education requirements have been met at the expense of the regular education program.

But fears of special education's erosion of state support for regular education are not totally without grounds. The fact that available evidence confirms no pattern does not mean that erosion cannot happen. The need to achieve a balance between special education and regular education will remain a high priority, especially where tax or expenditure limits are placed on state and local governments. If available funds are inadequate to pay for mandated special education services and if revenue growth is curtailed, many fear that state and local decision-makers will be forced to find the dollars, either in the regular education budget or in other special program budgets.

Two states, California and Massachusetts, recently passed tax limitations affecting special education programs. California experienced a budget shortfall in state support for special education in 1980-81. Because districts are limited by Proposition 13 from raising additional revenues, the state had to either appropriate more money to cover the shortfall or allow districts to find the needed funds elsewhere in their budgets. The state appropriated only a portion of dollars to cover the shortfall. Massachusetts, as a result of funding cuts required by Proposition 2-1/2, has been embroiled in similar issues concerning special education's relative proportion of state and local budgets. The state has

endeavored to ease the fiscal pressure on towns and localities by relaxing some statewide special education requirements that exceeded federal requirements, but the ultimate fiscal resolution remains unclear.

The California and Massachusetts experiences may carry over to other states as the phenomenon of declining revenues spreads. State policymakers have to balance the needs of handicapped pupils along with the educational needs of regular and other special students. While they may pass this difficult balancing decision to district officials, the political repercussions loom large as backlash develops from parents of regular students and court suits emanate from parents of handicapped students. State policymakers ultimately will have to address whether sufficient state and local funds are available to educate adequately all the children in the state.

Local Control

Conventional wisdom in school finance holds that higher levels of state funding are associated with greater degrees of state control over local education program decisions. The little available research does not confirm this view.¹ Two factors are important in this debate: the form in which financial assistance is delivered to local units (i.e., whether aid is categorical or non-categorical); and, the extent to which central authorities monitor and enforce requirements relating to categorical expenditures.

Because special education revenues are targeted on particular students, higher levels of support inevitably may bring greater state restrictions on the decision-making autonomy of school districts. However, several states have intentionally sought to untie strong state support of special education from state control over local decisions. Both Arizona and New Mexico, for example, contribute significant state aid for special education yet emphasize strong local control. Arizona distributes all of its education aid in a block grant. New Mexico distributes its aid in a pupil weighting system but adds no requirement that districts spend dollars in specific program categories.

¹ Sherman, Joel D. "Changing Patterns of School Finance." In Government in the Classroom: Dollars and Power in Education. (ed.). Williams, M.F. New York: The Academy of Political Science, 1978.

Efficiency in Service Delivery

While full state support of special education costs may prove more equitable to districts, it provides little incentive for districts to be cost-conscious in their delivery of special education programs. Because districts do not have to account financially to local taxpayers for their program delivery choices, many argue that incentives to discover more cost efficient strategies are significantly reduced. Consequently, districts either spend to the limits of state support, or in systems that reimburse purely on the basis of cost, they can select programs without regard to costs. State policymakers must balance the competing claims for equitable and adequate support of special education programs with the need to achieve cost efficiency in those programs. Requiring districts to share in the finance of programs for handicapped children either across the board or differentially by program area may constitute one means of resolving this dilemma. Alternatively, policies that require strict state-level accounting for district expenditures within approved cost categories may also improve cost efficiency at the local level. But, state monitoring and enforcement may conflict with a state's desire for greater local discretion.

Federal Fiscal Requirements

While P.L. 94-142 and Section 504 do not require states to provide a specific level of support for special education, they do contain provisions that reduce some of the state discretion especially with respect to reducing state revenues for special education. These provisions -- the mandate to provide a free appropriate public education, the nonsupplanting requirement and the excess cost restriction of P.L. 94-142 -- limit districts' ability to reduce funds available for the education of handicapped children and to use federal funds in their place. Though these mechanisms directly control district funding decisions, their impact on state choices can be significant. Because districts must maintain a level of expenditure per handicapped child equivalent to the preceding year (the P.L. 94-142 nonsupplant requirement) and must delay for one year any reductions in their basic support for handicapped children (the P.L. 94-142 excess cost requirement), strong indirect pressures exist to prevent state reductions in special education support. Moreover, some have argued that the mandate to provide a free appropriate public education for handi-

capped children may preclude reductions in both state and local funds for special education.

Whether these requirements lock a state into its existing levels of financial support for special education remains a matter for speculation since no pertinent cases have tested the precise meaning the federal government attaches to these requirements. Undoubtedly, if the federal government tried to preclude state reductions in spending, it would have to demonstrate that local revenues were incapable of filling the void in state funds -- an allegation that might be difficult to sustain.

The Structure of State Special Education Aid

Equally important to the issue of how much to spend is the issue of how to structure state aid for special education. This issue involves decisions about: the design of state funding; the service providers and agencies eligible to receive state funds directly; and, the accountability measures necessary for ensuring appropriate use of funds. States vary considerably in their response to these determinations. No single approach stands out as superior; rather, different structural designs reflect different priorities and political traditions across states.

Categorical and Noncategorical Aid

This issue is particularly confusing in special education because of the handicapping categories that are frequently a component of a special education system. The term categorical aid, however, broadly refers to aid that is allocated for and limited to, a specific set of activities and/or students, e.g., special education. In contrast, noncategorical aid is not allocated or limited to a specific set of activities and students. In theory, noncategorical aid is distributed in a lump sum to a district and not broken down into different component sums. In practice, as we shall see, these distinctions do not always apply.

Identifying states that use a categorical aid structure can be a complex task. The confusion stems from the fact that several

¹Long, David C. and Likes, Jean. "Legal Issues Raised Under Major Federal Education Legislation by Reductions in State and Local Funds at the SEA, LEA, and Postsecondary Institution Levels." Washington, D.C.: Lawyers' Committee for Civil Rights Under Law, July 1978.

states distribute state aid for general and special education in one sum but earmark and restrict the amount of revenue to be used specifically for special education. Thus, even though a separate program authority for special education does not exist in the state budget, the earmarking and restriction of funds for special education activities achieves much the same effect as categorical aid. Florida and Utah, two states that use a comprehensive pupil weighting approach for financing education, have followed this pattern in their funding of special education. In 1977 Florida specified that 80% of the total special education funds earned by a special program category had to be spent on that category. In the same year Utah required that 100% of special education and vocational education earnings be spent within these two subject areas. Hence, breaking out special education revenues and specifying where districts can use those funds can make a seemingly noncategorical aid structure quite categorical.

The most recent information (1978-79) on all 50 states indicates 27 distributed special education funds through separate categorical funding programs. Seventeen states distributed special education funds with their foundation or basic support program, but as noted, some of these states earmarked specific amounts for special education. Six states employed a combined structure to finance special education with some aid flowing through categorical programs and the remainder through a noncategorical structure.

Since 1979, several states have reduced both the number and nature of categorical aid programs that support special education. Arizona folded its special education funding into one education block grant for districts to use as they see fit. The state of Washington in 1981 consolidated a number of education programs, including handicapped programs for learning disabled, behaviorally disabled, and communication disordered children, into an education special needs block grant for districts to allocate based on needs assessments. A handful of other states have reduced the number of separate special education categorical programs in the state or are considering such a step. New York instituted a separate categorical structure of five aid programs for special education that replaced nine separate programs. Illinois is considering a new aid

¹ Leppert, Jack and Routh, Dorothy. Weighted Pupil Finance Systems in Three States: Florida, Utah and New Mexico. Op.cit.

² Based on Tron, Ester (ed.). Public School Finance Programs 1978-79. Washington, D.C.: Government Printing Office, 1980.

structure to replace the variety of categorical programs now used to fund special education.

Arguments advanced for and against categorical aid in special education do not differ significantly from those in other educational areas. Proponents of categorical aid programs argue that they more efficiently target funds to agencies and children and ensure that funds are appropriately used. Several different categorical programs may be necessary to accommodate the wide range of services and settings required by handicapped children. For example, the transportation needs of handicapped children may require separate funding structures because such needs relate to only a subset of the handicapped population and can vary dramatically across districts.

States that operate categorical aid programs beyond those designed to support the special instruction of handicapped pupils in public schools usually do so in two areas -- transportation and special programs for more severely handicapped students. A few states separately fund programs for non-public school handicapped students. These separate categorical programs are believed to be justified by the "unique" costs or the types of service providers involved. For example, residential schools may experience costs associated with maintaining their facilities and staff capacities unlike those of public schools that rely on local property assessments. Additionally, many advocates of a categorical structure argue that it permits separate, more targeted administration and tracking of state funds. Moreover, categoricals ensure that specific areas are not ignored by policymakers at the state level.

Critics of separate categorical programs charge that local officials are in the best position to determine the needs of students; hence, local officials should control financial allocations to programs. These critics also charge that separate categorical programs lead to bureaucratic inefficiencies and fragmentation of the service delivery system. New York, for example, prior to its new special education funding structure, counted five separate funding authorities supporting special education in the public schools. The existence of several categorical programs, each with distinct requirements, frustrates the better intentions of not only district personnel but also policymakers in the state legislature. State policymakers find it difficult to evaluate and control the fiscal demands from interest groups and constituencies attached to individual categorical programs. Many policymakers characterize the separate categorical structure in their states as "a political patchwork quilt" reminiscent of previous policies toward special education that are no longer justifiable.

No easy solutions emerge to resolve the issues of categorical aid in special education. State policymakers can only take comfort from the great variety of approaches across the states. Ultimately, they will have to weigh the arguments advanced in light of their assessment of what is best for their state.

The Flow of State Aid to Different Agencies and Service Providers

Intertwined with the issue of categorical aid is the question of which providers (e.g., public schools, private day schools, residential programs, and intermediate service units) should receive financial assistance directly from the state. Recently some states have chosen to make public schools the primary agency responsible for overseeing that handicapped children in their attendance areas receive necessary special instruction and related services. Consequently, the state channels all state aid through the district. In turn, the district purchases services from the variety of providers needed to serve handicapped children. Advocates of this approach believe it counteracts the institution-building tendencies of service providers and promotes least restrictive placements in the public schools.

Obviously, the policy of channeling state aid through districts has not always met with unanimous support. Many residential schools and private providers report difficulty in receiving timely reimbursements from districts. They fear districts will make inappropriate public school placements for children when faced with the administrative overhead of paying other agencies. Moreover, these agencies argue that their services are necessary to meet the long-range needs of handicapped pupils, and consequently, they should not be totally dependent on year-to-year student placement decisions.

Districts also share reservations about these financial responsibilities. They express concern about inadequate state reimbursements both for services and for the administrative overhead that district reimbursement of other providers entails. For example, when districts are close to large residential institutions for handicapped children from across or out of state, reimbursement systems become complex. Frequently, districts participate in mainstreaming programs that bring residential students into public school programs for a portion of the day or week.

¹No estimates of the number of states pursuing this path are currently available.

But if districts obtain the funds necessary for operating these programs directly from other districts, the operating budget and administrative capacity of the serving district can be severely taxed. Some districts believe direct state reimbursement to them or to the residential institution would be more efficient and compatible with least restrictive environment policies.

The Desirability of Expenditure Controls

As we noted earlier in this chapter, many states impose explicit expenditure controls on state revenues for special education. In the absence of expenditure controls, districts have flexibility to shift revenues generated by handicapped students to other program categories. Many policymakers believe that without expenditure controls districts are prone to divert dollars away from handicapped students. Alternatively, other policymakers hold local flexibility as a high priority and argue that the strength of advocacy organizations for exceptional children in concert with the due process protections available under federal and state law are sufficient to force districts to use available dollars to serve handicapped students appropriately. This argument, of course, rests on the assumption of equal distribution of advocacy groups across districts and the willingness of the state education agency and the courts to review violations of due process brought to their attention. Undoubtedly, the policy debate will continue within and across states for the foreseeable future with some states following Florida and Utah's lead in instituting expenditure controls and others, like New Mexico and New Hampshire, allowing local flexibility.

¹For a poignant example of this situation, see: Stearns, Marian S., Greene, David, and David, Jane L. Local Implementation of P.L. 94-142: First Year Report of a Longitudinal Study. Menlo Park, California: SRI International, April 1980.

Chapter V: Characteristics of Different Financial Formulas

A state finance formula does more than transfer state revenues to school districts and intermediate education units. A finance formula also obligates and generates state revenues for individual districts. Consequently, it creates incentives and disincentives for local program practice that significantly influence district implementation of state policies for educating handicapped children.

Finance formulas are more than a technical computation of state aid. Numerous constraints, regulations, and exceptions concerning the flow and use of state funds usually accompany the technical elements of a formula. Frequently these attachments specify the services, personnel or program arrangements eligible for funding; the class size or special teacher case loads allowed; and the ceilings for particular expenditure categories. In short, a finance formula not only technically computes financial resources available to districts from the state, but also conveys important state policy choices about how handicapped students shall be educated.

This chapter describes special education finance formulas. The chapter consists of four parts: (1) basic funding formulas, (2) funding formulas used by states, (3) criteria for assessing funding formulas, and (4) major strengths and weaknesses of different funding formulas.

Basic Funding Formulas

To assess district needs, all special education funding formulas manipulate one or more components of the cost equation: students, resources (i.e., personnel or class units) or actual costs. In addition to these base elements, special education funding formulas also contain a funding mechanism that specifies how state funds will be allocated -- whether on a flat grant (straight sum) basis or on a percentage or weighted basis. As a result, we can describe state funding formulas by the base elements and the funding mechanisms they include. Figure 8 indicates the combinations that ensue and provides a brief description of each. For various reasons, not all combinations are practical or observable. We mark these with an asterisk. We also indicate in parentheses the number of states currently using each formula.

Almost every scheme has advantages and disadvantages. For instance, most experts agree that all funding formulas are variants of the three basic elements of students, resources, or costs. Unfortunately these three elements usually prove insufficient for describing particular aspects of formulas actually used by states and for highlighting important differences among formulas. For example, although both are based on students, the difference between the impact of a flat-grant-per-student formula and a weighted-pupil formula can be significant. Flat grants make no allowance for different student placements or handicapping conditions; consequently, they may underfund high-cost students and overfund low-cost students.

¹ These formula types were derived in the past ten years. They include Bernstein, Charles D., Kirst, Michael W., Hartman, William, J. and Marshall, Rudolph, S. Financing Educational Services for the Handicapped: An Analysis of Current Research and Practices. Prepared for the U.S. Office of Education, Bureau of Education for the Handicapped, Reston, Virginia: The Council for Exceptional Children, 1976; Hartman, William T. "Policy Effects of Special Funding Formulas." Stanford, Calif.: Stanford University Institute for Research on Education Finance and Governance, January 1980; and Leppert, Jack and Routh, Dorothy. Providing for Special Education in Missouri: A Report for the Missouri State Department of Education under contract with the Education Commission of the States. McLean, Va.: Policy Resource Center, 1978.

4

Figure 8

Types of Special Education Finance Formulas

Basic Elements	Funding Mechanism		Weight
	Flat Grant	Percentage	
Students	Flat Grant/Student (0)		Pupil Weighting (15)
Resources	Flat Grant/Classroom or Teacher Unit (6)	Percentage of Personnel Salaries (4)	Weighted Teacher or Classroom Units (10)
Costs		Percentage Cost or Excess Cost (15)	

- Flat grant per student:** The state provides districts a fixed sum of dollars for each handicapped student. P.L. 94-142 funds are distributed in this manner — for example, \$200 for each handicapped student served.
- Pupil weighting:** The state pays districts a multiple of regular per pupil expenditure levels or another basic support level. States frequently use this approach as a comprehensive educational finance scheme although some states choose to weight only the special education programs.
- Flat grant per teacher or classroom unit:** The state provides districts a fixed sum for each special education teacher employed or special classroom needed. For example, the state might pay \$2,000 for each ten students enrolled in special education.
- Percentage of teachers' or personnel salaries:** The state pays districts a percentage of the salaries of special education teachers and/or personnel. The percentage can vary by type of personnel. For example, a state could pay 70% of all approved special education salaries or 70% of special education teachers and 30% of special education aides.
- Weighted teacher or classroom units:** The state pays districts a sum that is a multiple of teacher or classroom units allowed. Different disability groups or program placements usually have different weights or staff ratios. For example, a state could contribute one staff unit for each 4.9 severely handicapped students and one staff unit for each 24.5 mildly handicapped students.
- Percentage cost or excess cost:** The state reimburses districts a percentage of the full costs or of the additional costs of educating handicapped children. Costs generally must be in approved categories within cost ceilings. Under excess cost systems districts must spend an amount for each handicapped student that is equal to the amount spent on the average nonhandicapped student. Costs can be actual district costs or an approximation of costs derived from statewide averages or estimates.

We have chosen two dimensions, base elements and funding mechanisms, to describe the funding formulas, however, even these two dimensions fail to highlight an important distinction that occurs within the category of resource-based formulas. Funding arrangements based on personnel and those based on classroom units can differ significantly. In theory, personnel systems only cover those costs associated with staff resources necessary to deliver special education and ignore costs associated with non-personnel items such as physical plant, supplies and equipment. In contrast, classroom unit funding systems usually take these cost elements into account. Note that these characteristics are theoretical. In practice, states using personnel-based formulas may make separate or additional funding arrangements to cover nonpersonnel costs.

Funding Formulas Used Across the States

Figure 8 indicates that 15 states currently use student-based formulas, 20 use a resource-based formula, and 15 use a cost-based formula. Considerable complexity exists in these basic special education funding formulas. Figure 9 classifies each state by the funding variation (base element plus funding mechanism).¹

In practice, a fine line often exists among the different types. The difference between a single weight for all handicapped pupils and a flat grant per student can be slight. Where a state uses a combination of funding formulas, we classified the state by the type of formula most dominant in that state. Where these calls were exceptionally close, footnotes indicate particularly unique aspects or combinations of funding formulas.

A few examples illustrate the complexity and ambiguity in state special education arrangements. The state of Washington uses a funding formula described as a "full-cost allocation model." The model blends both basic education and handicapped excess cost allocations into one amount. Each district in the state submits a count of handicapped students divided into five categories of "educational delay" (basically severity levels). These counts are used to generate staff units according to specified student/staff ratios. These special staff units include instructional/therapy, assessment and administrative personnel. The state also converts

¹For more detail on each state see Appendix H.

Figure 9
States Using Different Funding Formulas

Flat Grant Per Pupil	Pupil Weighting	Flat Grant Per Teacher or Classroom Unit	Percentage of Teacher/Personnel Salaries	Weighted Teacher/Classroom Units	Percentage Cost or Excess Cost
	Arizona	Alabama	Idaho ⁴	Alaska	Arkansas
	Florida	Illinois	Minnesota	California ⁶	Colorado
	Hawaii ¹	Kansas	Ohio	Delaware	Connecticut
	Indiana	Mississippi	Vermont ⁵	Georgia	Maine
	Iowa	Nevada		Kentucky	Maryland
	Massachusetts	No. Carolina		Louisiana	Michigan
	New Jersey			Missouri	Montana
	New Mexico			Texas	Nebraska
	New York ²			Washington ⁷	N. Hampshire
	Oklahoma			Wyoming	North Dakota
	So. Carolina				Oregon
	So. Dakota				Pennsylvania
	Tennessee				Rhode Island
	Utah				Virginia
	W. Virginia ³				Wisconsin

¹Hawaii centrally funds all education in the state; Hawaii's Education Department negotiates special education funds using a number of considerations, especially the number of full-time equivalent students enrolled in special education.

²New York calls its funding formula excess cost because the weightings and district cost factors are designed to approximate the average excess costs of educating a handicapped child.

³West Virginia weights handicapped students in the foundation formula as well as provides some salary support for special education.

⁴Idaho also provides for an additional weighting for exceptional students in its foundation support program.

⁵Vermont also pays costs of special education that exceed the average per pupil cost of a district.

⁶California employs a hybrid formula that takes 10% of a district's ADM to determine maximum teacher units available to a district. Teacher units are then distributed across program placements and adjusted for district cost factors.

⁷Washington designs its formula to cover the base costs and the excess costs of special education.

Sources: Developed from descriptions of finance formulas used by individual states in Tron, Esther (ed.). *Public School Finance Formulas 1978-79*. Washington, D.C.: Government Printing Office, 1980; McGuire, K., Angenblick, J., and Hammond, J. *School Finance at a Fifth Glance*. Denver, Colo.: Education Commission of the States; Winslow, H.R. and Peterson, S.M. *State Initiatives for Special Needs Populations*. Palo Alto, Calif.: Bay Area Research Group, September 1981; and select individual state documents.

handicapped student counts into full-time equivalent student counts for purposes of determining basic education staff unit allocations. In addition, Washington includes factors in these computations reflecting nonemployee-related costs such as supplies and materials.

Washington illustrates how two basic elements -- students and resources -- form the basis of the funding formula. Moreover, the state designed the formula to approximate a third basic element -- the costs of special education. We have classified this system as a resource-based system because the number of students is converted into personnel units and such units serve as the primary determinant of district allocations. But because a count of students forms the first computation and covering costs is its intent -- this formula could be typed as student or cost-based.

New York State makes a similar effort to reimburse districts for the costs of special education; however, New York uses a student weighting scheme to accomplish this purpose. New York's formula multiplies three factors: (1) a weighted pupil count (1.7 for special class, 0.9 for resource room services and 0.1 for special instructional services); (2) a base measure of average expenditure per handicapped child (this varies by district, but roughly equals the district's average per pupil expenditure, with a minimum value of \$1600 and a maximum of \$2100); and (3) an aid ratio that equalizes allocations according to district property wealth. Although New York calls this an excess cost formula, we have classified it as a pupil-weighted formula because district special education costs are approximated by means of a pupil weighting computation. We note, however, that the New York formula differs significantly from pupil-weighted states, such as Florida, that distribute their education aid by a comprehensive formula incorporating weights for 26 different program categories, 15 of which are special education.

The failure of state funding formulas to conform to a more precise classification reflects the efforts in many states to make their funding formulas more responsive to a combination of measures of district need. Districts vary in the numbers of handicapped children residing in the district, the programs prescribed for those handicapped pupils, the relative concentrations of elementary/secondary or mildly/severely handicapped pupils and the price of services and staff resources. Accommodating these differing needs often requires taking several factors into account. It is not surprising that hybrids or mixes of formulas occur as a result of these efforts.

Over the past decade many states have altered their special education funding formulas either to finetune an existing formula or to shift to a new approach. In 1980, at least 17 states reported that a change might ensue in the next year or two. Most recently, several states have moved toward comprehensive pupil-weighting funding formulas and away from excess cost formulas that rely on district-reported expenditures. The popularity of pupil weighting may be attributable to legislators' desires to consider the entire range of student needs in a single formula. Additionally, pupil weighting systems offer a means of merging categorical funding while retaining some fiscal attention to categorical groups. In contrast, excess cost formulas typically are part of a categorical structure that has proven less politically popular in recent years. Finally, policymakers express concern over the potential increased cost, of pure cost-based formulas and the attendant bureaucracy that may result if district costs are monitored closely.

Notably, resource-based funding formulas have remained consistently popular in those states using them. This may be partially attributable to the fact that these states usually allocate their foundation education aid in a similar fashion. Moreover, through weights resource-based formulas often can be adjusted to reflect student, placement, and cost differences across districts. To adjust for salary and cost differences among districts, for instance, California includes an average district special education salary level and a district indirect cost factor (called the support service ratio) in its resource-based formula.

State efforts to finetune or in some cases simplify, their funding formulas will probably continue in the future, especially in those states providing considerable state assistance for special education. Pressures to streamline government, to tie funding to district needs (including district fiscal capacity), and to stabilize state special education funding obligations are unlikely to abate in the near future. These pressures will continue to prompt policymakers to question the desirability of existing formulas and to search for improvements.

Is There A Best Formula? Criteria for Assessing Funding Formulas

Clearly no best formula exists for all states; all formulas regardless of type can be manipulated to render the same dollar

¹ 1980-81 State Survey by the National Association of State Directors of Special Education, Washington, D.C.

allocations for districts with similar handicapped populations, program practices and costs. Because districts typically vary in their handicapped populations, consensus on best program practices rarely exists, and accurate cost figures frequently are lacking, different funding formulas have different effects at the district level.

The funding formula most suitable for a state depends on the criteria that policymakers in that state consider most significant. State policymakers generally want special education funding formulas to (1) serve their own decision-making needs, (2) lead to appropriate educational placements for handicapped children, (3) treat districts equitably with respect to their different needs, and (4) foster efficient administrative and cost-containment practices. Each of these areas encompass criteria that appeal differently to different policymakers. We identify and briefly describe these criteria below.

Policymakers' decision-making needs

- Compatibility with other state funding policies and practices. By and large, policymakers desire funding arrangements that do not differ significantly from existing state approaches. Funding similarity can allow policymakers to interrelate programs and obtain a more comprehensive picture of education aid. Comprehensive pupil weighting or personnel (or classroom) unit schemes that distribute all education funding in states rank high on this criterion. Additionally, pupil weighting schemes may reduce yearly budgetary in-fighting among education interest groups because they fix each group's relative share in advance.
- Rationality and simplicity. Because policymakers want to understand the effect of their decisions, funding formulas should present policymakers with relatively logical, straightforward relationships among the policy elements of major importance -- for example, numbers of handicapped children, classrooms needed, or the actual costs of educating handicapped

¹Bernstein, Charles D. et al. Financing Educational Services for the Handicapped. Op.cit.

children. Complex manipulations that involve many variables, transform straightforward elements into new units, or serve as proxies for more direct measures often confuse and mystify the decision-making process.

- Ease of modification. If circumstances change dramatically (new cost knowledge or changed rates of inflation), policymakers want funding formulas that self-adjust or that can easily be modified to accommodate these changes. The more complex the formula, the more likely it is that any single change will require reworking the whole formula. Cost-based formulas by definition automatically adjust for changed circumstances like cost increases or inflation. Pupil weighting formulas often can adjust for the effects of inflation by using a base that shifts with inflation (e.g., average per pupil expenditures), but new cost information usually requires resetting the weights and can open the entire state formula to legislative scrutiny.

Appropriate educational placements

- Minimized misclassification. Generally speaking, funding formulas should not create financial incentives to place children in particular programs simply because the state reimburses proportionately more for some programs than for others. Similarly, funding formulas should not create incentives to maintain children in particular program placements when these programs are no longer appropriate. Minimizing misclassification is difficult because funding formula effects at the district level are complicated by other factors. For example, districts placing handicapped children mid-year often search for available placements, both because of the difficulty of shifting staffing patterns once school has begun and the fact that the funding formula may not sufficiently reimburse appropriate placements.
- Reinforcement of least restrictive placement policies. One misclassification concerns the placement of handicapped children in more restrictive settings when less restrictive settings would suffice. Funding formulas can influence such placement because of higher proportionate reimbursements for

more restrictive placements. In some cases, state policymakers may wish to reverse these incentives and reimburse less for less restrictive placements, even if they cost more, to counteract resistance to handicapped children in regular classes. This approach however, violates the principle that funding should be a neutral factor in deciding a child's placement.

- Avoidance of stigmatizing labels. Most funding formulas address the issue of whether students should be specifically labeled as part of the funding process (as opposed to labeling as part of establishing eligibility discussed in Chapter I). If students are only broadly classified as "handicapped," accommodating different districts' costs and needs for special education can be quite difficult. For example, cost-based formulas could not contain different ceilings for different placement categories, and pupil weighting schemes could not establish different weights. Because many experts have found handicapping condition labels more stigmatizing than the special education program in which the student participates, several states have chosen to categorize handicapped students by placement, rather than by condition.

Equitable treatment of districts.

- Accommodation of varying student needs across districts. Districts typically vary in the numbers and characteristics of students that require special education. Funding formulas that base funds on the same percentage of students qualifying as handicapped or on total student enrollment are often viewed as inequitable because they do not target funds to districts where students are located. Alternatively some argue that such funding formulas are equitable because they provide all districts with an equal capacity to serve the same proportion of students. As a result, they may be appropriate for states in early phases of extending special education mandates when start up costs are significant.
- Accommodation of cost variations. Several factors can cause district costs to vary for the same type of student or program -- e.g., price variations,

economies of scale and different conceptions of best practice. Policymakers may place a high priority on formulas that accommodate all or some of these variations. For example, Florida policymakers have favored including a cost-of-living index in their formula to adjust for the differential buying power of the dollar. Other state formulas include sparsity adjustments.

- Adjustments for fiscal capacity. When states support the total cost of special education, equalizing for district fiscal capacity is not a significant priority. Because most states do not support total costs, however, district fiscal capacity often constitutes a source of inequity. For example, if a low-wealth and a high-wealth district with a similar handicapped population are both called upon to support 70% of the excess costs of special education, the low-wealth district bears more of a burden to raise the same revenue. Relatedly, some argue that large urban districts are penalized because of the phenomenon of municipal overburden where competing claims by other public programs (health, fire, police) effectively reduce their capacity to support school programs.

Efficient administrative and cost-containment practices

- Funding predictability. Generally, policymakers at all levels want to predict their fiscal obligations and revenues. Predictability fosters resource planning and permits policymakers to estimate and obtain appropriate levels of support from tax payers and other revenue sources without losing credibility. But, because many special education costs are unpredictable (e.g., children identified in the middle of the school year or changing related service obligations), districts prefer state funding formulas that accommodate variability and ensure their own budget predictability. Similarly, state policymakers want funding formulas that minimize year-to-year variations in state fiscal obligations; consequently, they favor funding formulas that offer relative stability for the state. Purely cost-based formulas may offer the greatest predictability for districts and the least for states.

- Containment of special education costs. Policy-makers want funding formulas that keep costs from escalating too far beyond existing levels. While policies that place some of the cost burden on local districts aid cost containment, formulas can also influence how efficiently districts operate their special education programs. Funding formula provisions on administrative and indirect costs, ceilings, and allowed-cost categories all influence the cost containment picture. Many believe that cost-based funding formulas are particularly vulnerable to cost expansion because they too easily absorb costs from program areas beyond special education.
- Minimized reports, recordkeeping and state administration. Many state policymakers prefer funding formulas that entail a minimum of additional bookkeeping, reporting and state administration. Especially in times of fiscal retrenchment, policymakers want to avoid these additional costs wherever possible. This concern overlaps with some policymakers' preferences for local control. Nonetheless, virtually all funding formulas require some measure of reporting and state monitoring if districts are to account for state funds. The question is one of degree: will the formula be too burdensome?

These criteria present policymakers with some clear trade-offs. The more simple a formula, the less likely it will distinguish well among district needs. The more predictable a formula for ensuring state budget stability, the more districts will bear the unpredictable costs. The more a formula serves to contain costs, the less it will accommodate the full range of different district costs. A formula devoid of any kind of labels will fail to differentiate among districts' resource needs. In sum, policymakers will have to determine those criteria that matter most to them.

Figure 10 compares effects of the funding formulas across the criteria most important to state policymakers. Unfortunately, virtually no research has verified the actual effects of different funding formulas. As a result, we can speak only of the logical

¹Hartman, William T. Projecting Special Education Costs. Op.cit.

Student-Based Formulas

Resource-Based Formulas

Cost-Based Formulas

I. Policymakers' Decision-making Needs

Compatibility with other state funding

Flat grants per student frequently are used in state categorical programs for compensatory education.

Resource-based funding formulas form the basis of many states' foundation support programs.

Percentage cost and excess cost formulas are infrequently used to finance other education programs in a state.

Rationality and simplicity

Flat grants per student are highly straightforward but are not highly logical because they pay districts the same amount for handicapped children whose programs cost different amounts.

Flat grants per teacher or classroom are simple to comprehend, but they have no logical relation to costs.

Percentage cost and excess cost formulas are logical because they reimburse districts a portion of the costs of educating handicapped children. Their simplicity varies depending on the number of allowed-cost categories, ceilings and whether they include computations that approximate costs.

Pupil weighting formulas logically relate the cost of special education programs to a base amount. They can be extremely simple or quite complicated - using many weights and full-time equivalent student counts.

Percentage salary reimbursement formulas are understandable to state policymakers, but they can become complex if many salary categories and additional factors are included.

Weighted personnel or classroom unit formulas logically relate special education resource needs to regular education program needs. Their simplicity diminishes as full-time equivalent conversions and additional factors are included.

Figure 10
Comparison of Funding Formula Types Across Dimensions Important to State Policymakers

Student-Based Formulas
Resource-Based Formulas
Cost-Based Formulas

Ease of
modification

Flat grants must be modified by legislative action; they do not adjust for cost or inflation changes.

Flat grants per teacher or classroom do not adjust for cost or inflation and must be legislatively modified.

Percentage cost and excess cost formulas automatically adjust for cost changes and inflation when they are based on actual district costs. Cost ceilings can limit this adjustment process. Cost ceilings and formulas that approximate excess cost usually require legislative change to reflect new cost relationships.

Pupil weighting formulas use a base value and weights that must be adjusted by the legislature if new cost information comes to light. If the base is derived from an element of costs for a regular student, inflation is likely to be automatically accommodated.

Percentage salary reimbursement formulas automatically adjust for cost changes that relate to staff salaries but they do not adjust for other cost changes.

Weighted personnel or classroom unit formulas can adjust for inflation through the base but must be legislatively altered to adjust for changed cost configurations among programs.

II. Appropriate Educational Placements

Minimized
misclassification

Flat grant per student formulas, through over funding low-cost placements and under funding high-cost placements, risk a fair degree of misclassification of students into low-cost placements. They encourage filling classes to maximize sizes.

Pupil weighting formulas contain incentives to place students in higher reimbursement categories. Activation of these incentives de-

Resource-based formulas indirectly encourage misclassification because they contain incentives to classify children in ways that maximize resources.

Flat grant teacher or classroom formulas tend to encourage lower cost placement for students.

Percentage cost and excess cost formulas are neutral in encouraging misclassification if they reimburse all categories proportionally the same.

Student-Based Formulas

Resource-Based Formulas

Cost-Based Formulas

depends on the discretion allowed districts in serving students and the relative costs of different programs to the districts. Pupil weighting formulas also encourage filling classes to maximize class size.

Reinforcement of least restrictive placement

Flat grant per student may encourage undesirable mainstreaming approaches such as placing handicapped students in regular classrooms as a low-cost approach.

Pupil weighting formulas reinforce least restrictive placements if they contain appropriate weights for such placements.

Avoidance of stigmatizing labels

Flat grant per student do not necessarily require specific handicapped conditions or placement labels.

Pupil weighting formulas generally require student labelling but may use placement instead of condition.

Percentage personnel and weighted teacher or classroom unit formulas encourage misclassification when they disproportionately reimburse specific special education categories (e.g., 70% of resource room teachers; 50% of special class teachers).

Resource-based formulas reinforce least restrictive placements if they include mainstreaming units or personnel as acceptable for funding. Without these adaptations they encourage self-contained classes and resource rooms.

Flat grants per teacher or classroom do not necessarily require handicapping conditions or placement labels for students.

Percentage salary reimbursement formulas do not necessarily require individual student labels but may require children to be identified by placement categories or handicapping condition categories.

Weighted teacher or classroom unit formulas usually require placement labels for students but not condition labels.

Percentage cost and excess cost formulas usually reinforce least restrictive placements by including such programs in the allowed costs.

Percentage cost and excess cost formulas do not necessarily require condition or placement labels but frequently require some student categorization in order to set cost ceilings.

Student-Based Formulas

Resource-Based Formulas

Cost-Based Formulas

III. Equitable Treatment of Districts

Accommodate varying student needs

Flat grant per student make no accommodation for different types of students but do adjust for different numbers.

Pupil weighting formulas accommodate a range of different student programming needs. The more weights used, the more needs are accommodated. They also accommodate handicapped population size differences among districts.

Accommodate cost variations

Flat grant per student do not provide for cost variations among districts.

Pupil weighting formulas do not specifically adjust for cost variations because weights are uniform for all districts. Cost-of-living adjustments can be added. Pupil weights limit small districts from offering their own programs for small numbers of handicapped children and encourage interdistrict cooperative programs.

Flat grant per teacher or classroom do not accommodate different student needs but may accommodate different numbers of students.

Percentage salary reimbursement formulas usually accommodate district differences in numbers and frequently types of handicapped pupils.

Weighted teacher or classroom unit formulas accommodate district differences in numbers and types of handicapped pupils.

Resource-based formulas do not automatically adjust for cost variations among districts but may incorporate additional factors to reflect price differences or to allow small districts to qualify for units with less-than-minimum class sizes.

Percentage cost and excess cost formulas accommodate district differences in numbers and types of handicapped pupils.

Percentage cost and excess cost formulas accommodate cost variations among districts if they reimburse on individual costs. Ceilings may penalize districts facing high costs.

Student-Based Formulas**Resource-Based Formulas****Cost-Based Formulas**

Adjust for
varying fiscal
capacity

Flat grant per student contain no provision for fiscal capacity.

Pupil weighting formulas usually include an equalization factor to adjust for fiscal capacity.

Resource-based formulas do not adjust for district differences in fiscal capacity. Special adjustments must be added.

Percentage cost and excess cost formulas do not adjust for fiscal capacity differences without the inclusion of special equalization factors. Pure cost-based formulas can reward high-wealth districts that choose to spend their revenues on special education.

**IV. Efficient Administrative and
Cost Containment Practices**

Funding
predictability

Flat grant per student are highly predictable for states but do not cover unpredictable local costs.

Pupil weighting formulas are fairly predictable for states but are less predictable for districts faced with changing costs or the need to start entirely new classes because of a few additional students.

Flat grants per teacher or classroom are very predictable for states but do not cover unpredictable local costs.

Percentage salary reimbursement formulas are less predictable for states if no statewide salary exists but are fairly predictable for districts.

Weighted teacher or classroom formulas are predictable for districts because they accommodate districts' needs to form new classes. They are moderately predictable for states.

Percentage cost and excess cost formulas are less predictable for states but more predictable for districts. The use of cost reimbursement ceilings offers states more predictability and district less.

Student-Based Formulas

Containment of costs

Flat grants per student encourage low-cost programs yet may also encourage the over-enrollment of mildly handicapped pupils.

Pupil weighting formulas if accurately weighted do not encourage cost expansion.

Minimized reports, record keeping and state administration

Flat grant per student are fairly unburdensome to administer.

Pupil weighting formulas require student-level record keeping. Some formulas (but by no means all) require fairly detailed accounting of pupils' time and programs. Some state oversight of district enrollment practices generally accompanies these formulas.

Resource-Based Formulas

Resource-based formulas are relatively neutral with respect to escalating district costs.

Resource-based formulas are generally not perceived as burdensome because they require a planning sequence (e.g., staff assignments, student assignments) that most districts regularly use. Some state oversight may be necessary to verify counts of pupils for generating units.

Cost-Based Formulas

Percentage cost and excess cost formulas can encourage an expansion in special education costs if allowed cost categories are broadly defined. Ceilings and monitoring allowed costs improve cost containment.

Percentage cost and excess cost formulas usually require individual district cost records, submission and approval of expenditure reports, and fiscal oversight by the state or regional offices.

tendencies of the more pure forms of these formulas. The accuracy and usefulness of such predictions are limited because few states use a pure formula -- most states have elaborated or adapted the pure formula types to suit the policy preferences of that state. Thus, the actual state formulas will represent a combination of the incentives and disincentives used in the pure types of funding formulas of which they are composed.

Other factors complicate the actual incentives that ensue from any particular formula. For example, the year on which allocations are based and the method for counting students for purposes of funding both strongly influence district behavior. Many states choose the preceding school year as the basis for determining allocations. The information for the previous year is generally more readily available, and its constancy removes the need to make end-of-year adjustments in allocations. Alternatively, however, districts experiencing significant handicapped population growth or fluctuating enrollment or service patterns from the previous year will have to bear the initial costs entailed in their special education program.

Choices surrounding student counts also can create incentives and disincentives for district practice. Student and resource-based funding formulas frequently rely on student counts. States face difficult issues about whether to count students in more than one category, whether to adjust for the time a student spends in a program, and whether to count students enrolled in special education cumulatively throughout the year or at a single point in the year. Taking a duplicate student count allows districts to obtain appropriate funding for students who are multiply handicapped or whose educational needs fit into more than one handicapping category. On the other hand, districts may take advantage of this system to classify handicapped children in several categories regardless of need, thus obtaining additional state revenues.

Because not all students spend most of their time in special education, states must decide if the count should reflect this fact. Pupil weighting formulas require state policymakers to decide if handicapped students will be counted both in the base as well as in the specially-weighted program or only in the weighted programs. For students in special classes all day, separate counts may be most appropriate, but for students only spending a portion of their time, dual counts may be more appropriate.

¹ For an Application of this concept see Leppert, Jack and Routh, Dorothy, A Framework for Educational Finance Act Revision in South Carolina. Op.cit.

Relatedly, using full-time equivalent student counts to adjust for the amount of time students spend in special education programs can lead to district confusion and gamesmanship in arriving at the count.

States also influence district practices by specifying the point in the year when districts count handicapped students. A cumulative count across the entire school year can reward districts that place students in special education programs for a short duration of time. Further, a cumulative count can better meet the needs of districts that are attempting to expand programs for handicapped students throughout the school year. Some states may require a minimum number of days of service prior to allowing a handicapped child to be counted to mitigate some of these problems.

Major Strengths and Weaknesses of Different Funding Formulas

While different funding formulas create different incentives and disincentives for district practices in special education, the differences among types of formulas are less pronounced and dramatic than conventional wisdom usually assumes. Our comparison of formula types reveals that most funding formulas can take on a fair degree of complexity. Moreover, all formulas share tendencies to encourage student misclassification. In practice, most formulas use some form of labeling. Furthermore, no pure formula automatically includes an adjustment for fiscal capacity; such adjustments must be added by policymakers. In sum, the type of formula may be far less significant in explaining district practice than are the policy choices that surround and shape the funding scheme used by a state -- choices concerning local control, student eligibility, state spending, equity, and state oversight of district practices.

Funding formulas clearly have particular strengths and weaknesses that distinguish them. We present below an assessment of their major strengths and weaknesses, because policymakers often desire a brief summation of the most notable tendencies of specific types of funding formulas; we caution policymakers to go beyond these assessments in exploring a particular funding approach because the details of a specific formula often alter these generalized tendencies.

Flat grant formulas (student or teacher). Their major strength is their simplicity and ease of administration; their major drawbacks are inability to differentiate among districts' needs and a tendency to overclassify students as mildly handicapped.

Pupil weighting formulas. These formulas fit policymakers' desire to consider education funding comprehensively and are effective at achieving equitable treatment of districts with different special education populations. Pupil weighting formulas can present technical problems, however, in determining accurate weights for the formula. Inaccurate weights can encourage student misclassification. This problem can be exacerbated when policies restrict dollars to the subcategory that generated them. Also, because pupil weighting formulas by and large are based on average costs, they benefit low-spending districts and penalize high-spending districts.

Resource-based formulas (percentage salary and weighted). These formulas are compatible with a number of basic state support programs. They also coordinate well with districts' planning sequence in projecting personnel and other resource requirements. They need to be carefully constructed, however, if they are to reinforce least restrictive environment policies and ensure inclusion of non-personnel costs.

Cost-based formulas (percentage and excess). These formulas are particularly good at addressing student and cost variations among districts. Additionally, they are highly predictable for district budgets. Their major drawbacks fall in the areas of cost containment and administrative oversight. Cost-based formulas relative to other formulas may allow costs from other budget categories to drift into the special education budget. Relatedly, cost formulas may lead to an expansion of state oversight and district reporting burden.

Armed with a general understanding of funding formulas, policymakers will need to tackle the challenging tasks of constructing and implementing a specific formula. To use an expression applied to many policy areas, "the devil is in the details". For example, pupil weighting formulas can be complex, as in Florida, or quite simple, as in Massachusetts. They can entail constraints on local discretion in the use of funds as in Florida, or they can allow wide latitude as in Arizona. Low-cost ceilings can cancel policymakers' intent to accommodate wide cost variations across a state. Allocating funds on a predetermined percentage of students can result in a mismatch between districts where handicapped students are located and districts that receive funds for special education.

Finally, the implementation of a funding scheme can significantly influence its impact upon the state and districts within the state. Distrust and misunderstanding at the local level can play havoc with the best intended funding formula. Collaborative

development of a finance formula and broad-scale communication of the purposes served by a particular funding formula can do much to minimize distrust and misunderstanding. Rarely will any funding formula meet all the expectations or criteria of all policymakers and educators throughout a state.

Funding formulas can provide a medium for setting policy in a state with respect to special education. As such, they are bound to evolve and change as policymakers and issues change. Realistic, objective data that inform policymakers about the effects of their existing state funding formula will serve as an invaluable tool in this process of reevaluation and change.

Appendix A

State Special Education Policies and the Dynamic of Growth

During the past two decades, the states have moved through three successive policy stages as they extended educational services to handicapped students. In the first stage states adopted a benevolent stance toward the education of handicapped students by instituting permissive service policies and modest assistance grants that allowed, but did not obligate, districts to offer special education programs. The outcome of these policies was a rather uneven distribution of special education programs across the states and within individual states.

Under pressure from parents and educators to remedy these imbalances, the states moved into a second stage of education policy regarding handicapped students: the program-purchase stage. This stage was characterized by the development of statewide program standards for the range of handicapping conditions and by the institution of state aid programs to facilitate purchase of special education programs for most districts within each state. This stage of state policy emphasized building district-level special education programs as distinct from individual service entitlements for handicapped children.

The service entitlement emphasis emerged as the most recent stage of state policy in special education, a stage dominated by federal and state service mandates and significant increases in federal, state and local support. All fifty states and the District of Columbia are now at various implementation levels in this stage of special education, many of them grappling with organizational structures that developed as elements of previous stages. For example, some states relied heavily on private service providers and intermediate educational agencies in earlier policy stages. These institutional arrangements frequently require modification, as new policies view school districts as the primary responsible entity for serving handicapped children.

¹These stages are based on a conception originally developed by Federick Weintraub and Scottie Higgins in Local Special Education Variables Necessary for Consideration in Developing State Special Education Fiscal Policies. Reston, Va: The Council for Exceptional Children, December 1980.

State Achievements in Special Education

Within the entitlement stage of state policy, the states have moved a considerable distance in extending educational opportunities to handicapped children. Accomplishments across states include:

- an increase in children served by special education programs -- from 7.25% of the school-aged population in 1976-77 to 8.65% of the school-aged population in 1980-81;
- an increase in the younger and older handicapped children served -- in 1980-81, states served almost 41,000 more handicapped preschoolers and almost 43,000 18-21 year-old handicapped students than in 1976-77;
- an expansion in the range of special education programs available from local school districts -- in 1979-80, all districts in a nationwide evaluation of P.L. 94-142 expanded available services over the previous year either by enlarging existing and related services or by developing new programs for unserved or underserved children; and
- an 84% increase in state special education revenues from

¹ Based on child count information submitted by the states to Special Education Programs, U.S. Department of Education.

² U.S. Comptroller General. Disparities Still Exist in Who Gets Special Education. Report to the Chairman, Subcommittee on Select Education, Committee on Education and Labor, U.S. House of Representatives, GPO, September 30, 1981 and Progress Toward A Free Appropriate Public Education. A Report to Congress on the Implementation of P.L. 94-142, U.S. Dept. of HEW, Office of Education, January 1979.

³ Wright, Anne R. Local Implementation of P.L. 94-142: Second Year Report of a Longitudinal Study. Prepared for U.S. Department of Education, Office of Special Education, Menlo Park, Calif.: SRI International, October 1980.

approximately \$2.1 billion in 1975-76 to \$3.7 billion in 1981-82.

These national benchmarks of progress all reduce to a common theme: growth. Clearly this theme has dominated recent state experience in the area of special education. But because the states are at different developmental stages in the implementation of service entitlement policies, the dynamics of growth vary across the states. Some states report dramatic growth rates in numbers of children served, but a critical consideration is their respective starting points. Similarly, state growth rates in special education revenues must be interpreted in light of initial revenue levels and share of state support. From 1975-1980, for example, California's handicapped child count increased 6%, but the state's revenues for special education increased 100%. The reason behind California's revenue growth, however, was an intentional increase in the share of state support for special education brought about by the state's adoption of a new Master Plan for Special Education. In contrast, during the same period, New York's child count increased by 67%, but state revenues for special education increased by only 13%.

While growth has been an indicator of progress, it also has raised concerns among state policymakers. As regular education programs in schools experience declining enrollments, the growth of special education programs stands out in stark contrast. The fiscal limits on states also demand hard choices from many state legislators attempting to control program growth in special education. Consequently, policymakers are examining with particular scrutiny the complex of instructional, support, and due process services that characterize special education. Moreover, they want to know the impact of state dollars for special education on handicapped students.

The uneven growth and disproportionate composition of the handicapped school-aged population reinforce these concerns among state policymakers. For instance, within the overall picture of growth, several patterns are noteworthy:

The uneven growth and disproportionate composition of the handicapped school-aged population reinforce these concerns among

1 Wright, Anne R. Local Implementation of P.L. 94-142: Second Year Report of a Longitudinal Study. Prepared for U.S. Department of Education, Office of Special Education, Menlo Park, Calif.: SRI International, October 1980.

state policymakers. For instance, within the overall picture of growth, several patterns are noteworthy:

- The number of handicapped children in the learning disabled category has increased 48% over the last four years; 48 states showed absolute increases in this population and 32 states clocked an annual growth rate for this population in excess of 10% per year. A concomitant decline in children identified as mentally retarded would suggest that some of this increase is a shift across categories. But the magnitude of growth remains unexplained.
- The handicapped school-aged population appears concentrated in the elementary levels; 67% of the handicapped population served was under 12 with an average age of 8 years. Evidence suggests that children classified as requiring services for ²speech impairments explain most of this concentration.
- Minority children represent a larger proportion of the special education student population than their share of the total population. The most notable pattern affects Black students: 40% of Black students enrolled in special education are enrolled in educable mentally retarded programs. (Other groups enroll 20% of their populations in this category.) In contrast, Black children are less than proportionately represented in learning disabled and speech impaired programs.
- Male children are significantly overrepresented in emotionally disturbed and learning disabled programs; males are three times as likely to participate in programs for emotionally disturbed students and 2-1/2 times ⁴as likely to participate in learning disability programs.

¹Based on state child count numbers reported to Special Education Programs, U.S. Department of Education, 1977-1980.

²U.S. Comptroller General, Op. cit.; and Kakalik, James, et al. Study of Special Education Services. (draft) Santa Monica, Calif.: Rand Corporation, August 1981.

³U.S. Comptroller General, Op.cit.

⁴Ibid.

The extent to which a state reflects these nationwide patterns varies as does the significance of any state's growth pattern. Variations have to be interpreted in light of a state's developmental stage in the extension of education service mandates to handicapped students. Additionally, interpretations of an individual state's patterns should include a review of school district variations within that state. For example, it is not uncommon to find districts varying significantly in the types of handicaps they identify and the racial/ethnic characteristics of children served even when different minority enrollment patterns are taken into account.

Appendix B

1980-81 State Child Counts: Percent of Children Ages 3 - 21 Served Under P.L. 89-313 and P.L. 94-142^{1, 2}

Alabama.....	10.06	Kentucky.....	10.54	North Dakota.....	8.06
Alaska.....	11.97	Louisiana.....	10.64	Ohio.....	10.62
Arizona.....	9.97	Maine.....	11.52	Oklahoma.....	11.00
Arkansas.....	10.97	Maryland.....	13.15	Oregon.....	9.64
California.....	8.61	Massachusetts.....	13.85	Pennsylvania.....	10.37
Colorado.....	8.91	Michigan.....	8.37	Rhode Island.....	11.85
Connecticut.....	12.62	Minnesota.....	10.67	South Carolina.....	11.30
Delaware.....	14.50	Mississippi.....	9.75	South Dakota.....	7.89
Dist. of Columbia.....	6.30	Missouri.....	11.97	Tennessee.....	11.15
Florida.....	9.57	Montana.....	8.65	Texas.....	9.51
Georgia.....	10.48	Nebraska.....	10.96	Utah.....	10.45
Hawaii.....	7.28	Nevada.....	7.88	Vermont.....	12.59
Idaho.....	8.28	New Hampshire.....	7.49	Virginia.....	9.70
Illinois.....	12.45	New Jersey.....	12.69	Washington.....	8.39
Indiana.....	9.37	New Mexico.....	8.73	West Virginia.....	9.54
Iowa.....	11.43	New York.....	8.01	Wisconsin.....	8.43
Kansas.....	9.97	North Carolina.....	10.54	Wyoming.....	11.02

¹Expressed as percent of 1980 enrollment (age 5-17); percentages based on the 5-17 age child population are slightly lower.

²These percentages are not the basis for funding under P.L. 94-142. That count excludes children served by P.L. 89-313; funds are restricted to no more than 12% of the 5-17 school-aged population (not enrollment) in a state.

Source: ED/OSE Data Analysis System, October 11, 1981.

Appendix C

State Growth Rates: Annualized Growth Rate In Handicapped Children Served for School Year 1977-78 through 1980-81

Expressed as Percents

	Learning Disabled	Mentally Retarded	Emotionally Disturbed	Speech Impaired	All Conditions (includes 1976-77)
United States	10.93	2.78	4.86	-1.17	2.34
Alabama	24.32	2.16	22.19	-0.24	7.16
Alaska	8.84	-13.22	-2.60	12.84	1.59
Arizona	7.07	-4.36	6.39	5.35	3.53
Arkansas	20.84	1.42	14.25	8.17	11.50
California	16.80	-1.14	2.27	-4.06	1.76
Colorado	6.38	-0.91	7.87	-3.29	0.30
Connecticut	4.30	-11.20	7.21	0.99	1.56
Delaware	6.57	-7.35	-1.19	1.51	0.51
District of Columbia	35.96	-6.10	5.07	2.15	-7.39
Florida	8.19	-4.65	9.66	2.55	4.27
Georgia	14.94	-0.38	12.77	5.73	5.62
Hawaii	7.25	-7.59	17.21	-9.19	2.65
Idaho	8.96	-6.71	-2.93	-7.81	2.93
Illinois	8.04	-2.03	-1.39	-0.44	1.45
Indiana	32.19	-1.29	11.42	-0.45	2.45
Iowa	7.96	-0.36	17.52	-1.65	3.63
Kansas	12.86	-5.10	10.26	-0.42	1.55
Kentucky	17.48	0.06	10.04	2.32	4.36
Louisiana	22.04	-5.99	-0.19	-12.24	-1.00
Maine	5.79	-0.53	12.87	1.65	1.58
Maryland	11.50	-7.81	-4.67	-3.69	3.23
Massachusetts	9.27	-3.84	-2.20	4.24	1.41
Michigan	10.34	-3.22	6.26	-6.72	0.36
Minnesota	7.73	-2.83	4.48	-1.98	2.28
Mississippi	28.92	3.24	49.43	8.40	9.74
Missouri	11.52	-1.59	8.58	-0.41	1.38
Montana	11.76	-7.09	3.53	5.34	9.29
Nebraska	12.16	-4.17	7.16	-1.56	4.00
Nevada	10.66	-6.54	12.10	-6.12	1.15
New Hampshire	20.43	-11.08	10.98	6.08	4.78
New Jersey	6.67	-6.47	3.39	-0.94	1.78
New Mexico	12.05	-7.19	10.53	20.21	9.67
New York	12.64	-5.28	5.03	-11.58	-0.86
North Carolina	18.85	-2.73	12.55	2.06	3.96
North Dakota	10.50	-4.42	2.31	-4.71	0.98

(Continued)

	Learning Disabled	Mentally Retarded	Emotionally Disturbed	Speech Impaired	All Conditions (Includes 1976-77)
Ohio	16.52	-1.86	20.21	0.87	4.31
Oklahoma	11.35	0.47	12.12	4.06	7.54
Oregon	11.92	-5.80	3.82	2.31	3.87
Pennsylvania	18.08	-1.94	7.10	-2.05	-0.85
Rhode Island	21.15	-2.67	0.09	-1.86	1.93
South Carolina	10.24	-2.20	5.31	-5.89	-0.67
South Dakota	14.79	-13.88	12.10	2.40	0.40
Tennessee	-3.17	-4.44	3.91	5.74	-0.84
Texas	3.05	-9.25	6.51	-3.10	3.39
Utah	-1.46	-12.13	-0.42	5.42	-0.71
Vermont	12.94	10.59	34.81	3.98	13.57
Virginia	15.42	-3.61	15.54	0.34	4.77
Washington	16.76	-3.22	-4.70	3.89	-2.20
West Virginia	14.61	-0.20	15.08	3.73	3.95
Wisconsin	10.44	-4.11	9.84	4.74	3.81
Wyoming	9.70	1.87	8.33	11.19	8.34

Sources:

Progress Toward A Free Appropriate Public Education. A Report to Congress on the Implementation of Public Law 94-142: The Education for All Handicapped Children Act, U.S. Dept. of Health, Education and Welfare, January 1979.

To Assure the Free Appropriate Public Education of All Handicapped Children. Second Annual Report to Congress on the Implementation of P.L. 94-142, U.S. Dept. of Education, 1980.

ED/OSE Data Analysis System (DANS), October 11, 1981.

Appendix D

Federal Definitions of Handicapping Conditions

The terms are defined as follows:¹

- (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 which is not included under the definition of "deaf" in this section.
- (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 (e.g., poliomyelitis, bone tuberculosis, etc.), and impairments from other causes (e.g., cerebral palsy, amputations, and fractures or burns which cause contractures).
- (7) "Other health impaired" means limited strength, vitality or alertness, due to chronic or acute health problems such as a heart condition, tuberculosis, rheumatic fever, nephritis,

asthma, sickle cell anemia, hemophilia, epilepsy, lead poisoning, leukemia, or diabetes, which adversely affects a child's educational performance.

(8) "Seriously emotionally disturbed" is defined as follows:

- 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:
 - an inability to learn which cannot be explained by intellectual, sensory, or health factors;
 - an inability to build or maintain satisfactory interpersonal relationships with peers and teachers;
 - inappropriate types of behavior or feelings under normal circumstances;
 - a general pervasive mood of unhappiness or depression; or
 - a tendency to develop physical symptoms or fears associated with personal or school problems.
- The term includes children who are schizophrenic or autistic. The term does not include children who are socially maladjusted, unless it is determined that they are seriously emotionally disturbed.

(9) "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. The term includes such conditions as perceptual handicaps, brain injury, minimal brain disfunction, 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, or of environmental, cultural, or economic disadvantage.

(10) "Speech impaired" means a communication disorder, such as stuttering, impaired articulation, a language impairment, or a voice impairment, which adversely affects a child's educational performance.

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

Source: Federal Register, Vol. 42, No. 163, August 23, 1977.

Appendix E

Incidence Estimates: Range of Estimated National Rates by Major Handicapping Disability for Children of School Age (Ages 6-17 Inclusive)

Major Handicapping Disability	Range of Prevalence Rates (per 100 Children)		BEH Estimate (Ages 6-19)
	Low	High	
Mentally Retarded	1.3	2.3	2.3
Hard of Hearing	0.3	0.5	0.5
Deaf	0.075	0.135	0.075
Speech Impaired	2.4	4.0	3.5
Visually Handicapped	0.05	0.16	0.1
Emotionally Disturbed	1.2	2.0	2.0
Orthopedically Impaired	0.065	0.75	0.5
Other Health Impaired	0.065	0.75	0.5
Specific Learning Disabilities	1.0	3.0	3.0
Total	6.455	13.595	12.035¹

¹Includes 0.06% in Deaf-Blind and other multiply handicapped not included in other categories.

Source: Kaskowitz, David H. *Validation of State Counts of Handicapped Children, Volume II — Estimation of the Number of Handicapped Children in Each State*. Menlo Park, Calif.: Stanford Research Institute, July 1977.

Appedix F

Select Legal Cases Relating to Special Education Finance

Free Appropriate Public Education (FAPE) -- Adequate versus Optimum

Krawitz v. Commonwealth of Pennsylvania, 408A. 2d 1202 (Pa. Commw. 1979).

A Pennsylvania commonwealth court held that a handicapped child was not entitled to a "more appropriate" program as long as an appropriate program was made available.

Springdale School District v. Grace, 3EHLR 552:191 (W.D. Ar, 1980)

The Arkansas court reasoned that as long as an adequate program was provided, legal mandates were met.

Isgur v. School Committee of Newton, 3EHLR 522:197 (Mass. App. 1980).

In contrast. a Massachusetts appeals court reasoned that a program must benefit a handicapped child to the "maximum extent feasible" in order to be considered appropriate. However, the court denied reimbursement for private placement because there was insufficient evidence that the public school program would not benefit the student to the "maximum extent" while retaining him in the least restrictive environment.

Kruelle v. Biggs, 489 F. Supp. 169 (D. Del. 1980).

The Delaware Federal District Court interpreted P.L. 94-142 as requiring school districts to provide programs that "maximize" each handicapped child's chance of learning.

Rowley v. Board of Education of the Hendrick Hudson School District, 483 F. Supp. 528 (S.D.N.Y. 1980).

A New York federal district court ruled that services must enable handicapped children to reach their full learning potential.

commensurate with the opportunity provided for nonhandicapped children. The U.S. Supreme Court reversed this ruling stating that Congress intended P.L. 94-142 to provide handicapped students meaningful access to education.

Laura v. Special District No. 1, 3EHLR 552:152 (D. Minn. 1980).

The Minnesota Federal District Court rejected a parental claim for private placement reimbursement based on evidence that the local education agency was willing to revise the child's IEP to meet legal requirements.

Extended School Year -- Year Round Programs

Armstrong v. Kline, U.S.D.C., E.D., Pa., Civil Action No. 78-172. Findings of Fact..., June 21, 1979.

The court was persuaded that "the normal child, if he or she has had a loss, regains lost skills in a few weeks, but for some handicapped children the interruption in schooling of the summer recess may result in a substantial loss of skills previously learned." (Most states have indicated that parents have the burden of proof; they must demonstrate to school officials/hearing officers that extended programs are needed). The court concluded that all handicapped children who can be shown to regress without additional services, are clearly children who need those services and therefore, ~~require those services~~, not solely because of regression, but instead because of their need, based on individual determination.

Fiscal Limitations - A Justification for Service Limits

Meyer v. City of New York, 392 N.Y.S. 2d 468 (App. Div. 1977).

The New York trial court noted that unreasonably costly private schools should be eliminated during the state approval process for enrolling children in private schools.

Scavella v. School Bd. of Dade County, 363 So. 2d 1095 (Fla. 1978).

The Florida Supreme Court upheld the state education department's authority to establish a maximum amount for the support of exceptional students placed in private schools. The court noted that educational officials must ensure the ceiling is sufficiently high so that handicapped children are not deprived of a free appropriate education.

Elliot v. Board of Education of City of Chicago, 380 N.E. 2d 1137 (Ill. App: 1978).

In contrast, the Illinois appeals court invalidated a state statute that established a maximum reimbursable amount for educating a child in a private facility as abridging the state constitutional mandate that education through the secondary level must be free for all persons, including handicapped individuals residing within the state.

Michael P. v. Maloney, 3EHLR 551:115 (D. Conn. 1979).

Similarly, the Connecticut Federal District Court ruled that recommended private placements for handicapped children must be supported by the school district.

In the Matter of Charles Hartman, No. 3-379 A 60 (Ind. App. 1980).

An Indiana appeals court declared that a desire to conserve state funds cannot be used as a justification for withholding appropriate treatment from a handicapped individual.

Related Services Limitations -- Noneducational

In the Matter of Suzanne, 381 N.Y.S. 2d. 628 (Family Ct., Westchester County, 1979).

A state court reasoned that a New York school district was fiscally responsible for the placement of a severely multiply handicapped child in a residential facility in Florida. The New York education department had refused approval of the placement on the grounds that it mainly involved custodial care and was not primarily for educational purposes. The family court concluded that the private facility provided an individualized educational program as well as custodial care and was an appropriate out-of-state placement.

Tatro v. State of Texas, 481 F. Supp. 1224 (1979).

The court stated that a noneducational service (catheterization) is "related" if a) it is a service which would "arise from the effort to educate," or b) there is a "connection" between the provision of the service and equal educational opportunity.

Hines v. Pitt City Board of Education, 3EHLR 552:247 (E.D.N.C. 1980).

Despite public school fiscal constraints, the court required a residential placement because evidence was produced indicating that public school programs and private day programs were not appropriate for the student.

Guempel v. State of New Jersey, 387 A. 2d 399 (N.J. Super. 1978), aff'd 3EHLR 552:163 (N.J. 1980).

In contrast, the Supreme Court of New Jersey concluded that a school district was not obligated to incur the total expense of a residential placement for a severely retarded teenager because the care of a subtrainable child does not qualify as educational and that the institutional placement was primarily custodial in nature. The court ruled that the state was not precluded from requiring financially able parents to bear maintenance costs, necessitated by the student's home conditions (rather than educational concerns) for the care of their child.

Related Services - Medical

Hairston v. Drosick, 423 F. Supp. 180 (1976).

The child needed catheterization to enable him to attend the regular class. The court was concerned solely that he be able to attend that class. It simply did not find it important to characterize the catheterization as educational, medical, related, or anything else. If it was needed to ensure the educational attendance and progress of a handicapped child, the court required that it be provided.

Appendix G

State Revenues for Special Education

States	Revenue (Thousands)		Percent Change
	1975-76.	1980-81	Percent
Alabama	\$ 28.3	\$ N.A.	N.A.
Alaska	9.3	22.0	134.0
Arizona	16.6	N.A.	N.A.
Arkansas	6.7	23.8	254.0
California	207.3	416.1	100.0
Colorado	22.6	37.4	65.0
Connecticut	30.0	N.A.	N.A.
Delaware	16.9	N.A.	N.A.
Florida	113.5	223.4	96.0
Georgia	43.1	N.A.	N.A.
Hawaii	8.5	18.1	113.0
Idaho	9.3	22.0	136.0
Illinois	115.0	206.1	79.0
Indiana	16.5	42.4	157.0
Iowa	10.7	69.2	729.0
Kansas	9.4	25.9	173.0
Kentucky	20.4	N.A.	N.A.
Louisiana	31.4	95.0	202.0
Maine	4.3	14.1	22.6
Maryland	40.9	69.8	70.0
Massachusetts	93.0	N.A.	N.A.
Michigan	90.5	106.0	18.0
Minnesota	28.5	N.A.	N.A.
Mississippi	8.1	48.6	494.0
Missouri	28.2	N.A.	N.A.
Montana	13.4	N.A.	N.A.
Nebraska	10.3	N.A.	N.A.
Nevada	6.2	12.4	97.0
New Hampshire	1.3	5.6	330.0
New Jersey	61.5	177.0	188.0
New Mexico	12.6	N.A.	N.A.
New York	196.5	221.7	13.0
North Carolina	40.8	N.A.	N.A.
North Dakota	1.5	N.A.	N.A.
Ohio	103.0	N.A.	N.A.
Oklahoma	6.7	24.6	267.0
Oregon	5.2	N.A.	N.A.
Pennsylvania	168.0	252.2	50.0
Rhode Island	16.5	12.9	21.7
South Carolina	19.0	N.A.	N.A.
South Dakota	.3	2.0	558.0
Tennessee	33.5	N.A.	N.A.
Texas	190.8	259.9	36.0
Utah	13.5	N.A.	N.A.
Vermont	3.1	10.6	235.0
Virginia	21.3	N.A.	N.A.
Washington	33.2	52.7	58.0
West Virginia	4.6	N.A.	N.A.
Wisconsin	37.7	95.3	152.0
Wyoming	5.0	N.A.	N.A.

Source:

Odgen, Allan and McGuire, C. Kent. *Financing Educational Services for Special Populations; The State and Federal Roles.* (Working Paper No. 28), Denver, Co.: Education Finance Center, May 1, 1980.

State	Funding Approach	Distribution of Funds		Ages for Which Service is Mandated	Other Special Provisions
		Mechanism	Categories*		
Alabama	Resources	Teacher units for approved classes		6 - 21	Deaf and blind may be served from age 3. LEAs with kindergarten must begin service at age 5.
Alaska	Resources	Classroom units based on number of special ed pupils		3 - 19, inclusive	
Arizona	Students	Weighted per pupil within a consolidated formula	3	6 - 21	Services permitted from age 3. LEAs with kindergarten must begin service at age 5.
Arkansas	Costs	Reimbursement for excess costs of approved classes		6 - 21, inclusive	LEAs with kindergarten must begin service at age 5.
California	Resources/ Costs	Master plan: Unit allocation plus cost factor	3 categories based on placement and required services	4 yrs., 9 mos. - 18, inclusive	Services permitted from birth. Services required from 19 - 21 for students who have not completed high school or individual course of study. Non-public school and special school aid also provided.
Colorado	Costs	Reimbursement for portions of personnel, transportation, and materials costs		5 - 21 (or until graduation)	Services permitted from age 3. Prevalence limits.
Connecticut	Costs	Reimbursement for portion of excess costs, depending on district wealth defined in guaranteed tax base formulas		4 - 21 (or until graduation)	Service required from age 3 for hearing impaired.
Delaware	Resources	Classroom units	11, based on handicapping condition	4 - 21	Services permitted from birth for deaf/blind and hearing impaired.

State	Funding Approach	Distribution of Funds		Ages for Which Service is Mandated	Other Special Provisions
		Mechanism	Categories*		
Florida	Students	Weighting scheme keyed to base student allocation; multiple factors	15, based on handicapping condition and full- vs. part-time service	5 - 17, inclusive	Services to begin at kindergarten and continue for 13 years. Services permitted at age 3. Eighty percent of funds generated by students in a particular program must be spent on that program. Some prevalence limits.
Georgia	Resources	Weighted classroom units	11, based on handicapping condition	5 - 18, inclusive	Services permitted from birth to age 4 and 19 - 21.
Hawaii	Students			6 - 20	Services permitted from age 3 - 5.
Idaho	Resources/ students	Reimbursement for 80% of allowable salaries for teachers, aides, ancillary personnel, directors, and supervisors plus additional student weighting for exceptional children	3, based on number of children served	5 - 21, inclusive	Services permitted from birth to age 4.
Illinois	Resources/ costs	Flat grant per certified special education employee and approved aide; reimbursement of excess costs for severely handicapped students in district-operated program		3 - 21, inclusive	
Indiana	Students	Weighting scheme keyed to basic grant support	13, based on handicapping condition	6 - 18	

State	Funding Approach	Distribution of Funds		Ages for Which Service is Mandated	Other Special Provisions
		Mechanism	Categories*		
Iowa	Students	Weighting scheme keyed to foundation aid	3, based on handicapping condition	Birth - 20, inclusive	
Kansas	Resources	Per-teacher allocation plus reimbursement for 80% of transportation costs		5 - 21 (or completion of appropriate curriculum)	Services permitted from birth to age 5. Placements must be reviewed every 12 weeks.
Kentucky	Resources	Classroom units for teachers in approved programs		5 - 17	Services permitted for ages 18 - 21.
Louisiana	Resources	Classroom units plus allowances for other staff and transportation	18, based on handicapping condition	3 - 21	
Maine	Costs	Allocations of 100% of costs in prior year		5 - 20	
Maryland	Costs	Reimbursement for excess costs	Based on placement	Birth - 21	
Massachusetts	Students	Weighting scheme keyed to basic student allocation	2, based on placement services	3 - 21, inclusive	Prevalence limits. Eighty-five percent of funds distributed through Chapter 70 formula must be spent on programs where they were generated.
Michigan	Costs	Reimbursement for up to 75% of added costs for approved programs, subject to appropriation cap		Birth - 26, (or completion of high school)	
Minnesota	Resources	Reimbursement for 69% of staff salaries up to \$12,000 per person plus 5% of salary with no cap or 70% of salaries		4 - 21, (or completion of secondary program)	

State	Funding Approach	Distribution of Funds		Ages for Which Service is Mandated	Other Special Provisions
		Mechanism	Categories*		
Mississippi	Resources	Teacher units for approved classes		6 - 20, inclusive	
Missouri	Resources	Classroom units for approved classes	Based on handicapping condition	5 - 20, inclusive	Allowable class size varies with handicapping condition. Services permitted from age 3 - 4.
Montana	Costs	Full reimbursement for allowable costs		3 - 21, inclusive	Birth - 2 required under certain circumstances.
Nebraska	Costs/ students	Reimbursement for 90% of allowable excess for per-student costs	3, based on placement and services	Birth - 21	
Nevada	Resources	Classroom units for approved classes; maximum of 1 unit per 9 teachers in regular program		3 - 21 (or completion of 12 grades)	
New Hampshire	Costs	Reimbursement for costs exceeding twice the state average per-pupil cost		3 - 21	
New Jersey	Students	Weighting scheme keyed to state average per pupil cost	12, based on handicapping condition	5 - 21	Services permitted below age 5 and above age 20.
New Mexico	Students	Weighting scheme keyed to basic support	4, based on placement, services		
New York	Students/ costs	Weighting scheme keyed to equalization aid		5 - 21	Funds attributable to special needs students must be spent on services to those students.
North Carolina	Resources	Classroom units based on enrollments		5 - 17, inclusive	Services permitted from birth to age 4 and 18 - 21.

State	Funding Approach	Distribution of Funds		Ages for Which Service is Mandated	Other Special Provisions
		Mechanism	Categories*		
North Dakota	Costs	Reimbursement for costs up to 3 times state average per pupil cost and 4 times state average transportation and equipment costs	Based on handicapping condition	6 - 21	Services permitted from birth to age 6.
Ohio	Resources/ students	Flat grant plus salary for allowances for classroom units; per-pupil allocations for certain services		5 - 21	
Oklahoma	Students	Weighting scheme	3 (handicap, size of school, grade level)	4 - 17, inclusive	No minimum age specified for visually impaired/hearing impaired. Service required at age 3 for severely multi-handicapped and severely handicapped, with 12 years of schooling required.
Oregon	Costs	Reimbursement of 30% of approved costs, subject to appropriation cap		6 - 20, inclusive	Services permitted from 3 - 5 and at age 21.
Pennsylvania	Costs	Reimbursement of 100% of approved excess costs for pupils in special classes operated by district or intermediate unit; 75% of tuition and maintenance costs to ceiling for student in approved private schools	Cost ceilings for students in private schools vary by handicapping condition	6 - 21	Service permitted from birth. LEAs with kindergarten must begin services at age 5.

State	Funding Approach	Distribution of Funds		Ages for Which Service is Mandated	Other Special Provisions
		Mechanism	Categories*		
Rhode Island	Costs	Reimbursement for excess costs		3 - 21 (or completion of high school)	
South Carolina	Students	Weighting scheme keyed to basic support program	8, based on handicapping condition	5 - 21	Services required at age 4 for hearing impaired.
South Dakota	Students	Student allocation based on full-time equivalent		Birth - 21, inclusive	
Tennessee	Students	Additional student weighting for each special education student	All handicapped students weighted the same	4 - 21, inclusive	Services required at age 3 for hearing impaired/deaf. Minimum of 85% of state funds be spent in programs where they are generated.
Texas	Resources/students	Classroom units based on district's ADA		3 - 21	Allocation is based on percent of students served: full amount if 12% or more; reduced by 6% for each 1% decrease in percent served to minimum of 5% served.
Utah	Students	Weighting scheme keyed to minimum school program	20, based on handicapping condition	5 - 21, inclusive	Prevalence limits established for 11 handicapping conditions.
Vermont	Resources/costs	Reimbursement for percent of total cost in commissioner-designated programs; and for entire excess costs for others		6 - 21 (or completion of high school)	LEAs with kindergarten must begin service at age 5; otherwise, services permitted from age 3.

State	Funding Approach	Distribution of Funds		Ages for Which Service is Mandated	Other Special Provisions
		Mechanism	Categories*		
Virginia	Costs/ students	Per-student allocations based on state determinations of excess costs for programs serving different handicapping conditions	Based on handicapping conditions	2 - 21	
Washington	Costs/ resources	Reimbursement for approved excess costs (within allowances for personnel costs)	11, based on handicapping condition	5 - 21	Student-teacher ratios for self-contained classroom programs are specified for various handicapping conditions.
West Virginia	Students/ resources	Student weighting plus support for teacher salaries, facilities, and transportation	All handicapped students weighted the same	5 - 23	Services permitted from age 3.
Wisconsin	Costs	Reimbursement for 70% of approved costs for teachers, transportation, materials, coordinators and portion of salaries for ancillary personnel	11, based on handicapping condition	3 - 21	Identification and service are required for children in 11 handicap categories identified.
Wyoming	Resources	Classroom units for approved classes	Based on handicapping condition	Birth - 21	

Adapted from: Winslow, Harold R. and Peterson, Susan M. *State Initiatives for Special Needs Populations*. Palo Alto, Calif.: Bay Area Research Group, September 1981.

*Categories attached to a state's funding formula are specified when available.