

1985

# A description, analysis, and evaluation of Iowa's special education instructional program funding formula "The Weighting Plan"

Thomas M. Burgett Jr.  
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**A DESCRIPTION, ANALYSIS, AND EVALUATION OF IOWA'S SPECIAL  
EDUCATION INSTRUCTIONAL PROGRAM FUNDING FORMULA, "THE  
WEIGHTING PLAN", 1975-1984**

*Iowa State University*

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A description, analysis, and evaluation of  
Iowa's special education instructional  
program funding formula  
"The Weighting Plan"  
1975-1984

by

Thomas M. Burgett, Jr.

A Dissertation Submitted to the  
Graduate Faculty in Partial Fulfillment of the  
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## CHAPTER I

## INTRODUCTION

Iowa's current special education program delivery system which includes the finance component called the "Weighting Plan" became effective in the 1975-76 school year. Since that time, tremendous growth in the number of students receiving special education programs and the financial resources allocated to them has occurred. The magnitude of this growth during a period of general education enrollment decline and increased financial pressure on state and general education budgets has caused great concern on the part of state policymakers. There is a great need to understand the financial implications of current special education laws and their funding mechanisms so that judgments can be made for the future. A short review of the history of the development of special education will place this need in perspective.

Tweedie (in Chambers and Hartman (8, p. 48-73)) concluded that the history of special education has been a history of exclusion; the exclusion of handicapped students from school and the exclusion of their representatives from participation in education policy development. Prior to the enactment of the Education for All Handicapped Children Act (P.L. 94-142) in 1975, most states



authorized special education programs by making them permissible at the discretion of local school officials. Other states' compulsory attendance laws provided for the exclusion of handicapped students. The special education programs that existed at this time were most often based on a caretaking approach. Those handicapped children who were lucky enough to be admitted to the public schools often faced segregation and minimal services. Special education professionals generally determined the curriculum content and the assignment of students within these programs while local boards of education offered little control or direction. The control exercised by special education professionals caused a rigid division of the school program into two unequal parts, regular and special education. Also, school policy included little additional funding for special education and many handicapped students were denied programs because of the lack of funds. Education for the handicapped largely depended on the kindness of state and local governments, and the generosity of private charity. Advocates for the handicapped were generally excluded from political bargaining for funds and programs. They lacked political power and were unable to compete with other special interest groups.

The pattern of exclusion began to change in the 1960s with the progression of the Civil Rights Movement. Like other minorities, advocates for the handicapped began to speak in terms of their "rights". Professional educators reassessed their appraisal of

handicapped students and concluded that all children were educable. Amid growing distrust of school officials' ability and willingness to provide adequate programs, special education advocates changed their strategy of cooperation with political officials. They undertook litigation to force comprehensive reform of special education. While specific demands for programs continued, an additional strategy to pressure powerful education lobbies into the support of federal special education reforms was employed. Right-to-education lawsuits which were directed by advocates for the handicapped threatened school districts with possible disruption, expensive court battles, and the complexity of implementing subsequent court-ordered programs. Schools were unable to provide needed reforms on their own and were afraid that costly litigation and court-ordered programs would cut into existing programs. They sought financial assistance from Congress to remedy the situation.

Congress eventually responded to these needs with the passage of The Education For All Handicapped Children Act, Public Law 94-142, in November of 1975. In that Act, Congress adopted the policy proposals of reformers and provided substantial Federal assistance to supplement increased state and local special education funding. Guarantees of appropriate education were tied to the financial assistance Congress provided the schools. Inherent in the Act is the philosophy that handicapped children share with other citizens the right to an appropriate, publicly financed education. It represents

a statement of national goals and is sometimes referred to as a civil right act because it incorporated judicial decisions which ensured equal access to education for handicapped children, due process procedures, and affirmed a respect for individual differences. The philosophy reflected in the major provision of P.L. 94-142 included the following concepts which have had great financial implications at the state and local levels:

1. Schools are responsible for reaching out and ensuring that no child is excluded from a free and appropriate public education (FAPE).
2. Each identified handicapped child must have an individualized education plan (IEP) that includes present level of performance, annual goals, specific objectives, special education and related services to be provided, and time schedules; the IEP should be reviewed and reconsidered at least annually.
3. Handicapped children should be educated in the least restrictive environment (LRE) possible.
4. Parents of handicapped children must be notified about the child's identification, evaluation, and placement in special education programs; parents should participate in decisions, and must give informed consent to program changes; due process rights to a fair hearing are to be provided when parents and the school cannot agree on a handicapped child's evaluation or program.

Iowa's history of providing education for handicapped children generally parallels that of the nation. Howe (22) pointed out that Iowa passed its first special education law in 1945. However, prior to 1975, it was only permissible for Iowa public school districts to provide educational programs for the handicapped. Additional funding for the excess costs of such programs was very limited. Evaluation and identification procedures were generally loose and unstructured. Program content was largely left to individual teachers' determination. Formal due process procedures and those ensuring parent involvement did not exist. While many of the larger school districts in Iowa provided some programming for handicapped children under the guidance and direction of the county school system, comprehensive programming was rare.

Following the national trend, Iowa's legislature mandated special education services for handicapped children in 1974 with the passage of Senate File 1163. These changes in State Code became effective on July 1, 1975, and preceded the September 1, 1978, date established by Congress for initial compliance with P.L. 94-142. Iowa's special education laws have been considered to be some of the most comprehensive promulgated at the state level because they contain essentially all of the elements of and the philosophy underlying P.L. 94-142. Iowa's state mandate also extended the federal mandate of services to handicapped students from age three through twenty-one to ages birth through twenty-one, and established

funding mechanisms to provide additional funds for the excess cost of providing the special education instructional and related services.

Included in S.F. 1163 was the abolishment of the county school system and the establishment of Iowa's intermediate educational agencies called area education agencies (AEAs) with the expressed responsibilities for the identification of handicapped children, assurance of appropriate programming by local school districts, and the direct provision of special education support services.

As Howe (22) pointed out, there are two major components of Iowa's special education funding mechanism. One is the funding of the AEAs for special education support services including personnel such as a director of special education, coordinators, school psychologists, speech and language clinicians, school social workers, occupational and physical therapists, hospital-homebound teachers, itinerant teachers, consultants, and others. The second component is the financing of excess costs of special education instructional programs which are the direct responsibility of local school districts. This second component is accomplished by utilization of the "Weighting Plan," which is the focus of this study.

Iowa's "Weighting Plan" like other weighted systems, provides funds on a per pupil basis as a multiple of the regular program cost per pupil. The "Weighting Plan" is developed around a modified continuum of service model in which the amount of funding for a handicapped student is associated with the degree of integration into

the regular classes. Students' integration is based on the severity of their handicapping condition which in turn determines the teacher/student ratio prescribed by the Iowa Rules of Special Education to provide appropriate special education instructional service. Weightings are assigned to handicapped students as part of the regular State School Foundation Program based on those factors.

Current weightings are 1.7 for the mildly handicapped who are in regular classes for a major part of the school day, 2.2 for the moderately handicapped who need more intensive service through placement in a self-contained special class with little integration, and 3.6 for the severely and multiply handicapped students. Non-handicapped students in the regular curriculum are assigned a weighting of 1.0. by the "Weighting Plan."

As a result of the state laws, subsequent federal laws, and their accompanying rules and regulations, there has been tremendous growth in both the numbers of handicapped students served in special education programs in Iowa, and funds necessary to provide those programs. In 1975-76, the first year of implementation of the "Weighting Plan" approximately 27,000 handicapped students were served in special education instructional programs in Iowa at a cost of approximately \$59 million in state and local funds. By 1983-84, these figures had grown to over 46,000 students and \$176 million respectively. The "Weighting Plan" generates more money as more and more students are identified as educationally handicapped.

The magnitude of growth in funds earmarked for special education in Iowa and the continued growth in the number of identified handicapped students at a time when total school enrollments have declined has caused great concern on the part of the state policymakers. Policymakers are beginning to ask "When will it end?" Pressures on the state's budget and school district's general education budgets have intensified the concerns recently. In this regard, Iowa too appears to parallel the nation.

Tweedie (in Chambers and Hartman (8)) suggested in 1983, that the greatest test of special education reform lies ahead. He reported The Excellence in Education Movement may cause a shift in educational priorities in a direction away from one of equity for the handicapped. He further stated that education budget cuts at state and local levels pose a serious threat to the presently favored status of special education and that it is questionable whether or not special education advocates will be able to hold their own.

Hartman (in Chambers and Hartman (8)) asserted that prevailing legal and humanitarian attitudes, as well as compliance with the new laws, has resulted in a very rapid growth of special education budgets in recent years. However, the new and growing levels of special education funding are attracting greater attention from policymakers concerned with increasing costs. Education budgets are under strong pressure from tax and expenditure constraints, negative voter attitudes in school finance elections, and reduced federal

funding. The luxury of spending "whatever it takes" for special education, he stated, may well be gone. Hartman states that it is becoming increasingly important to understand the fiscal implications of special education laws at all government levels when planning future needs for funds and their allocations. He urges use of his Resource Cost Model Methodology and the Special Education Planning Model to accomplish this.

Crowner (10) agreed with Tweedie and Hartman and stated that if the United States should move into a period of "New Federalism" that affects the balance of advocacy power between state and federal government, agencies working on behalf of the handicapped will need to have a precise system for comparison, a set of general guidelines for evaluation, and for a set of recommendations by which states special education funding mechanisms may be judged. "With the focus shifting from moral imperative and growth, to fiscal efficacy and retrenchment, it is important that special educators be aware of funding options and their effects on programs and policy" (p. 508). He urged use of a taxonomy that will help serve several purposes: 1) it will enhance awareness; 2) it can provide a guide for states and federal governments to analyze different state funding approaches to special education; 3) it can be used to communicate in a uniform manner; and 4) the taxonomy can serve as a delimitation of funding variables which could be manipulated by critics and advocates of special education alike.



Crowner developed his taxonomy because there is a lack of consistent terminology and no source in the literature which covers all of the relevant elements or provides a general classification system for special education funding options.

Bernstein et al. (2) also urged evaluation of states' present special education funding options and presented some decision criteria to aid policymakers in the assessment of present or proposed special education delivery systems. The criteria developed by Bernstein and his colleagues to evaluate funding options and special education delivery systems include equity, comprehensiveness of programming, flexibility, accountability, cost effectiveness, compatibility with the total educational finance system and educational policies of the state, and lack of needless complexity. The criteria were drawn from general education finance and economic literature as well as from special education literature. These criteria should be used to evaluate Iowa's special education "Weighting Plan." The authors admonished that trade-offs must be made since no system can satisfy all criteria completely and simultaneously.

Crowner (10) suggested the following questions be asked as part of a fiscal policy analysis: 1) what funding base does the state use? 2) what formula does the state apply to that base? 3) what elements do the state allow inside and outside its formula? 4) to what extent is state funding more or less discretionary? and 5) what percent of

the local funding comes from which sources?

Just as the development of special education laws and the resulting programs and services for handicapped students in Iowa has paralleled that of the nation as a whole, so too has the concern about the magnitude of growth in funding these programs and services. Bernstein, Crowner, Tweedie, Hartman, and others have admonished state policymakers to evaluate special education funding formulas. They point out the increasing need to understand the implications of special education laws and funding formulas when planning future needs for funds and their allocations.

Another perceived need on the part of Iowa policymakers is that of a clear, concise explanation and description of Iowa's "Weighting Plan." In-state and out-of-state educational policymakers and other interested parties often request this information. Currently, no such document exists, and therefore, requests are answered with copies of state laws and rules which lack operational clarity.

In light of the forgoing discussion, the purposes of this dissertation are 1) to explain Iowa's special education instructional funding formula, the "Weighting Plan," and its procedures in relation to the total special education program delivery system; 2) to describe the "Weighting Plan" in the terminology suggested by Crowner's taxonomy so that other researchers and interested parties will have a standardized description; 3) to examine and analyze the results of the "Weighting Plan" in terms of

special education program and budget growth from 1975-1984 and by a comparison of regular program and special education program and budget growth from 1975-1984; and 4) to evaluate the "Weighting Plan" through application of Bernstein's decision criteria and Crowner's fiscal policy questions.

### Organization of the Study

This report is comprised of five chapters. The first is an introduction to the topic presenting background information, the need for the study, and the purposes of the study. Chapter two contains a survey of related literature including a section on the Education for All Handicapped Children Act (Public Law 94-142), one section on Iowa statutes pertaining to special education program delivery and funding; one section about policy issues pertaining to special education funding; one section on special education funding formulas; another section about the evaluation of special education funding formulas; and one section each on special education cost analysis and cost projection studies. Methodology and procedures are presented in chapter three. Chapter four is a presentation of the findings of the study, including an operational explanation of the "Weighting Plan" and a description of the "Weighting Plan" as suggested by Crowner's taxonomy of special education finance. Conclusions are presented in Chapter five along with a discussion of the findings and limitations of the study. Recommendations are also provided in Chapter five.

## CHAPTER II

## REVIEW OF THE LITERATURE

The survey of literature is organized into seven parts. The first part reports the provisions of the federal special education statutory mandate, the Education for All Handicapped Children Act of 1975 (Public Law 94-142). The second part reports the main provisions of Iowa's statutes relative to special education programs and finance. The third part discusses policy issues including those of equalization of educational opportunity, adequacy and source of resources and programming arrangements. Funding formulas are surveyed in part four, and the evaluation of funding formulas is discussed in part five. Special education cost analysis studies and cost projection studies are presented and discussed along with their methodologies in parts six and seven respectively. Summaries are provided at the end of parts two, five, and seven.

Education for All Handicapped Children Act of 1975  
(20 U.S.C. 1411-1420)  
Public Law 94-142

Part A of the Act

Part A of P.L. 94-142 lists Congress' findings which include that: there are more than eight million handicapped children in the

United States; special education needs are not being met; more than half of the handicapped children do not receive appropriate education; one million handicapped children are excluded from public schools; given sufficient funding state and local educational agencies can and will provide effective services; and that it is in the national interest for the federal government to assist state and local special education efforts in order to assure equal protection under the law.

This part also states that the purpose of the Act is to assure that all handicapped children have a free appropriate public education available. The education should emphasize special and related services to meet the unique needs of handicapped students, and to assure that rights of the handicapped and their parents or guardians are protected.

The next section of the Act defines many terms including: special education, related services, free and appropriate public education (FAPE), various disability categories, individualized education program (IEP), excess costs, and intermediate educational unit.

#### Part B of the Act

This part of P.L. 94-142 establishes the condition that participating states must submit an annual program plan to the federal government in order to be eligible to receive federal funds

from this part of the Act. The content of the program plan is defined in detail and includes provisions for: assuring full educational opportunity for all handicapped children; public participation in the development of the plan; data requirements, facilities and personnel needed to achieve full educational opportunity; establishment of priorities; identification, location, and evaluation of handicapped children; confidentiality of student records and information; individualized education program (IEP); procedural safeguards; least restrictive environment, personnel development, and compliance monitoring activities required of the states.

Part B of P.L. 94-142 also describes in detail and with examples the methodology to be used to calculate excess costs, what minimal fiscal effort is expected by applicant agencies, and requirements for utilization of Part B funds. Payment, application, submission, and approval processes for funding are also defined and described.

#### Part C of the Act

This part of P.L. 94-142 establishes timelines for which the availability of a free appropriate public education for handicapped children must be insured. Handicapped children aged 3-18 must have the program available by September 1, 1978, and not later than September 1, 1980, for handicapped children aged 3-21.

Part C of the Act also establishes priorities in the use of Part B funds. First priority children are defined as those not receiving any educational program and second priority children are defined as those receiving an inadequate educational program.

Individualized Education Programs (IEPs) are defined in detail in this part of P.L. 94-142 and must include present level of performance, goals and objectives, services to be provided, and at least an annual review. State education agencies are charged with the responsibility to assure their development and implementation. Participation in IEP meetings is detailed in terms of content, student evaluation, the participants, and steps which must be taken to insure parental participation.

Another section of Part C of the Act deals with the procedures for the development and implementation of a comprehensive system of personnel development. These procedures must be included in the states' annual program plan.

#### Part D of the Act

This part of P.L. 94-142 details the procedural safeguards and due process procedures for handicapped children and their parents or guardians. It guarantees parents or surrogate parents rights to: review the child's records; an independent educational evaluation at public expense under certain circumstances; prior notice about the initiation or change in identification, evaluation or placement of

the child; informed consent before preplacement evaluation, initial special education placement; and an impartial due process hearing.

Iowa's Statutes Relative to Special Education

Chapter 273 Area Education Agency,  
Code of Iowa

Section 273.1, Code of Iowa, begins with a statement of the legislative intent which is to "provide an effective, efficient, and economical means of identifying and serving children . . . who require special education and" . . . "to provide a method of financing the programs and services."

The next two sections establish Iowa's fifteen intermediate educational units called area education agencies (AEAs) and lists the duties and powers of their boards. Each is required to provide special education services to local school districts located within its geographical boundaries. Authorization for the AEAs to receive and expend funds, to enter into contractual arrangements, to employ personnel, to prepare budgets, to determine policies and perform other acts which are necessary to carry out the legislative intent is also itemized.

Section 273.5 establishes a division of special education within each AEA's structure and lists the duties of the AEAs' directors of special education: 1) to identify special education children; 2) to assure the receipt of an appropriate special education program for each identified child; 3) to assign weightings for each child in



order to generate funds for instructional programs, 4) to supervise special education support personnel; 5) to provide special education weighted enrollment counts to each school district and the state department of public instruction, 6) to submit special education program plans to the state department of public instruction; and, 7) to coordinate special education programs.

Section 273.9 describes the funding mechanisms available to the AEAs. It requires school districts to pay for the services and programs provided by the area education agency. Specifically, this section states that special education instructional programs shall be paid by the school district from funds generated by the "Weighting Plan" and that those programs shall be provided by the local district whenever it is practical to do so. School districts are required to cooperate with their AEAs in order to provide appropriate special education programs for children identified and certified by the AEA director of special education as children requiring special education. Special education support services provided by the AEAs are funded through local districts budgets. The funds are generated based on an increase in allowable growth which is added to the AEAs cost per pupil for special education support services and then multiplied by the sum of each constituent districts weighted enrollment. The funds, although generated on local district budgets, are paid directly to the area education agency.

Chapter 281 Education of Children  
Requiring Special Education,  
Code of Iowa

The first section of this chapter creates a division of special education within the department of public instruction and charges it with the responsibilities of promotion, direction, and supervision of the education of children identified as requiring special education in the schools which are under the jurisdiction of the Department.

The next section defines "children requiring special education" to include children from birth to twenty-one years of age and defines what "special education" means. A statement of the state's policy relative to special education is provided next and includes the following major concepts: 1) to require school districts to make provision for special education opportunities as an integral part of public education; 2) to require special education children to attend regular classes to the maximum extent possible and to discourage separate facilities and segregated programs; 3) to require a level of education comparable to that provided to nonhandicapped children to be provided to handicapped children whenever possible; 4) to allow cooperation between local districts, private agencies, and AEAs in order to provide special education programs economically; and, 5) to require special education funds to be utilized only for special education programs and services.

Section 281.3 lists the duties and powers of the division of special education at the State Department level. Those duties and

powers include: 1) to adopt rules to carry out the responsibilities; 2) to supervise the special education system; 3) to assist in the organization of special education classes, schools, and facilities; 4) to adopt program delivery methods; 5) to prescribe special education curricula and assessment requirements; 6) to cooperate with other state and local agencies which are responsible for handicapped children; 7) to investigate and study costs, needs, and methods of the special education delivery system; 8) to provide inservice training for special education personnel; and, 9) to establish employment and performance standards of special education support personnel.

Section 281.6 states that it is the duty of the child's parents to enroll the child for special education instructional services. This section also allows parents to review decisions relative to denial of entry or continuance of a child in a program, placement, or other program decisions, and establishes a mechanism compliant with federal regulations and due process hearings.

Section 281.9 establishes the "Weighting Plan." This section established the original weightings which were in effect for the 1975-76 school year. Those weightings were: 1.0 for pupils in a regular curriculum; 1.8 for special education pupils who are assigned to regular classrooms for basic instructional purposes but receive special adaptations and for special education pupils who receive part of their instruction in regular classrooms but also are placed in

special education classes; 2.2 for special education pupils who require full-time self-contained special classes with little integration into regular classrooms; and 4.4 for pupils who are severely handicapped or who have multiple handicaps. The weighting assigned to each child is dependent upon the educational modifications necessary to meet the needs of the child. The weighting for each category of special education is multiplied by the number of pupils in each category as identified and certified by the AEA director of special education. This total determines the weighted enrollment to be used by the district to generate special education funds as part of the School Foundation Program.

This section also establishes the authority of the School Budget Review Committee to review the special education costs for the preceding year and to alter the "Weighting Plan" as necessary for the subsequent year. The Committee, therefore, establishes the "Weighting Plan" for each school year and is allowed to increase or decrease the special education weightings by not more than two tenths for any one year.

The special education division of the Department of Public Instruction is required in section 281.9(5) to audit the certified special education weighted enrollment counts and to certify the correct special education total weighted enrollments to the state comptroller so that the funds may be generated for each district's budget. The division is also allowed to conduct evaluations of

special education programs and services provided by local districts, AEAs, and private agencies in order to determine the following: 1) the program or service meets the needs of the child; 2) proportion of benefits to cost; and, 3) necessary improvements. Written reports of these evaluation efforts are to be provided to the legislature.

Section 281.11 of the Code of Iowa defines the content of special education program plans which must be submitted to the Department of Public Instruction by each area education agency. The content includes assurances that qualified personnel are employed, that the instruction provides for a natural and normal progression, that all revenue generated for special education is expended for the actual delivery of special education programs and services, and that the most appropriate agency will provide the special education services.

Chapter 442 School Foundation Program,  
Code of Iowa

Section 442.1, The Code of Iowa, establishes a state school foundation program as the means to finance public elementary and secondary education. All children are guaranteed a basic financial support level by requiring school districts to generate property tax revenues at a rate of \$5.40/\$1,000 valuation and by requiring the state to contribute state aid up to the basic support (foundation) level. For each district, the total foundation level equals the

foundation support level (an established amount per pupil) multiplied by the district's total weighted enrollment.

The state support of the foundation program is defined in Section 442.3 and is expressed as a percentage of the state cost per pupil. For the 1975-76 school year the state support equaled 73 percent and increased one percent each year until the 1980-81 year. At that time the state support was frozen at a foundation level of 77 percent and remained so until the 1983-84 year when it was allowed to increase one percent per year again for the 1983-84 and 1984-85 school years.

Section 442.4 sets out the enrollments used as a basis for generating funds via the state foundation program. School districts are required to certify to the Department of Public Instruction a basic enrollment count taken on the second Friday of September. This basic enrollment count includes all resident pupils, regular and special education. Compensation for declining enrollments is stated as adjustments to the basic enrollments although the method to determine the amount of compensation has been changed at various times. Additional weightings for special education pupils and supplementary weightings for pupils whose districts share services of teachers from other districts or jointly employ teachers are also calculated as part of the final budget enrollments.

Section 442.7 establishes a method to ensure budget growth by permitting districts to increase expenditures per pupil by a fixed

dollar amount. The method to determine this "allowable growth" factor has changed at various times, but is expressed as a percentage of the budgetary state cost per pupil and then translated to a fixed dollar amount which in turn is added to each districts' previous years cost per pupil. The allowable growth rates have ranged from 13.592 percent to 5.0 percent between 1975-76 and 1983-84 school years, and averaged 8.774 percent during that time.

Sections 442.12 and 442.13 relate to School Budget Review Committee (SBRC) which consists of the state commissioner of education, the state comptroller, and three appointed members. The SBRC has the authority to review districts' budgets and modify them because of unique or unusual circumstances. Additionally, the SBRC is charged with the responsibilities to review the recommendations of the state commissioner of education relative to the special education weighting plan and to establish the weighting plan for each school year. Prior to the 1982-83 year, the School Budget Review Committee also had the authority to determine the extent to which unexpended special education weighted funds may be carried forward to the next year and the extent to which the balances were to be reduced. Since the 1982-83 year, the School Budget Review Committee determines the special education balances, and certifies them to the state comptroller who in turn adjusts school district's budgets to compensate for both negative and positive balances.

Section 442.38 provides for advanced state aid payments to

school districts which experience an increase in special education weighting. If the additional weighting for special education is greater on the December 1 count of the budget year compared to the December 1 count of the previous or base year, the difference is calculated and multiplied by the district's cost per pupil. This amount is forwarded to the district in state aid. The state comptroller adjusts property tax and state aid revenues on the next year's budget to compensate for the state aid advancement.

#### Summary

In less than ten years, education of handicapped children has changed dramatically. The changes have primarily been caused by mandates enacted at both Federal and state levels. The Education for All Handicapped Children Act of 1975, Public Law 94-142, granted all school age handicapped children the right to a free and appropriate public education. Further the Federal law incorporated judicial decisions ensuring due process and equal access to education for handicapped children. Inherent in the Act is the respect for individual differences. Key concepts included in P.L. 94-142 are: 1) schools are responsible for the identification of handicapped children and ensuring that no child is excluded from an appropriate education at public expense; 2) handicapped children should be evaluated and prescribed appropriate educational services without being mislabeled or discriminated against; 3) each child must have an



individualized education program that includes present level of performance, goals and objectives, and services to be provided; 4) handicapped children should be educated in the least restrictive environment possible; 5) parents must be notified about a child's identification, evaluation, and placement, should participate in decisions, and must give informed consent to program changes while being guaranteed due process rights; and 6) states must assure compliance with federal regulations and establish plans for their implementation including priorities for the use of federal funds.

Iowa statutes contain virtually all of the main concepts of P.L. 94-142 and extends the federal age requirements to birth through twenty-one years of age. Area education agencies were established as a means to identify and serve handicapped children. The AEA director of special education is charged with specific duties and responsibilities: 1) to identify special education children; 2) to assure the receipt of an appropriate special education program for each identified child; 3) to assign weightings for each child in order to generate funds for instructional programs, 4) to supervise special education support personnel; 5) to provide special education weighted enrollment counts to each school district and the state department of public instruction, 6) to submit special education program plans to the state department of public instruction; and 7) to coordinate special education programs.

Local school districts are required to provide appropriate

special education instructional programs for all resident children identified and certified by the AEA director of special education. Additionally, school districts are required to fund the instructional programs for handicapped students from funds generated by the "Weighting Plan" as part of the overall school finance mechanism known as The School Foundation Program.

#### Policy Issues in Financing Special Education

In 1969, Rossmiller et al. (36) attempted to identify the "dimensions of need" for special education programs and to survey current procedures for financing special educational programs for exceptional students. He reported great difficulty in making estimates of the number of handicapped students because of the lack of common definitions and a national census at that time. He concluded that, whatever the number, there was a tremendous unmet need because of shortage of trained personnel, limited research, and low incidence of some disabilities which made it difficult for small districts to provide special education programs. He found that local school districts carried the burden of the costs of providing special education. Rossmiller et al. (36) outlined six major problem areas: namely, the effect of future developments in medicine on the number of handicapped students; the effect of current research on the chemistry of the brain and on learning; the effect of various methods of financing programs; the usefulness of present categories for the

organization and operation of special education programs; the effect of emerging instructional practices, such as individualized learning, computer-based instruction and the effect of objective research and evaluation of instructional programs for children; and for teacher preparation programs which he noted was conspicuous by its absence.

Alexander (in Rehmann and Riegen (35)) detailed the implications of the dimensions of the program need as related to school finance. He noted that improvements in school finance programs had been slow and often haphazard, mainly because there had been no comprehensive effort to study or revise them. Decisions to allow local control and local financing precluded contributions to state and national studies. State methods of financing were being attacked at that time because they did not include provisions for high cost children such as the handicapped. Alexander noted that equalization of educational opportunity has two major facets: one is the identification and financing of appropriate programs for specific groups of pupils with specific educational needs, and the other is the allocation and distribution of the funds necessary to support such programs on the basis of relative fiscal ability of a district or state to support these programs. He pointed out that state equalization formulas are largely based on wealth variations measured by property valuations, while federal distribution formulas rely heavily on personal income as a measure of fiscal ability to pay. Funding categorical programs aimed at certain educational deficiencies had usually been sporadic

and lacked uniformity. There has been little empirical research to support the identification of high cost programs. Alexander concluded by saying, "The basic purpose of all educational fiscal policy should be to put the money where the need is and if this is adequately done, equalization of educational opportunity will be in large part accomplished" (p. 219).

Providing each and every child with equal educational opportunity implies that both cost and benefits of education must be fairly distributed. Weintraub et al. (49) traced the evolution of educational equity in the United States. They concluded that the concept has changed from one of identical inputs toward those with differing needs to differing inputs for the achievement of common goals and to a new concept of equality of access to different resources which are necessary to achieve different goals.

Thomas (44) also reported the dual dilemma facing funding education for the handicapped, namely that of adequacy and equity. She stated the reason for inequality of access to educational opportunity for the exceptional child was the higher cost of educating such a child. These higher costs were in salary, facility, transportation, and equipment areas. Personnel expenditures were higher because of smaller class sizes and the need for ancillary personnel such as psychologists, speech clinicians, physical therapists, and aides. Thomas reviewed methods used by states to distribute state aid to local districts and found excess cost

formulas to be the best method if they were fully funded and if what constitutes "excess cost" can be ascertained. She suggested nine basic fiscal questions to be answered in analyzing an educational finance program for the handicapped: 1) How much visibility does special education have in the overall budget decision process at state and local levels? 2) What recourse do districts have when state allocations are delayed or not forthcoming and compensation given to start-up expenses being greater than those in subsequent years? 3) Are regionalization efforts structured so as to not impede the relationship between general and special education or between local and state government levels? 4) Does the reimbursement formula take into account the need for ancillary professional and noncertified personnel? 5) Has attention been paid to interagency planning and coordinating the flow of funds so children do not slip through the cracks and unnecessary duplication is avoided? 6) In general revenue sharing or block grant approaches, are mechanisms included to insure that general fund aid will reach the destination of handicapped children; 7) Are allowances made for individualizing learning, computer-assisted instruction, competency-based curriculum development, etc., in planning for the allocation of resources? 8) Is state aid dependent on local property tax effort in any way that makes a program for the handicapped dependent on the wealth of the district? and 9) Does the system include research, demonstration, personnel training, and evaluation analysis? Thomas also reported

on policy statements made by various groups. The Council for Exceptional Children policy statement of 1971 called for local districts to participate in financing education for the handicapped at the same rate as for the nonhandicapped, with the state contribution, supplemented by federal funds, to pay all the excess costs. The President's Commission on School Finance in 1971 proposed that local revenue sources be gradually phased out with simultaneous increases in state revenue, that states adopt budgeting and allocation criteria to include differentials based on need and variances in costs within various parts of the state, and that local funds be used in an amount not to exceed ten percent of the state allocation as a supplementary source.

The National Education Finance Project in 1971 admonished individual states to assure sufficient funds in each district to operate the educational programs needed, to equalize tax burdens among districts, and to provide local districts with an incentive to improve their programs.

Bernstein et al. (2) conducted a major study of the financing of educational services for the handicapped. The authors stated their purposes were to identify relevant existing research related to special education finance; to critically review that research; to evaluate the content, concepts, and methodology of the research; and to synthesize the research into an organized body of knowledge. The report focused on financing at the state level and is divided into

the four major areas of programming, cost determination, level of funding, and funding formulas. Bernstein et al. cited these areas as central issues with programming being the primary one from which the other three must follow when they wrote for the Special Education Leadership Conference in 1975. Two separate methods were utilized to gather information. One involved a comprehensive search of all available literature. The second method was a survey of all states to obtain information on current procedures in financing special education programs.

In the area of programming, Bernstein et al. (2) found remediation efforts for some educational deficiencies were more intensive than others and, therefore, more costly. Thirty-eight states reported some range of program alternatives to meet varied needs of students. Programs also varied due to factors other than type of severity of handicapping condition such as geography, wealth of the district, the court-ordered placement, and services. The biggest difficulty discovered was the lack of a standard definition of the target population without which total special education needs and costs cannot be determined accurately. They also found no consensus on the best methods of remediation, program evaluation, or measures of program benefit or outcomes. Future research cited as needed in the programming area included determination of how many children require special education, which program alternatives are most effective, and what proportion of children can be effectively

served by each program type.

In the area of cost determination, Bernstein et al. (2) cited the National Education Finance Project as the major influence in the last five years. Rossmiller and colleagues (36), as part of this project, developed a cost index which was the ratio of per-pupil expenditures for special education services divided by per-pupil expenditures for the regular education program. This study inspired several state-specific studies and doctoral dissertations using the same cost index methodology. Bernstein et al. found variations in expenditures as reported in these studies to be so great that it was not possible to draw any generalizations. Also, many of these studies could not be compared because different financial data bases were used; for example, some included expenditures for capital outlay and transportation while others did not.

Bernstein et al. (2) reported that while many states have tried to match funding with costs, no satisfactory method of determination of program need and costs exist. Often past expenditure levels have been projected to future levels. This procedure is flawed because past expenditures may have been based on politics, imposed expenditure limits, or other factors rather than on past needs. Bernstein et al. stated, "It is likely, for example, that if a particular service were to be arbitrarily funded at ten times the funding of another service, it would eventually come to "cost" ten times as much as could thereby be justified by empirical data" (p.



10). The study suggested four areas for future research in the area of cost determination: 1) determination of the relationship between the mix of educational resources needed, their associated costs, and educational outcomes for students; 2) determination of the critical factors that affect costs; 3) determination of the simplest and least expensive means of isolating, recording, and monitoring special education expenditures; and 4) determination of methods by which accounting systems that record past expenditures can be used to estimate current and future costs.

The third major focus of Bernstein et al.'s (2) review was on level of funding. They found the literature on full funding characterized by a lack of empirical data and filled with political pleas. In the Rand Corporation Study by Kakalik (25), five broad problem areas were identified. These areas were inequities, gaps in services, insufficient knowledge, inadequate control, and insufficient resources. Bernstein et al. added total level of need, level of state involvement, and timing of state aid payments as critical issues in the area of level of funding. They reported that researchers have typically used national estimates of incidence and subtracted those students actually served to determine the number of students still needing service. Then, this unmet pupil need was multiplied by a current average expenditure amount to arrive at the amount of funds still needed. The assumptions underlying this method are that the present use of funds is optimal, that the unserved

population is similar to the currently served population, and that national incident estimates are accurate for individual states. These assumptions may well be false. Bernstein et al. reported that justification for full state funding is generally based on an uneven distribution of severely handicapped students, a tendency to ignore the more severely handicapped, high cost students in times of limited general funds, and variations in wealth between districts. The argument presented against full state funding for special education was a fear of a raid on the state treasury accompanied by a feeling that local districts will be more economical if they are required to expend local funds on education for the handicapped. They believed that future research should center on advantages and disadvantages of various proportions of state funding and on the impact of timing of state aid payments made to schools for programs.

Alexander (in Rehmann and Rigger (35)) argued that the economic benefits of educating the handicapped have been largely ignored. He used a rate of return concept to estimate that, if provided twelve years of schooling, the employed handicapped persons will repay the public treasury more than the costs of educating all the handicapped. This estimate was based on the assumptions that seventy percent of handicapped people will be employed and will have reached an eighth grade level of education. Alexander stated that the fiscal resources available for education is basically a function of the state's ability and effort to support education. He called for

greater use of sales tax monies to support education at the state level and a reduction on the reliance on local property tax monies.

Kakalik (25) conducted a review of the literature to identify the major issues related to cost and finance and to discuss the areas of future research needed to help resolve these issues. He reported that since 1976, there had been a major shift away from local agency support of special education and toward state and federal involvement in both funding and control of the programs. Despite recent improvements, Kakalik noted that a number of issues still remained. Many students were still not receiving special education services or were receiving inadequate services. Additionally, inequities existed in the availability of special education services, gaps in services existed within geographic regions, information on the costs and effects of different services needed for policy development was insufficient, coordination of various service delivery systems was inadequate, and total resources that had been devoted to special education were insufficient.

Kakalik (25) established a framework for considering special education cost and finance issues. This framework required the determination of: 1) characteristics of children to be considered exceptional and delineation of the special services needed by children with various sets of these characteristics; 2) the total size and geographic distribution of the handicapped population and the quantity and geographic distribution of the various services

needed; 3) the type of public or private agency best suited to provide each service; 4) the programming arrangements that educational agencies should make to provide the services for which they are responsible; 5) the human and other resources needed to implement those programming arrangements; 6) the total level of funding required to provide all necessary services; and 7) the method to be used in allocating funds to local agencies.

Kakalik (25) found that currently there is so much latitude in definitions of handicapping conditions that the same child might be identified as handicapped in one jurisdiction and not in another, or labeled one disability in one jurisdiction and by another in a different jurisdiction. The definitions of needed service also appeared to change over time and across jurisdictions. Kakalik viewed as a fundamental truth that there will not be sufficient funds to provide every service to every child and that classification of children as handicapped is related to finance in four ways: 1) a definition of who is to be served affects the total amount of funds required; 2) a definition helps to convey to legislators and executive branch personnel and other policymakers the types of needs that will be served; 3) a precise definition affects the precision of the targeting of funds and fiscal accountability; and 4) it may be desirable for fund distribution formulas to explicitly allocate varying amounts of dollars depending on the cost associated with the type of child being served.

Questions that Kakalik (25) viewed as unresolved in regards to assignment of service responsibility included the following: 1) Which agency is response for the education and training of children in residential institutions? 2) Who is responsible for providing mental health services such as psychotherapy? 3) What should be the division of responsibility for vocational education between education and rehabilitation agencies; and 4) Which agency should be responsible for coordination of services and funds so the needs are met without unnecessary duplication? Kakalik found no definitive information on various components of pupil's needs. He called for a multi-year research effort on the costs and effects of various programming arrangements to adequately define what is appropriate and satisfactory.

Kakalik (25) viewed the cost of various programming arrangements as unknown, primarily because local districts do not typically compile and report most data separately for a particular type of programming arrangement for a particular type of handicapped student. Their reporting and accounting efforts were developed for other purposes. He felt that this cost information is needed to facilitate planning and evaluation, determine the level of financing required, allow adjustments in the formulas currently used to match need and enhance equalization efforts, and reduce fiscal incentives for inappropriate classification and placement of children.

Kakalik (25) believed that there is a need for cost of special

education indices because purchasing power varies, although he admitted that the real cost of special education has not been determined. Two types of special education costs indices were reported. One measures price variations for given programming arrangements, and the other measures cost variations across programming arrangements due to differences in combinations and quantities of resources required. He cautioned that the cost of special education may not vary across districts in the same manner as the cost of education because of economy of scale.

Another issue Kakalik (25) addressed was the proportion of funds each level of government should contribute. He viewed governmental involvement to be necessary in five areas: 1) providing direct services; 2) controlling and regulating the direct service delivery program; 3) funding those direct services; 4) investing in personnel training, facilities, and other capital outlay items; and 5) innovating and stimulating change in service delivery through research, demonstration projects, and dissemination of information. Actually, all levels of government are involved in each of these areas but in different proportions. Arguments presented for funding of programs by higher levels of government included the low-incidence handicapped populations so small in numbers that it is not economical for a single locality to provide quality programs on its own, geographical variation in the incidence of handicapping conditions which result in unequal financial burden, differences in local

district's ability and willingness to provide special education, thereby resulting in unequal opportunity for some students, a large unmet need which a local district cannot fully fund, an inherent ability of higher levels of government to raise additional funds under the current tax structures, the fact that minority populations needing service appear to be able to exert more pressure at the federal level than at the state or local level, and the concept that since special education is mandated by federal and sometimes state law, state and federal governments should provide the funds for it. Arguments against increased funding by higher levels were that education is primarily a nonfederal responsibility, that higher level funds are usually accompanied by controls which may be inappropriate to the particular local situation, and that federal funds may not be needed because of the freeing up of regular education funds because of declining enrollment.

After the total amount of funds necessary is determined and funding sources are known, decisions must be made about how those funds are to be distributed. Kakalik (25, 26) indicated that the method of distributing the available funds should help equalize resources in relation to need, but also provide incentives for program involvement and control costs. Criteria to accomplish this might include factors such as the number and types of handicapped children in a specific locale, the number currently being served, personnel employed, the relative costs of resources in the locale,

the total or excess cost of the program, the ability of local sources to generate funds, the type of program provided, and the degree to which local districts have tried to meet established standards and goals.

Hartman (18) suggested that two factors relevant to policy decisions in special education funding should be explicitly considered. These are the relationship between the content and cost of special education, and the programmatic and management incentives/disincentives of funding approaches selected. He attributed the greater costs of educating handicapped students to the fact that the majority of the handicapped students receive special education while at the same time are enrolled in general education. This increases the total cost of their education. He noted that those students served full time or nearly full time in special education classes and require a much smaller teacher-pupil ratio, and therefore, the costs on a per-pupil basis is greatly increased. Also, some children require more than one type of special education program or service arrangement. Under federal law, it is necessary to identify and evaluate each student individually and develop an individualized education program. Hartman also stated that this individual process includes a multiperson staffing conference for each student which is often a lengthy and expensive step.

McCarthy and Sage (30) reported that issues in the financial support of special education can be viewed as relatively minor



extensions of major issues confronting the financial support of all education in general. Educational finance has always been concerned with determining the need for service, the amount and source of necessary resources, and an acceptable way to distribute those resources among the needs. Inherent in the concept of "acceptable" is two frequently conflicting principles; one of political reality, and one of an idealistic desire for some form of equity. They concluded that the issue of financing special education was dependent upon value judgments and cited a need for program flexibility. "It can be assumed that existing special education systems do not provide adequately flexible programming and there is a need to develop systems that do. Flexible programming can occur only when decisions are not dependent on fiscal influences and appropriate resources are provided for each child's unique or unequal needs. We must approximate fiscal neutrality in order to achieve true equity" (p. 415).

Nelson's (34) study focused on how fiscal, social, and demographic features of school districts influence how many students are labeled handicapped, the categories in which mildly handicapped students are placed, and the extent to which these students are mainstreamed in Wisconsin school districts. Specifically, mentally retarded (MR), learning disabled (LD), and emotionally disabled (ED) students were studied. Nelson concluded that the distribution of the mildly handicapped among disability categories in Wisconsin is

related to several variables. High enrollments are associated with serving more students as emotionally disabled, and consequently, a higher proportion of mildly handicapped students identified as ED. Wealth, a common measure of fiscal capacity, is associated with fewer pupils labeled as LD. The retarded tend to comprise a higher proportion of mildly handicapped in wealthy districts. High total school spending per pupil is associated with fewer LD and more MD students. Districts with a high tax rate exhibit a preference to label mildly handicapped as MR and ED rather than LD. Urbanness as measured by pupil density per square mile is clearly associated with more students served as ED and fewer as LD. The percentage of children living in families below the poverty level is strongly correlated with fewer handicapped students in all categories and a preference to serve mildly handicapped as LD.

High unemployment like poverty is associated with more LD students but has little correlation with MR and ED preference. A higher portion of elderly is associated, like poverty, with a preference for labeling mildly handicapped as LD.

On March 16, 1983, the Commission on the Financing of a Free and Appropriate Education for Special Needs Children reported to the House Committee on Education and Labor, United States Congress (14). Their report discussed issues related to financing special education programs and proposed nine solutions to remedy problems. The first six of the nine recommendations focused on management and

administrative special education issues facing state, local, and federal officials, and the last three on continued support of 94-142 and increased funding. This group was comprised of leaders from professional organizations and representatives from state, local, and federal agencies responsible for public education. The Commission's recommendations are as follows: 1) SEAs and LEAs should establish more flexible and individualized options in the regular education program; 2) states should develop standards which define fiscal responsibility of local school districts for the related services mandated by P.L. 94-142 and interagency agreements which ensure ready access to the complete range of fiscal resources available under various state, federal, health, and human service programs for those mandated services; 3) LEAs and SEAs should increase coordination of allocation of funds for low incidence handicapped conditions and then accompany expensive related services; 4) community-based residential programs should be developed in coordination with LEAs to prevent unnecessary high cost institutionalization; 5) SEAs and LEAs should reduce unnecessary conflict-related expenses by encouraging joint decision making and initiation of conflict resolution strategies to improve parent-school communications; 6) Congress and the Department of Education should target a part of the discretionary funds to encourage districts to use more effective administrative practices and policies; 7) Congress should preserve 94-142 without change; 8) Congress should increase

current appropriations to 94-142 (Part B) and should allocate new funds for intervention strategies for at-risk children under school age; and 9) Congress should fully fund the EHA discretionary program to support model development and dissemination programs, research, and training.

#### Funding Formulas

Bernstein and his colleagues (2) provided one of the first reviews of special education funding formulas after the passage of P.L. 94-142. They reported that in 1971 the Council for Exceptional Children made the first comprehensive examination of state provisions for financing special education and, subsequently, identified three types of reimbursement formulas: unit, per-pupil, and special. The special type was applied only to ancillary services. Within the first two types, six subgroups have been distinguished by Bernstein et al. and Thomas (44, 45). They are defined as: 1) unit—a fixed sum is reimbursed by the state for each designated unit of instruction, administration, and transportation; 2) weight—a multiple of regular per pupil is reimbursed and usually varies by type of disability or service delivery alternative expenditure; 3) percentage—a percentage of full costs incurred by the district is reimbursed; 4) personnel—a flat amount per person employed; 5) straight sum—a fixed amount per child is reimbursed and often varies with type of disability; and 6) excess cost—full cost less the cost

of educating a regular student is fully or partially reimbursed. Chambers and Hartman (8) added a seventh type of funding approach, the approved program method in which costs of approved programs for special populations are reimbursed fully or partially upon submission of a program application which details projected expenditures. State finance plans have also been classified into flat grants, nonequalizing matching grants, equalization grants, weighted plans for special needs, and full state funding. Bernstein et al. (2) noted that the formulas cited above are only conceptual models; most state finance plans do not fall neatly into one category but are a mixture. They felt that the full impact of a funding model must be assessed with respect to the policy decisions that precede it and the practices that surround it. For example, categorical approaches may provide a financial incentive to label more children, while in noncategorical approaches, accountability may be sacrificed with no method of relating the dollar to the child. Some formulas may not encourage placement in less restrictive environments because costs associated with such placements are not reimbursable or are reimbursable at lower rates.

Kakalik (26) categorized fund distribution methods into three types. One type was based on payment for resources with regulations controlling the allowable cost of resources and resource use for handicapped child served. A second type was based on the number of students served with regulations on cost and use of resources. The

third type is based on cost with regulations on resource use and the number of children to be served. Thus, the distribution of funds is usually based on a formula plus many constraints. The constraints determine the flow of funds in an effort to prevent misuse of funds and to discourage excessively high cost programs. The choice of the formula to be used and its accompanying constraints affect districts' future programming decisions. The implications and incentives created by the formula and its constraints need to be considered in advance in order to minimize the negative implications and incentives. Kakalik reported some of the problems associated with formulas based on resources: a tendency to maximize class size as a means of decreasing per pupil cost; the inability of small districts to qualify for units of ancillary services and administration; the lack of funding for least restrictive environment alternatives; inappropriate placement of children into programs with lower per pupil expenditures when the units allocated allow different class sizes; identical reimbursement for all programs regardless of cost or quality; failure of districts to offer units because reimbursement is much less than the actual cost the district incurs; failure to reflect differences across districts on a cost per unit basis; and a failure to take into account district's ability to generate local funds. The use of personnel as a special type of resource unit was determined to be even less desirable because this approach does not account for physical resources needed such as facilities, supplies,

equipment, or transportation, and may promote employment of personnel when "things" are really needed.

Problems associated with funding formulas based on numbers of students served are: failure to apply the weighting to each district's cost and thereby penalizing higher cost districts; weighting by disability which implies a consistency of need among all children within that disability category; a tendency to maximize the number of students per staff member; hiring lower salaried staff members to reduce cost since reimbursement is not dependent on the actual cost; inability of small districts with few handicapped children to receive sufficient funds to provide adequate staff; over identification of students; placement in lower cost programs or serving each child for brief periods of time; failure to serve some types of children when costs are greater than the amount of reimbursement per child; and creating an inequity of opportunity because of differences in local fund generation ability if costs are greater than reimbursement. Kakalik recommended more stringent regulations on diagnostic and placement procedures, and weightings based on the designated type of program rather than the disability type to answer some of the problems associated with formulas based on the number of children served. A main problem associated with funding formulas based on cost is an incentive to inappropriately serve students in the least costly program when the percentage of costs reimbursed is less than on hundred percent. Also listed as

additional problems were costs rising without constraints, an incentive to over identify handicapped students, and the difficulty of defining and accounting for excess costs.

Kakalik (26) made it clear that any of these formulas can have the following disadvantages: 1) discouraging expensive special education services to a child because of only partial reimbursement; 2) discouraging interdistrict cooperation; 3) discouraging the use of support personnel or equipment when they could be as effective as a special education teacher working alone; and 4) creating inequities within the total funding levels, general and special education. Kakalik suggested additional study of the implications and incentives of various formulas on program delivery models, on the relationship of special and regular funding formulas, and on the relationship of the special education funding method to the overall special education delivery system. He thought this research should consider the identification and labeling incentives, data collection and reporting requirements and their costs, programmatic costs and incentives, and acceptability of various constituencies and advocacy groups.

Hartman (18) also felt that funding formulas can be grouped according to the main factor used to determine the allocation of funds. He identified three categories: resources, children served, and cost. The purpose of each formula is to transfer funds from the federal to state level to the local school district. The main issue according to Hartman, is how the various formulas should be neutral



in its effect and not result in overclassification to obtain additional dollars or underclassification because the reimbursement is not sufficient to support necessary programs or services. Also the formula should not prevail over the selection of the appropriate program model for children. He reported that there is still a tendency to place children in programs where the state's share of funding is a larger proportion of the total actual costs. This causes the formula to become a policy tool and to determine program placements. The number of students per instructional unit is the key variable in determining costs of special education. Maximizing class size is desirable when it makes the most efficient use of special education resources without reducing program efficiency. Funding formulas which require children to be labeled handicapped in order to qualify for funding encourages continuation of the labeling process. The least restrictive environment provisions of P.L. 94-142 implies the need for a funding formula that encourages maintenance of handicapped children in general education settings.

Hartman (18) reviewed the incentives and disincentives associated with the three types of funding formulas. He viewed the resource-based formulas (unit and personnel) as reducing the incentive to overclassify children, encouraging maximization of class size as a cost reduction measure unless the units are fully funded with state monies, not necessarily requiring that a child be labeled as handicapped in order to receive funding, being historically viewed

as discouraging placements in general education settings, encouraging multidistrict cooperation if a minimum personnel-student ratios are established as a criteria for reimbursement, requiring minimal additional recordkeeping, and providing a relatively direct method of tracking funds. Hartman believes that the child-based formulas (weight and straight sum) are most likely to encourage overclassification of children, provide the greatest incentive to serve the unserved population, create an incentive to serve children in higher reimbursement models if different weightings are assigned to different program models, must be on a full-time equivalence basis for weighting, or can be an incentive to serve many children for short periods of time, encourage maximum class size and labeling, can provide easily for costs of maintaining students in general education, and require recordkeeping at the individual child level. The cost-based formulas (percentage and excess costs) create the least incentive for overclassification, would be fiscally neutral if fully funded, create a tendency to place children in lower-cost programs if the district's contribution toward the total cost is significant, cause resistance to change in placement from lower cost programs to higher cost ones, encourage changes in placement from higher cost programs to lower cost programs, do not inherently require labeling of children, require detailed cost accounting, records and reporting, and provide the most direct method for

tracking special education expenditures.

Hartman (18) commented that the funding formula provided in P.L. 94-142 is a straight sum method. He noted that when Congress passed this legislation it was commonly believed that there were many unserved or underserved handicapped children. It was believed that a child-based method would encourage child-find activities. This method, however, encourages identification and service to mildly handicapped children since it costs less to serve them than the more severely handicapped.

Moore, Walker, and Holland (33) concentrated on locating descriptive information about special education funding formulas used by the states and analytical research about the consequences of various funding formulas. They reported that while several efforts have been made by researchers to describe funding formulas used by states, close inspection showed few of the studies agreed about the categorization of individual state's financial method. As an example, New York described its formula as an excess cost formula, but a more intensive review revealed it to be a pupil weighted formula which attempted to approximate excess costs through a separate categorical aid program. Moore et al. concluded that there were two reasons for such confusion: 1) unclear and highly variable criteria for labeling state formulas; and 2) the complexity and diversity of state methods to distribute special education funds. Variations and complexities of funding formulas defies attempts to

classify and simplify them.

Wood et al. (52) categorized the forty-nine states receiving P.L. 94-142 funds in 1980-81 (all but New Mexico) in terms of their funding formulas. He found that eighteen states used a cost-based method, eleven of which were excess cost, and seven which were percentage. Fifteen states were categorized as using a pupil weight system with ranges of from one to fifteen different weightings. Another seventeen states were found to be using a unit approach, five of which were based on personnel units.

Wood et al. (52) also examined the relationship between the cost, weighted, and unit special education formulas to the implementation of placement of children identified as mildly handicapped, mentally retarded, and learning disabled in regular class placements. Handicapped students in regular classes were defined as those who spent more than fifty percent of their school hours in regular classroom settings. Predictor variables included the type of funding formula system (cost, weighted, or unit) and the handicapping condition. The criterion variable was the state reported incidence rate of handicapped students aged 6-17 in regular or special education classrooms. Population means and standard deviations were calculated for each handicapping condition in regular and special placements for each type of funding formulas. The results from page 138 are represented in Table 1.

TABLE 1  
 POPULATION MEANS FOR SPECIFIC LEARNING  
 DISABLED AND MENTALLY RETARDED  
 BY FORMULA

Class Placement	Regular		Special	
	Specific Learning Disabled	Mentally Retarded	Specific Learning Disabled	Mentally Retarded
Cost				
$\mu$	82.99	33.47	17.01	66.53
$\sigma$	20.41	25.47	20.41	25.47
N	18	18	18	18
Weighted				
$\mu$	84.73	36.40	15.27	63.60
$\sigma$	10.12	26.19	10.12	26.19
N	14	14	14	14
Unit				
$\mu$	87.35	39.60	12.65	60.40
$\sigma$	7.88	21.40	7.88	21.40
N	17	17	17	17
Totals				
$\mu$	85.00	36.43	15.00	63.57
N	49	49	49	49

Wood et al. (52) drew the following conclusions from his study:

- 1) there was no relationship between the type of funding formula and the percentage of mildly handicapped children served in regular classroom settings;
- 2) there is a relationship between the kind of funding formula and the percentage of mildly mentally retarded children served in regular settings. States using cost formulas are serving fewer mentally retarded children in regular settings and more in special settings than are states using weighted or unit formulas;
- and 3) there is a relationship between the type of funding formula

and the number of learning disabled children served in regular education settings. States using cost formulas are serving fewer learning disabled students in regular settings and more in special settings than are states using weighted or unit formulas.

#### Evaluation of Funding Formulas

Bernstein et al. (2) also urged states to evaluate their present special education funding options. They presented some decision criteria to be used to aid policymakers in the assessment of present or proposed special education delivery systems. They also advised that the criteria should be met by funding and programming components of the delivery system and should be viewed in relative terms since no system can completely satisfy all the criteria simultaneously. The eight decision criteria presented by Bernstein et al. are: 1) the method should be equitable by allowing for unequal expenditures based on pupil need; 2) the method should be comprehensive by providing for a range of program options and services, while encouraging placement in the least restrictive setting; 3) the method should be flexible and sensitive to price level changes over time and between geographic areas; 4) the method should promote accountability to insure that aid intended for the handicapped children actually gets to them; 5) the method should be cost effective with the state providing start-up and evaluation costs to programs which promise to provide equal quality services more cheaply; 6) delivery system

should be compatible with the total educational finance system; 7) the method should not be in conflict with state educational policies of the state which should be made first so funding decisions will be complementary or at least neutral; and 8) needless complexity should be avoided but individual differences recognized.

Mange (27) reported that legislators, school administrators, and school board members faced with increasing costs of providing special education, worry about the ability of governmental units to fund the programs. He believed that a funding formula should provide for complete or at least a high degree of equalization, that there should be a mix of funding sources from all governmental levels--state, local, intermediate, and federal--and that these sources should be coordinated so that the following criteria could be met: 1) a funding formula should neither encourage or discourage particular program or service delivery method; 2) funding should be based on program or service needs, not on the number of students; 3) the method should provide something less than full reimbursement to prevent charges of unreasonable expenditures; and 4) the method should be understood by a great majority of school personnel and other state and local policymakers.

Howe (22) summarized factors that should be considered in funding special education programs. Those factors included the following criteria: 1) financing should be as simple as possible, and require a minimum of resources to administer; 2) reimbursement

from the state should be on a current or advanced funded basis; 3) accountability for the funds must be possible through procedures that allow for a clear audit trail; 4) special education funds should be compatible with the basic state educational funding program; and 5) options for necessary private and out-of-state placements should be included. He added that establishing program costs accurately will be necessary in future cost-benefit evaluation efforts.

Crowner (10) states that should the United States move into a period of "New Federalism" that affects the balance of advocacy power between state and federal government, agencies working on behalf of the handicapped will need to have a precise system for comparison, for general evaluation guidelines, and for a set of recommendations by which states should be judged. "With the focus shifting from moral imperative to growth to fiscal efficacy and retrenchment, it is important that special educators be aware of funding options and their effect on program and policy" (p. 508). He urges use of a taxonomy that among other things will help enhance that awareness.

The taxonomy will serve other purposes such as: 1) it can provide a guide for states and federal governments to analyze different state funding approaches to special education; 2) researchers can use the taxonomy to communicate in a uniform manner; 3) researchers, using the taxonomy, might consider the validity of various assumptions that have been made about program biases inherent in different funding approaches to special education; and 4) the



taxonomy can serve as a delimitation of funding variables which could be manipulated by critics and advocates of special education alike.

Crowner (10) developed his taxonomy because there is a lack of consistent terminology and no source in the literature which covers all of the relevant elements or provides a general classification system for special education funding options. His taxonomy consists of the following four main areas: bases, formulas, types, and resources.

Crowner defined "base" as the element or elements upon which revenues are calculated. He itemized five types of bases: 1) pupil base in which funds are generated on the number of served pupils; 2) resource base in which funds are generated on some specific resource needed to provide services such as teachers or supplies, equipment; 3) service base in which funds are generated on a service provided such as a resource program; 4) cost base in which funds are generated on a district's actual cost of operating a special education program; and 5) unit base in which funds are generated on a combination of other bases such as a unit comprised of a teacher, an aide, and ten students.

"Formula" was defined as the method used to compute revenues generated by the base elements. Crowner identified five formulas: 1) excess cost formula which compares the cost of a special education program to the cost of a basic education program and applies funding to compensate for all or some of the difference; 2) percent of cost

formula which limits the funds generated by a base to some fractional percentage of the actual cost associated with that base; 3) straight sum formula which applies a fixed amount of reimbursement for each base element reported such as \$2,000/pupil or \$10,000/teacher; 4) weighted formula which applies different weightings to base elements determined by actual costs or perceived relative needs; and 5) mixed formula which consists of any combination of the other four formulas.

Crowner (10) defined "type" of funding as restrictions placed on the possible use of the funds. Eight "types" were listed: 1) continuing funds are stable and continue from year to year; 2) noncontinuing funds are available only for a fixed time period; 3) targeted funds are those which must be expended on a prescribed item such as equipment; 4) discretionary funds may be expended on any item determined to be relevant to the agency's objectives; 5) inside formula funds are funds received from one source and which must be deducted from any costs reported for reimbursement from another source; 6) outside formula funds are funds that an agency receives that will not be deducted from its primary source; 7) matching funds are those available from a source only if matched in part or equally by another source; and 8) mixed funds share characteristics of two or more types of funding, such as noncontinuing/targeted funds.

"Source" was defined by Crowner as the agency from which the revenue flows. He provided a list of five sources: 1) Federal source such as P.L. 94-142 Part B funds which flow directly or

indirectly to local school districts; 2) state source is funding to local districts from the state; 3) intermediate source is funding which comes from a revenue-generating agency which operates on a regional level; 4) local source is funding which is generated at the local level through some taxing mechanism such as local property tax; and 5) private source is funding which is solicited or volunteered by an individual, business, or charity.

Crowner (10) also suggested the following questions be asked as part of a fiscal policy analysis: 1) What funding base does the state use? 2) What formula does the state apply to the base? 3) What elements do the state allow inside and outside its formula? 4) To what extent is state funding more or less discretionary? and 5) What percent of the local funding comes from which sources?

#### Summary

Many methods have been used to finance special education programs and services. Analysis of state school finance plans shows that most of these methods can be described as reimbursement formulas based on unit expenditures or per pupil expenditures. A third method, designated as special, has been used to reimburse districts for ancillary service personnel. The unit and per pupil methods or reimbursement or payment have been further categorized into the following seven types: 1) unit—a fixed sum for each designated unit of instruction, administration, and transportation; 2) weight—a

factor based on a multiple of regular per pupil expenditures; 3) percentage—a percentage of full costs incurred by the district; 4) personnel—a flat amount per person employed; 5) excess cost—full cost less the cost of educating a nonhandicapped student; 6) straight sum—a fixed amount per child; and 7) approved program—costs of approved programs are paid fully or partially upon submission of projected costs.

Each method has advantages and disadvantages and must be analyzed in relation to the policy decisions and practices that precede it and the practices that surround its implementation. For example, methods based on the child as a unit may encourage labeling of a student while methods based on personnel may encourage inadequate services due to class size.

These methods have also been analyzed to determine their effort on equalization efforts of the general state school finance plan. As such, they may be described as flat grants, nonequalizing matching grants, equalization grants, weighted plans for special needs, and full state funding. Most researchers and school finance experts believe that for special education, funding should contribute to overall equalization or at least not interfere with such efforts.

Special education funding methods should meet the following criteria: 1) the method should be equitable, allowing for unequal expenditures based on need; 2) the method should be as simple as possible and require a minimum of resources to administer, and be

understood by school personnel and policymakers; 3) the method should allow reimbursement on a current or advance funded basis; 4) the method should provide accountability by means of a clear audit trail; and 5) the method should allow for a variety of placement and service options.

Researchers have identified and analyzed the methods actually used to finance special education. Categorization of states' methods have been inconsistent. Many unresolved underlying issues, such as determination of actual need, determination of actual costs, and determination of comparative costs and benefits of various program and service delivery models have been reported.

#### Special Education Cost Analysis Studies

Rossmiller and his colleagues (36) conducted one of the earliest studies of special education programming arrangements and costs under the auspices of the National Education Finance Project (NEFP). At that time, very little was known of the relative cost of educating handicapped children compared with the cost of educating nonhandicapped children, or of the program components which contributed to the cost differentials. Rossmiller and his colleagues attempted to answer the five following questions in the NEFP study:

- 1) How many children were estimated to be in each category at the time, and what is a likely estimate for 1980?
- 2) What criteria are used to identify the various categories of exceptionality, and what

is the estimated incidence of each category in the total population of school-aged children? 3) What are the characteristics of high quality programs for exceptional children with particular regard to configurations of human and material resources? 4) What is the cost of educational programs provided in private schools and public facilities not operated by regular public school systems? and 5) What cost differentials are associated with programs for exceptional children compared to the cost of the regular school program for nonhandicapped children?

Rossmiller et al. (36) selected a panel to nominate five states each believed to be offering quality programs. Each state selected for the study had received at least two nominations and were geographically representative. Project staff then met with the director of special education in each state and asked that person to nominate from six to ten districts or intermediate units that were providing high-quality comprehensive educational programs for exceptional children. Because of this requirement, only relatively large districts were included. Project staff next selected five or six from those nominated by the state director. Because there were so few nominations of private schools, little commonality among the nominations, and an unwillingness to participate, that part of the study was dropped. Some residential schools operated by the state were selected for inclusion. The definitions used in this study were those used by the United States Office of Education at that time,

namely, intellectually gifted, intellectually handicapped, auditorially handicapped, visually handicapped, speech handicapped, physically handicapped, neurological or mental disorders, emotionally disturbed, special learning disorders, and multiple handicapped.

Information was collected in the following areas: average daily membership (ADM) by primary, middle, and secondary levels in the program areas of regular school, prekindergarten, kindergarten, compensatory, vocational-technical, exceptional child, and other; ADM in each category of exceptionality; the number and type of special education personnel, their total prorated salaries, and information regarding their experience and training; comparable information for the regular program staff; fringe benefits; instructional supplies and equipment; operations and maintenance of plant; transportation; food services; debt services; capital outlay; materials and equipment outlay for exceptional programs; special transportation costs; district sources of revenue; and general economic and demographic characteristics.

Base line data was the per-pupil cost of the regular program. Costs associated with each special program were computed and compared with the cost of the regular program. The cost index was computed by dividing the cost per pupil in special education programs by the cost per pupil of the regular education program provided by each local district. A summary of the data taken from pages 65 to 101 appears below:

TABLE 2  
 ROSSMILLER'S COST INDICES BY TYPE  
 OF HANDICAPPING CONDITION

Number of Districts	Handicap	High	Low	Mean	Median
21	Speech Imp	2.12	1.09	1.25	1.18
22	EMR	3.21	1.14	1.92	1.87
22	TMR	3.62	1.18	2.20	2.10
20	Spec. Learn. Dis.	5.20	1.40	2.50	2.16
4	Multiple H	3.86	1.90	2.80	2.73
14	Emotionally Dis.	11.64	1.58	3.70	2.83
17	Visually H	11.45	1.05	3.48	2.97
18	Auditorially H	5.88	1.05	3.15	2.99
15	Physically H	4.64	1.52	3.26	3.64

Expenditures for salaries of teachers and aides represented the single largest determinant of costs. The costs of transporting some types of handicapped children were very high such as in programs for the physically handicapped in which specially equipped buses were needed. The cost indices were relatively consistent and stable between districts serving the educable and trainable mentally retarded. The authors suspected a relationship between the expenditure per pupil in special education and the type of financial support provided by the state. Districts located in states which provided general aid funding were spending at a lower level and



districts in states that provided categorical aid funding.

Bernstein et al. (2) indicated that the type of cost indexes used by Rossmiller et al. (36) must be viewed with caution. It is possible for two districts to have exactly the same special education costs and different ratios because of differences in the regular program costs. Kakalik (25) also expressed reservations about the Rossmiller study for the same reason. He suggested, for comparative purposes, a second index based on the actual resources devoted to special education in terms of a standardized price of resources.

McClure and his colleagues (31) studied the needs, costs, and methods of financing special education for the Illinois School Problems Commission and the Illinois Office of Education. They sampled twenty-three districts in Illinois and found that cost differentials were primarily the result of the number of pupils per teacher. The pupil-teacher ratio plus back-up costs provided the basis for classifying programs according to their resource intensity. Twenty percent of the special education funds came from state aid, thirty per cent came from general funds, and fifty percent came from general funds available to local districts. They described the special education delivery system across state agencies as chaotic. It was difficult to transfer children from one service to another. Emerging trends since 1965 were reported as follows: the public schools are serving more moderately and severely handicapped; the distribution of the handicapped is not uniform across districts

due to socioeconomic status of the community, selective migration of families, and deliberate placement in foster homes in districts with sophisticated services; and the better the regular program is at attending to individual differences, the fewer the mildly handicapped. Poor districts generally were found to employ minimally prepared teachers and have higher teacher-pupil ratios; and mildly handicapped students in these poor districts were more likely to be placed in special education. McClure and his colleagues stated that a comprehensive special education program must include elements that are noneducational in nature such as early screening, home-school liaison, and cooperation with medical, mental health, and university personnel. Finally, there seemed to be a new role relationship between general and special education because of the utilization of itinerant and resource special education personnel to maintain students in general education programs.

McClure et al. (31) found that small class size and special materials resulted in higher cost for special education programs, and that earmarking of state aid came from the need to help local school districts with these higher cost and as an incentive to serve handicapped students. From 1950 to 1970, the concept of one teacher for a group of handicapped students gave way to a variety of instructional arrangements supported by a broad range of support personnel such as therapists, psychologists, social workers, aides, etc. The diagnosis of need expanded for a single evaluation by a

sole evaluator to the combined judgments of a team of multi-disciplinarian professionals. These authors suspected that between the years 1970 and 2000 increasing attention will be paid to the milder handicaps in addition to the severe. They foresaw a time when the goal of education will be to develop each student to the limit of his or her capabilities.

McClure et al. (31) made several recommendations in their study of Illinois: 1) the state board of education should be assigned the sole responsibility for planning and overseeing all education programs and related instructional services for handicapped persons aged birth through graduation from high school, including institutional programs; 2) the state board of education should be responsible for interdisciplinary diagnostic procedures to identify needs and determine proper placement in other governmental agencies and in private institutions; and 3) the method of funding should be revised to one of full state funding of excess costs of programs for handicapped students. They felt the latter to be justified since children with varying needs are not evenly distributed among the districts, and the degree of need is unrelated to local districts' taxing ability. The reimbursement should be applicable on a current funding basis with the previous year's enrollment used for preliminary payments in the current year until pupil load for the current year is established.

Wilken and Callahan (51) believed Congress was working from 1972

data, not 1975, and that special education was neither so underfinanced nor so inadequate as Congress was led to believe when P.L. 94-142 was under debate. They felt there had been vast improvements by states in the period from 1972 to 1975, improvements that resulted in a growth in spending from \$9.1 million in 1972 to \$2.1 billion in 1975. This translated to an annual average increase of forty-six percent. There had also been dramatic increases in the number of students receiving special education. They believed that many needs would remain unmet in the foreseeable future, however, unless the states were willing to deal with three key problems; inequities in the distribution of special education resources among local districts, widespread shortages in special education regulation, and serious deficiencies in coordination of services for the handicapped provided by education and noneducation agencies.

Wilken and Callahan (51) related inequities in the distribution of special education resources among local districts to the fact that state special education resources flow like flat grants without much relationship to real educational or fiscal need. They suggest that rural, urban, and minority areas were not getting enough of the resources.

Wilken and Callahan (51) noted that definitions of handicapping conditions and special education programs are unclear and vague. They said: "But until regulations are written in ways that are scientifically operational, they will border on the useless insofar

as determining whether children are being served appropriately or not" (p. 18).

Wilken and his colleagues (51) also studied state aid for special education for the National Conference on State Legislatures. A generation ago, state aid for special education amounted to three percent of all state aid to local districts. In 1973, it accounted for five percent, by 1975 it accounted for eight percent. In 1963, only nine percent of all school districts offered instruction for handicapped students, in 1975 almost all did. Wilken et al. reported much debate over state special education aid; one argument stated it was a waste of tax dollars to educate handicapped children, and another expressed fear that it is but another example of erosion of local control because of the requirements that accompany the funds.

Wilken et al. (51) found the effect of court decisions on state aid for special education to have been dramatic. They projected that state and local governments would spend \$4.7 billion in fiscal year 1976 on the excess cost of educating handicapped children and that this would amount to approximately \$1200 per child.

Existing recordkeeping procedures made it impossible to reach any definite conclusions about the degree to which handicapped students benefited from regular education programs or conversely, the extent to which expenditures for special education benefited the nonhandicapped. They believed the question of benefit trade-offs to be an important one for future policy decisions.

Wilken et al. (51) found that on the average the state's share of special education expenditures equaled fifty-five percent, with federal share fourteen percent, and the local share thirty-one percent. While the relative percentages varied widely across states, it was generally true that the greater the level of service within a state, the less important was the federal share.

Wilken et al. (51) reported that actual costs for special education were still difficult to determine. The costs exhibiting the least amount of interstate variation were those related to programs for learning disabled students and the mildly to moderately mentally retarded. In other categories, they found so much variation in cost figures that they questioned even their grossest accuracy. They cited a critical need for better information about special education finance because of the growing skepticism of state legislators. For example, during the early 1970s, it appeared that states were serving about eighty percent of the children with the more apparent handicaps such as the mentally retarded, deaf, speech impaired, and orthopedically handicapped. Smaller percentages of the emotionally disturbed, students with partial hearing losses, or the learning disabled were served. At that time, states viewed as progressive tended to spend more money on special education. Between 1972 and 1976, state support for special education tripled, state and local expenditures taken together had doubled, and the number of children served had increased from six to nine percent of the school

age population. A trend in the western part of the country to reduce EMR placements and dramatically increase LD placements appeared to be false. They were probably the same children simply reclassified. No especially uniform service delivery method could be discerned in any region of the country. There was wide diversity in allocation of resources to particular handicaps and particular program models. Wilken et al. warned that experts say that "full service" had not been reached, but they could not agree on what "full service" was or what it would cost. In 1975, states estimates of the number of handicapped ranged from a low of 4.1 percent in New York to a high of 21.8 percent in Colorado. Five states indicated twenty percent or more, and ten states indicated twelve percent or less.

Wilken and his colleagues (51) reported that efforts to revise provisions for distribution of states aid for special education usually generated debate over four issues: 1) the value of categorical restrictions on the use of aid, 2) the need for administrative discretion in determining aid payments, 3) the criteria used for calculating aid payments, and 4) the timing of aid payments. There had been little research to confirm or deny the allegations made during debate on these issues. Efforts to implement better service definitions or improve service procedures were confounded by disagreements over the boundaries of special education, the consequences of placements in general education, and the levels of authority over special education services.

Marriner (29) studied the costs of educating handicapped pupils in New York City, using data collected for the 1975 school year. New York City served many different types of handicapped and in various ways. The cost data was compiled for thirty-five discrete programs. Two factors proved useful in analyzing and summarizing special education enrollments: the difference between students served full time in self-contained special education classrooms and those served part time in resource rooms or by itinerant teachers, and the severity of the handicapping condition. Costs were divided according to services shared by all students, such as central administration or debt service, and those specifically provided to handicapped children. The average cost for educating a handicapped pupil was \$5,897 compared to the average cost for nonhandicapped of \$2,294. Using 1.0 for regular program costs, the cost indices for the handicapped ranged from 1.06 for itinerant speech services to 6.13 for children served at a center for the multiple handicapped. This study provided a data base to allow an examination of the different cost components of special education and an assessment of how these costs could be reduced. Marriner pointed out that maintaining handicapped students in regular classrooms may be as costly as educating them full time in special classes because of the addition of the regular program and the resource room or itinerant program costs.

State aid in New York for severely handicapped students was



reported to be less than the full costs of special education; for nonhandicapped, the difference between the costs of education and state aid amounted to only \$1,662. Therefore, two and one-half times as much local tax levy money to fund each severely handicapped pupil's education was needed. The most relevant consideration to the additional cost of educating the unserved population is whether it will be incremental or marginal cost. Incremental cost per pupil is the extra expense of educating another child in the existing program. Marginal costs arise when a new class or classes must be established to serve a new group of students. Incremental and marginal costs were studied by Marriner in an attempt to determine the costs of absorbing handicapped students currently placed in private schools in New York City. Incremental cost estimates were based on the addition of enough children to necessitate extra classes but not enough to incur added supervisory or other costs. At that time, New York City was serving about two-thirds of its total handicapped population. The additional students from private schools would cost about \$135 million more, or about five percent of the \$2.7 billion City's educational budget.

Amlung (1) wrote about the efforts of the Educational Priorities Panel, a coalition of twenty-five parent and civic groups which serve as an independent fiscal watchdog over the New York City Board of Education. In 1981, that group sought to determine: 1) To what extent is the federal government financing special education? 2) What

is the fiscal impact of P.L. 94-142 on cities with large enrollments? 3) What problems exist with New York's special education finance method, and how can it be changed to benefit the handicapped children of New York City? and 4) What actions can New York City take to enhance its special education revenues? Amlung surveyed ten other large cities in addition to New York.

She concluded that the federal government was not keeping its financial promises implied in P.L. 94-142 since Congress has appropriated only twelve percent of the average nationwide costs of educating handicapped children instead of the thirty percent authorized in the law. She reported a net loss to the states of nearly \$1.25 billion in fiscal year 1981 alone. New York City's share of that loss was \$20 million with an additional loss of \$34 million from state sources due to a change in the state's funding formula. For fiscal year 1981, New York City's revenue sources for special education were found to be fifty-nine percent from the city, thirty-three percent from the state, and only eight percent from the federal government. Steinhilber et al. (40) reported that in 1979, the National School Board Association estimated that local school district's budgets were rising at twice the rate for special education as for general education, fourteen percent and seven to eight percent respectively. The ratio of costs of education for the handicapped to the overall cost of education was found to be somewhere close to two to one nationally. Of the cities surveyed,

Amlung found an average increase in special education expenditures of 63.5 percent, while total school expenditures increased only 23.3 percent over the four-year period of 1974-1975 to 1978-1979.

Vasca and Wendel (47) conducted a study to determine the extent to which local districts rely on federal, state, and local revenue sources for the operation of special education programs, the relationship between the average overall per pupil expenditure, and the ratio of the cost of special education programs to the cost of regular programs. They surveyed a random sample of thirty-five districts across the United States. Two hundred forty-three usable responses from all but six states were obtained from school administrators, primarily superintendents. Of the districts that responded, 86.4 percent reported that they received less than one-fourth of special education funding from the federal government. More than thirty-eight percent of the districts responded that they received fifty-one percent or more of special education funding from the state. Local sources provided 52.8 percent of responding districts with less than one-fourth of their special education funds. The greater the enrollment of a district, the greater the portion of funds received from state sources for special education; 64.3 percent of districts spent less than \$1600 per pupil annually; 28.5 percent spent \$1600-\$2200 per pupil annually; and 7.2 percent spent more than \$2200 per pupil annually. Two-thirds of the districts reported costs of special education to be at least one and

one-half times as high as the costs for regular education programs; fifty percent of the respondents said special education costs were at least twice as high as general education costs.

Rossmiller et al. (36) conducted a study of expenditures and funding patterns for the Idaho State Department of Education. The major purpose of the study was to determine actual costs for exceptional children for the 1976-1977 school year; to make recommendations for alterations or improvements in funding patterns for financing exceptional education; and to make recommendations with regard to policies currently in effect on the administration, reporting, and incentive features of Idaho's program for financing exceptional education. The authors believed that the promise of federal funds under P.L. 94-142 was not likely to be fulfilled and that the fiscal responsibility would remain with the state and local agencies. They noted that many states had reformed their general school finance formulas in recent years to relieve property tax burdens and provide greater equality of educational opportunity. Most had paid greatest attention to the revenue dimension and relatively little attention to the allocation dimension. Many legislators and policymakers had come to view equal spending per pupil as synonymous with equal opportunity. Rossmiller et al. viewed inequality of educational opportunity as inevitable if state finance models did not take into account such factors as socioeconomic backgrounds, handicaps, and language differences. They describe a

weighted per pupil formula as one method of attending to equal educational opportunity for specific student needs. At that time, they found that twenty states used at least one weighting factor in allocating resources. Weightings were described as based upon the specific needs or abilities of pupils, the type of program offered, or on the geographic or demographic characteristics of an area. In 1973, Utah instituted weightings in ten categories of special education, in five categories of vocational education, and in professional staff costs. Because of inconsistency in the data available, the legislature had appropriated half of the special education dollars by the weightings and half based on each unit's proportion of the total special education population in the state. Weightings in special education require sophisticated cost accounting systems to prevent abuse and clear criteria to determine eligibility of students for various weightings. Under Idaho's system, districts are reimbursed by the state for eighty percent of the salaries of certified personnel, teacher aides, directors, and supervisors of special education. The state also pays the full costs of social security and retirement of local district personnel. The foundation program in Utah also includes a special child sparsity factor applied to the district's average daily attendance of 1.6 for ten or more exceptional children, 1.7 for four to nine exceptional children, and 1.8 for less than four exceptional children.

Data for the 1976-1977 school year from forty districts within

the State of Utah were collected. A full-time equivalency basis was used to allocate time and costs for exceptional children in regular versus special education programs. Thirty hours per week and one hundred eighty days per year were defined as one full-time pupil equivalency. A cost index was calculated by dividing the weighted average special program cost per pupil for the regular K-12 program. The weighted average cost per FTE pupil for all resource rooms (\$5,141) was divided by the weighted average cost per FTE pupil for all regular K-12 programs (\$970) to obtain a cost index of 5.3. On the average then, the cost to educate a full-time exceptional student in a resource room was 5.3 times greater than the cost to educate a full-time regular pupil. On a FTE basis, a comparable figure was \$942. The weighted average cost per FTE pupil in exceptional programs across all districts was \$4,682, or a cost index of 4.8 with a range from \$.499 to \$5,470. The weighted average cost per FTE pupil identified as communication disordered was \$12,650; a cost index of 13.0. This cost for speech services is very high on a FTE basis because contact time between student and speech clinician is only fifty to sixty minutes per week. The researchers found that low contact-hour programs were characterized by lower FTE pupil-teacher ratios, greater use of itinerant and ancillary personnel, and more attention to planning and organization.

### Cost Projection Studies

Howe (21) conducted a cost projection study of special education funding in Iowa from 1975-1976 through 1985-1986. He noted that the approved budgets for Area Education Agencies (intermediate units) special education support services had grown about \$5 million annually during the first three years of operation. The amount available for new and expanded support services had been set by the legislature at 4.87 percent for 1978-1979, and at three percent for 1979-1980. For future years, the budget would be limited to allowable growth only. Howe used a six percent estimate of allowable growth to predict future budgets and projected that in ten years the total costs for special education support services would more than double. Howe stated that more service should be available to each student if enrollments continued to decline during that period.

Walker (48) studied the effect of fund limits on the provision of special education in various states. The material used for her study was gathered by telephone interviews with state and local district school officials. She summarized her findings as follows: 1) regardless of the impact of tax or expenditure limits on the total school expenditures, mandatory special education laws remained in effect and right to education for the handicapped was seen as a commitment which must be honored; 2) special education budgets were less likely to be cut now than ten to fifteen years ago when the law was permissive and the right to education was less accepted; 3) if

cuts are made, they are more likely to be in areas not involving direct service to children and more apt to be proportional across programs; 4) the federal requirements of maintenance of effort, nonsupplanting, and full service have had the effect of protecting current programmatic expenditures; 5) expansion of services will be at a slower rate than in the past coupled with careful examination of special education budgets; and 6) the long-term impact of funding limits was impossible to determine.

Hartman (19) estimated the cost of educating handicapped children in 1980-1981 using the resource-cost model (RCM) methodology. RCM is expressed as a mathematical statement of the relationship among students, programs, resources, and decision rules in the special education process. Data from twenty-eight states were used. Three values were estimated for each variable: the most likely, a low estimate, and a high estimate. Hartman's most likely estimate was \$9.0 billion, the low was \$7.3 billion, and the high alternative was \$12.4 billion. The magnitude of the range points out the relationship of programmatic decisions to costs. A sensitivity analysis was conducted to test the impact of each variable on the total cost estimate. The variables which had the greatest impact on costs were incidence rates of handicapping conditions, the student/teacher ratio, personnel salaries, placement patterns, use of aides, and the inflation rate respectively.

Projecting costs in special education must include anticipated



program changes and practices caused by legislation, courts, implementation efforts of the district, and advances in technology. Hartman (19) believed that extrapolation from the past experience was inadequate in predicting the future. He found significant problems in cost projections because of lack of clear definitions of eligible students, lack of commonly accepted national standards for special education programs and services, and inconsistencies in cost data provided by states because reporting was for other purposes than cost analysis. In the resource cost model approach used in this study, the students to be served, the programs and services to be provided, and the resources which comprise each program were specified. Prices were assigned to each resource and costs were then estimated. Use of this model allows evaluation of the cost impact of trade-offs among various alternatives, such as reducing the size of each class by two students.

The Education Finance Center of the Education Commission of the States (38) studied the fiscal implications of P.L. 94-142. Data from the states of Connecticut, Oregon, Missouri, and Florida were used to analyze the distribution of students served, state special education funding systems, and the likely impact of dollars available from P.L. 94-142. The general findings of this study were that urban and large districts tended to serve more handicapped students than rural or small districts, that the number of students served and the support provided to them was not related to district wealth

whether it be measured in terms of income or property wealth, and that the implementation of P.L. 94-142 may place a greater burden on low wealth districts since they had a large proportion of students still unserved. This study indicated that P.L. 94-142 was potentially the most expensive piece of education legislation ever initiated by the federal government. Funds provided by the law are distributed on a per pupil basis without consideration of disparities in state or local fiscal capacity. This analysis tried to assess both the degree to which different aid systems promote fiscal equity and whether the interaction between state and federal funds resulted in a duplication of state and federal funding. A questionnaire was also sent to all state directors of special education to assess their attitude toward compatibility of federal and state funding patterns. Thirty-nine of the state directors responded. Most directors believed that handicapped students were not distributed evenly when property wealth, population density, and minority population were considered. They expected that the students yet to be located and served were in districts with below average property wealth and thus creating a burden that would be shared by the state.

Chambers (6) reviewed the literature on special education cost differences and stated that there tended to be three types of empirical studies on the cost of categorical programs: an examination of the average per pupil expenditure patterns (cost per student); determination of supplemental, replacement, and common

costs of the program; and the specifications and costing out of the components that make up the program (resource cost model).

The cost per student approach has taken several forms. First, the average dollar cost per student has been calculated by simply adding up all costs directly associated with programs for a particular type of student and those indirect costs that may be allocated to the programs and then dividing the total program costs by the number of students involved. An example of this approach is found in the study by Kakalik et al. (26) in which the average reported costs by category of handicapped student were determined. Chambers (6) reports that while providing summary per pupil expenditure data, the results of this approach has serious limitations for analytical or funding purposes. The average cost by type of student masks a significant variation among individual student cost. In fact, another recent study done by Hartman (20) of special education has shown that there is less variation in the cost per pupil by the type of delivery system (e.g., special class, resource room, itinerant instruction) than by type of handicapped student. The use of the average cost figure also hides the cost differences attributed to educational need. The differences in selection, quantity, and organization of resources that cause the programmatic cost differences are not specified and, therefore, their effects are not known.

Another, and perhaps more prevalent form of the cost per-student

approach has been the development of "cost factors" for categorical and grade level programs. The general procedures in the cost factor approach were used in the special education component of the National Education Finance Project (NEFP) by Rossmiller et al. (36) in 1968-1969. A cost factor, which is the ratio of the cost per student of a special education program to the cost per student of the regular education program was calculated for each special education program. A ratio greater than one indicated the degree to which the estimated total cost of a special education program was greater than that of the regular education program. The overall cost index averaged about two for all special education students, but there was wide variations among categories within a single district and among districts with similar categories.

The cost factor approach, however, presents a number of problems for cost analysis applications. Rossmiller et al. (36) has noted some of the primary limitations to using these "cost factors" (p. 14):

"A cost index generally is expressed as either a statewide average or median . . . . Provisions must be made . . . to deal adequately with the fiscal needs of individual districts which deviate from the state average for good and sufficient reasons . . . . They reflect only what is currently

being done, not what could be done (or should be done) in the way of educational programming for specific pupils . . . . Cost indices show the relative cost of educating pupils in special programs compared with the cost of educating pupils in regular programs . . . . It is possible that a given special education program could be offered to an equal number of students, could provide the same educational services, and could cost the same amount per pupil in two school districts but the cost indexes in the two districts could differ because of differences in the cost of the regular program in each district . . . . A cost index which lumps together all programs for educating a particular category of handicapped children without regard to the way in which educational services are delivered to such children will mask a great deal of cost variation within these programs . . . . Finally . . . for a variety of reasons, cost will vary between districts for identical programs . . . the cost of transporting pupils involved in special

programs . . . pupil/teacher ratio . . .  
difference in salaries and in the cost of  
educational supplies and materials . . .  
these differences will be reflected in  
educational program cost and in cost indices."

Chambers (6) reported that subsequent to the original NEFP study, there have been many individual state studies conducted which used the cost factor methodology. These have included studies in Delaware, Florida, Idaho, Illinois, Indiana, Kentucky, Mississippi, South Dakota, and Texas (respectively, Rossmiller and Moran, in 1973; National Education Finance Project, in 1973; Shrag, in 1974; Sorenson, in 1973; Jones and Wilderson, in 1972; National Education Finance Project, in 1974; Governor's School Finance Study Group, in 1973; National Education Finance Project, in 1973; Bussell, in 1973). Additionally, cost studies using this approach have been reported by McClure et al. (31). These studies followed the specific cost factor methodology developed by the NEFP study, and they generally found the same results; an overall median index of approximately 2.0 with much variation among districts and among categories.

A second methodology that can be used to recognize the costs of programmatic needs of categorical programs focuses on specifying the supplemental, replacement, and common costs for the overall programs. In this methodology employed by Marriner (29), the

analytical emphasis is on specifying which activities, resources, and costs are appropriate for each classification and making the subsequent adjustments to the regular and categorical program costs to reflect these changes.

Supplemental services and costs are those that are in addition to the regular education program (e.g., special education resource room, vocational education counseling). The students who receive supplemental programs and services obtain most of their education from the regular education program. The supplemental programs and services can be considered completely additional since the students receive them while also attending the regular education program. Therefore, the costs of these programs are totally in addition to those of the regular program.

Replacement costs are for those programs and services, that, in whole or in part, are provided in place of the regular education program. The general procedure for determining these costs is to total the direct costs of the replacement education programs, and then to subtract the costs of the regular education programs and services which are replaced. The resulting net cost is then the additional cost of the programmatic needs of students served by these programs. Such deductions may include only the instructional component (for a separate category program classroom within a school) or the entire regular education cost (for programs provided by other agencies). The common costs for general services that are provided

to all students (e.g., district administration, debt service) are generally allocated to all students or programs in a local district on a pro rata basis.

The major difficulty in this approach to cost adjustment is with the replacement cost. The supplemental costs are additional by definition and would need to be included in any adjustment. With the common costs, care must be taken not to double-count (including them both in regular program and in the cost adjustment for special programs) or omit them (not including them in either program costs). The initial and non-trivial problem with calculating replacement costs is deciding specifically which program components and services are being replaced in the regular program. This is not as easy as it may sound. Further, deduction of the average per student replacement cost can be a misleading calculation. Many of the costs on a classroom level are fixed over the range of a few students per class and the reduction of several students would not appreciably change the costs of that regular classroom. Similarly, schoolwide and districtwide service costs are not greatly affected by the reduction of a relatively small number of students. Rather than deducting the average costs per student of these components (which are relatively easy to calculate from student and financial records), the marginal costs per student would be the correct deduction. Unfortunately, marginal costs per student are not generally known since they are not collected or reported by financial accounting systems in education.



They will, however, certainly be much smaller than the average costs per student.

The final cost methodology used in studies of categorical programs is that of the resource-cost model (RCM) developed by Hartman (17, 18, 19, 20). The focus of this approach is on the specification of programmatic terms of the educational program to be provided, i.e., the total special education types and numbers of students to be served, definition of programs in terms of resources, allocation of eligible students to various programs, student/teacher ratios, etc. Consequently, the program costs are explicitly determined from the structure of the educational program. The input data requirements, calculation process, and projections which result from the resource-cost model have been reported by Chambers and Hartman (7 and 8) in both narrative and schematic design forms under the model known as the Special Education Planning Model (SEPM). The fifteen steps which comprise the SEPM are: 1) the total population in which handicapped students are found is specified (e.g., the K-12 enrollment in public and private schools); 2) the classification system to be used to identify handicapped students is selected along with an expected incidence rate for each category (e.g., educable mentally retarded (EMR): 2.00 percent; visually handicapped: 0.10 percent). The classification system specified may be other than by type of handicap, for instance, by type of learning needs; 3) the number of students in each handicapping category expected to need

special education services is then calculated (total population X incidence rates); 4) the percentage of handicapped students that are to receive each special education program are estimated by type of handicap (e.g., for EMR: twenty percent in consulting teacher program, forty percent in resource rooms, and forty percent in special classes); 5) the number in each category of handicapped students to receive each program is then calculated (step 3 X step 4). The total number of handicapped students in each program is also calculated; 6) the number of students per unit in each special education program for each category of handicapped student is specified (e.g., for EMR: forty-five in consulting teacher program, twenty-five in resource rooms, twelve in special classes); 7) the number of units (and personnel) of each program required for each handicapping category is then calculated (step 5 X step 6); 8) the number of personnel to serve each handicapping category and the number of personnel required for each program are then calculated by summing across programs for each handicapped category and across handicapping categories for each program, respectively; 9) the set of special education programs to be provided to handicapped students is determined (e.g., consulting teacher program, resource room, special class); 10) for each program, the type and quantity of resources required in the program are selected along with a price for each resource (e.g., one teacher at \$12 thousand, instructional materials at \$500 per class); 11) the unit price for each program is then

calculated by summing the quantity times the price for each resource in the program; 12) the cost of special education for each handicapping category in each program is then calculated from the number of units required times the unit cost (step 7 X step 10); 13) the cost of special education for each handicapping category is then calculated by summing the costs of each category across all programs. Both constant and inflated costs are calculated; 14) the cost of special education for each program is then calculated by summing the costs of each program across all handicapping categories. Both constant and inflated costs are calculated; and 15) the total cost of special education is obtained by summing the costs of all handicapping categories (sum step 13) or by summing the costs of all programs (sum step 14). Both constant and inflated costs are calculated. Schematically, the Special Education Planning Model appears in Figure 1.

#### Summary

The literature on special education cost differences can be categorized into three types of studies. The first is an examination of the average per pupil expenditure pattern or cost per student. This methodology may take the form of summing up all the costs associated with a program and dividing by the number of students involved, or may be expressed as a comparative ratio of the cost per special education student to the cost per regular education student.

While many studies have utilized this methodology, wide variations among categories within a single district and among districts with similar categories have been found. Application of the results obtained from cost per pupil studies must be made cautiously.

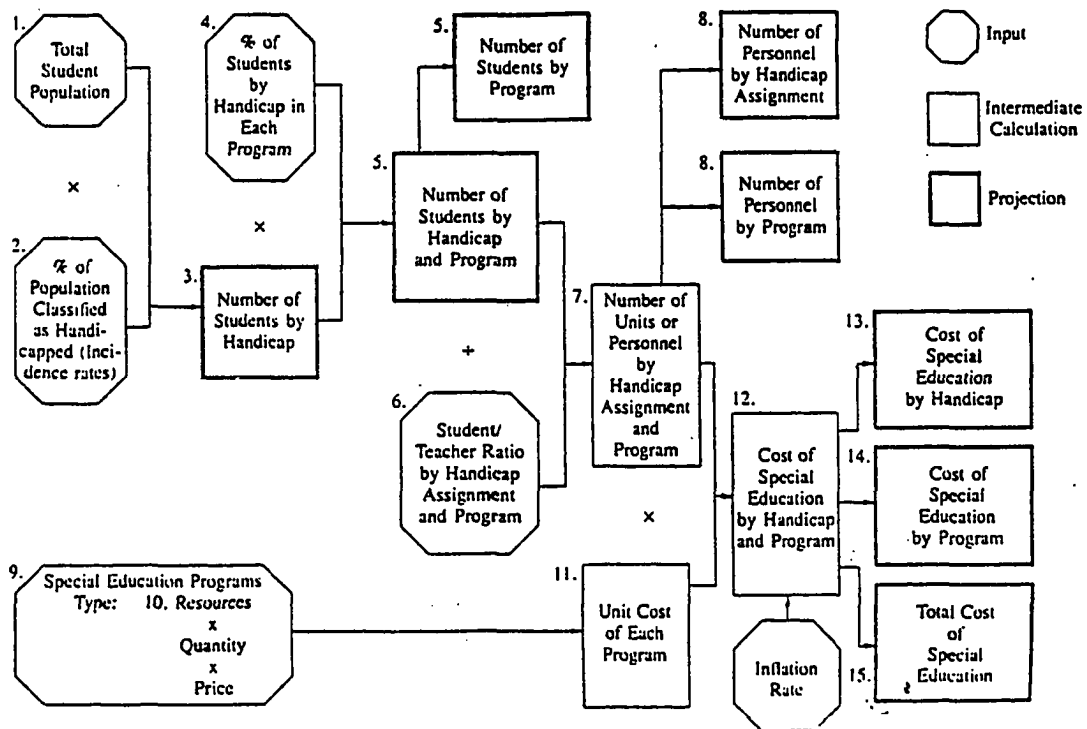


FIGURE 1

SPECIAL EDUCATION PLANNING MODEL

A second methodology that can be used to determine programmatic costs of categorical programs focuses on specifying supplemental,

replacement, and common costs for the overall programs. The analytical emphasis of this methodology is on specifying which activities, resources, and costs are appropriate for each classification and making adjustments to the regular and categorical costs to reflect these changes. The major difficulty with this methodology is determining the accurate replacement costs for program components and services that are being replaced in the regular program.

The third cost methodology used in studies of categorical programs is called the resource cost model. This approach focuses on the specification of programmatic terms of the educational program to be provided. Program types, numbers of students to be served, student/teacher ratios, etc. must be defined and a price established for each resource component. Costs are estimated using both constant and inflated figures. The resource cost methodology has great utility for policymakers who need to be able to project future needs and costs of categorical programs.

## CHAPTER III

## METHODOLOGY/PROCEDURES

The overall thrust of this study is descriptive and historical in nature. The purposes are: 1) to explain Iowa's special education instructional program funding mechanism, the "Weighting Plan"; 2) to describe the "Weighting Plan" in standardized terms suggested by Crowner's taxonomy; 3) to examine and analyze the results of the "Weighting Plan" in terms of special education program and budget growth during the nine year period of 1975-84 including a comparison with regular program and budget growth; and 4) to evaluate the "Weighting Plan" as suggested by the literature namely through application of Bernstein's (2) decision criteria and Crowner's (10) fiscal policy questions.

This chapter describes the methods and procedures used to accomplish the purposes. The chapter is organized into six sections: 1) Explanation and Description of the "Weighting Plan"; 2) Pupil Data; 3) Budget Data; 4) Expenditure Data; 5) Balance of Funds Data; and 6) Evaluation of the "Weighting Plan".

Explanation and Description of the  
"Weighting Plan"

The procedures for the classification of students identified as educationally handicapped and in need of special education instructional programs which are funded by the "Weighting Plan" are explained in operational terms. These procedures include placement of students into one of the seven special education instructional program types, determination of disability or handicapping condition, and the assignment of a weighting to accomplish fund generation. A history of the weightings by category for mildly, moderately, and severely handicapped students is also reported.

Other factors that determine the special education instructional fund generation as part of the Foundation Program are explained in operational terms. These factors include: district cost per pupil, allowable growth factors, and the utilization of pupil counts which are conducted by each school district on December 1 of each year. An example of fund generation for nonhandicapped, mildly handicapped, moderately handicapped, and severely handicapped students is reported in relation to these factors.

The kinds of information that local school districts are required to report to the Department of Public Instruction is itemized. An explanation of the School Budget Review Committee's responsibilities to review the audited data, to determine the "Weighting Plan" for subsequent years, and to adjust special

education instructional fund balances is provided. Procedural examples of balance adjustments indicating the impact on district budgets are also provided.

This section also describes Iowa's "Weighting Plan" through application of Crowner's taxonomy of special education finance. The terms "base", "formula", "type", and "source" are defined in detail and are utilized to describe the "Weighting Plan."

#### Pupil Data

1975-84 pupil data were obtained from the records of the Department of Public Instruction. These records include: Certified Public Enrollments; Special Education Weighted Enrollments; and Secretary's Annual Reports, Special Education Supplement. The data are presented in graph or table form with explanation and descriptive statistics of range and mean provided when appropriate. The data include: 1) public and weighted enrollment counts with percentages of change from the preceding year calculated for each; 2) proportion of weighted enrollments to total public enrollments; 3) numbers of mildly, moderately, and severely handicapped pupils used to generate special education instructional funds as well as the total; 4) proportion of special education instructional funds generated by each weighted category: mildly, moderately and severely handicapped; and 5) numbers of special education pupils served in each instructional program model: supplemental assistance, resource teaching, special



class with integration; school age self-contained class with little integration; preschool age self-contained class with little integration, preschool age self-contained class; school age self-contained class, and total number of pupils served in special education instructional programs.

#### Budget Data

1975-84 budget data were obtained from the records of the Department of Public Instruction and the Office of the State Comptroller. The source documents were the Controlled Budgets and Secretary's Annual Report, Special Education Supplement for each school district. The data are presented in graph and table form and includes: 1) regular program budgets reported in dollars and calculated by deducting the total of special education budgets from the total controlled budgets; 2) special education instructional budgets reported in dollars; 3) the percent of total instructional budgets devoted to special education; 4) comparison of regular and special education instructional budget growth from the previous year in actual and deflated terms. Deflated budget growth was calculated by applying the mean of the implicit price deflator (annual series) for total G.N.P. of the two calendar years which comprise each school year; 5) breakdown of special education generated funds between the amount generated by the 1.0 (headcount) and the additional weighting with the percentage each of the total generated funds; and 6)

receipts generated for each special education program model within the three weighted categories: mildly, moderately, and severely handicapped.

#### Expenditure Data

Special education expenditure data were derived from the Secretary's Annual Report, Special Education Supplement for each school district as submitted to and audited by the Department of Public Instruction. The expenditure data include: 1) total expenditures reported in dollars for each program model for each of the three weighted categories; 2) total expenditures reported in dollars for each object classification for which the data are available, 1976-1984 (salaries, employee benefits, employee travel, supplies/materials, contracted services/non tuition, pupil transportation, capital outlay, indirect costs, administration, regular program expenditures, tuition, and total); 3) comparison of expenditures by object classification as percentages of total expenditures for each two year period for which data are available, 1976-1984; 4) comparison of utilization of 1.0 generated funds by regular and special education programs; and 5) comparison of mean expenditures for each program model calculated three ways: average expenditures per pupil generating funds, average expenditures per pupil served, and the mean expenditure of those two categories.

### Balance of Funds Data

These data were also derived from the Secretary's Annual Report, Special Education Supplement for each school district as submitted to and audited by the Department of Public Instruction. The data include: 1) the balance of funds either positive or deficit in dollar terms for each program model within the three weighted categories; 2) a comparison of the total balance of funds in dollar terms for each year; and 3) a comparison of balance of funds as a calculated percentage of the total funds generated for each weighted category and sum of the categories.

### Evaluation of the "Weighting Plan"

The author's subjective evaluation of Iowa's "Weighting Plan" is presented. Two sources in the literature provided guidance for this evaluation. First the decision criteria suggested by Bernstein is applied to the "Weighting Plan". These criteria include equity, comprehensiveness, flexibility, accountability, cost-effectiveness, compatibility with the total educational finance system, simplicity, and lack of conflict with the state's educational policies.

Secondly, Crowner's fiscal policy questions are also used to evaluate the "Weighting Plan." These questions are: 1) What funding base does the state use?; 2) What formula does the state apply to that base?; 3) What elements do the state allow inside or outside its formula?; 4) To what extent is state funding more or less

discretionary?; and 5) What percent of the local funding comes from which sources?

## CHAPTER IV

## FINDINGS

Iowa's "Weighting Plan": An  
Operational Explanation

## Program Models

Students who have been identified as educationally handicapped and in need of a special education instructional program are classified by disability/handicapping condition, and by the special education instructional program model for which placement is recommended. The recommended program model placement determines the weighting assigned to the handicapped student and, therefore, the amount of funds generated by the local school district. Iowa's continuum of service model for special education instructional programs consists of seven program types: 1) supplemental assistance, an individual program in which the handicapped student is enrolled full-time in regular education classes but needs special adaptations such as specialized transportation arrangements or services of an aide or an interpreter; 2) resource teaching program in which handicapped students are enrolled in regular classes for the majority of the school day but need special education instruction for remedial or tutorial purposes from one half to two hours per day; 3)

special class with integration program in which handicapped students are enrolled in regular classes two or three periods per day but need special education instruction for the majority of the day; 4) school age self-contained special class with little integration in which school age handicapped students are enrolled nearly full-time in special education but can profit from integration into regular classes on a very limited basis; 5) preschool self-contained special class with little integration in which preschool handicapped students are enrolled part-time or full-time in special education but may also be enrolled in private or public preschool regular or kindergarten classes on a very limited basis; 6) preschool self-contained special class in which preschool handicapped students are enrolled part-time or full-time in special education and are offered integration opportunities with nonhandicapped peers but usually not in a classroom setting; and 7) school age self-contained special class in which school-age handicapped students are enrolled full-time in special education and are offered integration opportunities with nonhandicapped peers but usually not in a classroom setting. See Appendix A for the program model definitions provided in the Rules of Special Education.

It is important to note that placement into an appropriate special education program model is determined more by the severity of the handicapping condition/disability than the type of disability itself. For instance, a child diagnosed as learning disabled may be

placed by the staffing team into a special education resource teaching program or into a special class with integration or into a self-contained special class. The placement is more dependent upon the nature and severity of the learning disabilities and the teacher-student ratio necessary to provide appropriate special education instructional services rather than the disability itself. See Appendix B for the maximum class size, teacher-student ratios assigned to each program model by the Rules of Special Education.

#### Weighting

Nonhandicapped students enrolled in the regular program are weighted 1.0. Mildly handicapped students whose recommended special education instructional program placement is supplemental assistance, resource teaching, or special class with integration programs are currently weighted 1.7. Moderately handicapped students whose recommended special education instructional program is self-contained special class with little integration which requires fewer students per teacher than the programs for the mildly handicapped are currently weighted 2.2. Severely and multiply handicapped students whose recommended special education instructional program placement is self-contained special class which requires even fewer students per teacher than the programs for the moderately handicapped are currently weighted 3.6. Thus, mildly handicapped students generated 1.7 times the amount of funds generated by regular education

students, while moderately and severely handicapped students generate 2.2 and 3.6 times the regular program amount respectively.

The original weightings were 1.0, 1.8, 2,2, and 4.4, and have been adjusted at various times by the School Budget Review Committee. Table 3 reflects the weightings which were in effect for each school year beginning with 1975-76 through 1983-84.

TABLE 3  
WEIGHTING BY CATEGORY  
SPECIAL EDUCATION INSTRUCTION  
1975-76 THROUGH 1983-84

Year	Mildly Handicapped	Moderately Handicapped	Severely Handicapped
1975-76	1.8	2.2	4.4
1976-77	1.8	2.2	4.4
1977-78	1.7	2.0	4.2
1978-79	1.7	2.0	4.0
1979-80	1.7	2.0	4.0
1980-81	1.7	2.0	4.0
1981-82	1.7	2.0	4.0
1982-83	1.7	2.2	3.8
1983-84	1.7	2.2	3.6



Generating the Funds: District Cost/ Pupil,  
Allowable Growth, December 1 Count

In addition to the weighting assigned to each handicapped student which is dependent upon the recommended special education instructional program model, two other factors determine the amount of funds generated by a school district. The first is the district's cost per pupil. This is the amount equivalent to the district's 1.0 generated amount for regular education pupils and is the basis for determining the controlled budget. It varies district by district. In 1983-84 most districts' cost per pupil was \$2,224 but some were above and some below that amount. The district cost per pupil is determined by the prior year's district cost per pupil with an allowable growth factor added. The allowable growth factor for 1983-84 was 6.103 percent which when applied to the state cost per pupil translated into \$133 as an addition to the 1982-83 district cost per pupil for each district. Therefore, districts with a cost per pupil of \$2,091 in 1982-83 added \$133 to arrive at the 1983-84 cost per pupil of \$2,224. Using \$2,091 as an example of a district's cost per pupil, a regular student would generate \$2,091 (1.0), a mildly, a moderately, and a severely handicapped student would generate \$3,555 (1.7), \$4,600 (2.2) and \$7,528 (3.6) respectively. Table 4 depicts allowable growth rates and translated dollar amounts from 1975-76 through 1983-84.

TABLE 4  
 ALLOWABLE GROWTH RATES AND DOLLAR AMOUNTS  
 1975-76 THROUGH 1983-84

Year	Allowable Factor	Amount
1975-76	10.70%	\$ 110
1976-77	9.825%	111
1977-78	7.84%	98
1978-79	9.422%	127
1979-80	9.484%	139
1980-81	13.592%	219
1981-82	5.00%	92
1982-83	7.00%	136
1983-84	6.103%	133

The second factor which determines the funds generated for special education instructional programs by local districts is the number of pupils certified by the Area Education Agency Director of Special Education on behalf of each constituent district on December 1 of each year. This pupil count is included in the P.L. 94-142, Part B certified pupil count. The number of resident students identified for each special education instructional program and their weightings and disabilities are certified to the Department of Public

Instruction. The December 1 count serves as the basis for determining the number of students generating funds for each program model for the following school year, but there is a provision of an advancement in state aid if the budget year's (current) December 1 count is greater than the base year's (prior) count. For example, if district A's certified count on December 1, 1982, indicated fifteen resource program (1.7) students, eight special class with integration (1.7) students, and two self-contained special class (3.6) students for a total of twenty-five students with total additional weightings of 21.3 (23 times .7 plus 2 times 2.6), the 1983-84 generated funds would equal 46.3 (25 + 21.3) times the district's cost per pupil unless the December 1, 1983 count was greater. In that case, the December 1, 1983 count would be utilized and the state would provide the additional funds as an advance in state aid during 1983-84 with an adjustment on the district's 1984-85 controlled budget to proportion the property tax and state aid mix appropriately. The advance in state aid for increased special education enrollment in the budget year over the base year has totaled \$3,407,977, \$2,518,298, and \$1,040,161 for 1983-84, 1982-83, and 1981-82 respectively. There is no reduction in fund generation during the budget year when districts experience a decrease in the weighted count taken on December 1.

### Relationship to Controlled Budget

Special education instructional dollars are generated by local districts as part of their total controlled budgets. Appendix G depicts local districts' budget formation as determined by the Foundation Plan and includes special education instructional funds. The certified enrollment of a district includes the headcount of all resident enrolled students including special education students. The certified enrollment count is conducted each second Friday in September. A formula to compensate for declining enrollment situations is applied to the actual enrollment. This count generates the 1.0 funding for all students. The appropriate December 1 special education additional weighting above the 1.0 total is added to this formula enrollment and the resulting total weighted enrollment is multiplied by the district cost per pupil to reach the controlled budget amount for each school district.

The state aid contribution toward the controlled budget is also determined by the Foundation Plan. All students are guaranteed a basic financial support level from property tax by requiring all districts to levy a uniform amount of \$5.40 per \$1,000 valuation. The state supports the Foundation Plan at a percentage of the state cost per pupil called the foundation level. For 1983-84, this percentage was 78%. Therefore, a district's weighted enrollment times 78% of the state cost per pupil (which is equivalent to most district's cost per pupil) less the property tax generated by the

uniform property tax levy equaled the amount of state contribution for 1983-84. Districts levy additional property tax in the amount of difference between the foundation level and the controlled budget. Since special education instructional funds are generated as part of the Foundation Plan, the 1.0 (headcount) funds are generated in the same mix of property tax and state aid for special education and regular program students. This may be as little as 25% state funds in districts with high property tax valuations. The additional weighted funds generated on behalf of handicapped students are generated at the foundation level (78% state aid, 22% property tax for 1983-84) because the same amount of property tax would be raised from the uniform levy if no handicapped students were identified.

#### Accounting and Reporting Procedures

Districts are required to provide a detailed accounting for the funds generated for special education instruction. Funds generated and expended are accounted for and reported to the Department of Public Instruction by special education program model. Appendix E is an example of the Secretary's Annual Report, Special Education Supplement, which is submitted each August 1 for the preceding school year by each school district. This report includes both special education program and finance data for each school district. Each report is audited by the Department of Public Instruction and summarizing reports are then provided to the State Commissioner of

Public Instruction and the School Budget Review Committee. This committee reviews the data and recommendations for adjustments in the "Weighting Plan" and makes that determination on an annual basis.

Information reported on the Secretary's Annual Report, Special Education Supplement includes: numbers of teachers employed by disability area and program model; numbers of students served by disability area and program model; numbers of special education classes by program model; numbers of teacher aides; numbers of tuition-in pupils by disability and program model; funds generated by program model; expenditures of funds by program model and object classification; balance of funds for each program model; and numbers of students tuitioned-out by program model and type of service agency.

The expenditure object classifications include: instructional salaries; instructional benefits; employee travel; contracted service non-tuition; supplies/materials; pupil transportation; capital outlay; indirect cost; administration; regular program expenditures; and tuition expenditures.

#### Reduction of Balance of Funds

School districts calculate their balance of special education instructional funds by subtracting expenditures from the amount of generated funds for each program model. The sum of each program model balance equals the district's total special education

instructional balance of funds. If expenditures exceed generated funds, the balance is a negative or deficit amount.

Since 1982-83, the Code of Iowa has required the School Budget Review Committee to reduce all districts' special education instructional balances to zero on an annual basis. This was retroactive to 1981-82. Districts with positive balances (generated receipts exceed expenditures) experience a reduction in state aid in the year following the occurrence of the balance and in the amount of the balance. The subsequent year's budget is increased in state aid and decreased in property tax to compensate for the portion of the initial reduction which was generated by property tax. As an example, if District A's final 1982-83 special education balance was \$10,000, it would receive \$10,000 less than the scheduled state aid payment during 1983-84. Further, District A's 1984-85 state aid would be increased by \$4,000 and property tax decreased \$4,000 if property tax equaled 40% of the original \$10,000 balance of funds.

Districts with negative balances (expenditures exceed generated receipts) may request allowable growth to increase spending authority and state aid in the amount of the state aid portion of the negative balance in the year following the occurrence of the negative balance. The portion of the balance unpaid by state aid may be generated by a property tax levy in the subsequent year if the district so desires. If the state aid portion of positive balances is insufficient to pay the state aid portion of negative balances,

the state aid available from the positive balances is prorated. For example, if District B's final 1982-83 special education balance was \$-10,000 of which 40% was property tax, it would receive a state payment for \$6,000 in 1983-84 and would be allowed to increase property tax generation by \$4,000 in 1984-85 if the district so desired. If the state prorated state aid payments to \$5,500, then \$4,500 could be generated in additional property tax. In this way, all districts' special education instructional balances are brought to zero level annually by reducing positive balances and making payment for negative balances.

#### Summary

On the second Friday in September, each district takes a headcount of all enrolled resident students including those identified for special education. This enrollment count generates the 1.0 funds for all students in an amount equal to each particular districts' cost per pupil and in a proportion of property tax and state aid that depends on the property wealth of the district and the state's foundation level. A special education weighted count is taken each December 1. This count generates the additional funds in the amount of .7, 1.2, or 2.6 times the district cost per pupil with state aid contributing the greatest share of the funding as determined by the foundation level established for that year. Districts account for the total special education funds generated on



behalf of their resident handicapped students by program model: 1.7 times the district cost per pupil for supplemental assistance, resource teaching, and special class with integration programs; 2.2 times the district cost per pupil for school age and preschool self-contained special class with little integration programs; and 3.6 times the district cost per pupil for school age and preschool self-contained special class programs. Also, districts report detailed program and finance data on an annual basis to the state. This data includes fund generation, expenditure, and balance information from which the School Budget Review Committee determines the "Weighting Plan" for the following school year. The School Budget Review Committee reduces all special education instructional balances to zero on an annual basis through adjustments in state aid and property tax.

Iowa's "Weighting Plan" A Description  
Based on Crowner's Taxonomy

Crowner (10) developed a taxonomy of special education finance to assist special education administrators to better understand related fiscal concepts such as the difference between a funding base, a funding formula, and a funding source. The taxonomy serves other purposes: 1) it will enhance awareness; 2) it can provide a guide to analyze different state funding approaches to special education; 3) it can be used to communicate in a uniform manner; and

4) it can serve as a delimitation of funding variables which can be manipulated by both critics and advocates of special education.

Crowner defined "base" as the element or elements upon which revenues are calculated. He itemized five types of bases: 1) pupil base in which funds are generated on the number of served pupils; 2) resource base in which funds are generated on some specific resource needed to provide services such as teachers or supplies, equipment; 3) service base in which funds are generated on a service provided such as a resource program; 4) cost base in which funds are generated on a district's actual cost of operating a special education program; and 5) unit base in which funds are generated on a combination of other bases such as a unit comprised of a teacher, an aide, and ten students.

"Formula" was defined as the method used to compute revenues generated by the base elements. Crowner identified five formulas: 1) excess cost formula which compares the cost of a special education program to the cost of a basic education program and applies funding to compensate for all or some of the difference; 2) percent of cost formula which limits the funds generated by a base to some fractional percentage of the actual cost associated with that base; 3) straight sum formula which applies a fixed amount of reimbursement for each base element reported such as \$2,000/pupil or \$10,000/teacher; 4) weighted formula which applies different weightings to base elements determined by actual costs or perceived relative needs; and 5) mixed

formula which consists of any combination of the other four formulas.

Crowner (10) defined "type" of funding as restrictions placed on the possible use of the funds. Eight "types" were listed: 1) continuing funds are stable and continue from year to year; 2) noncontinuing funds are available only for a fixed time period; 3) targeted funds are those which must be expended on a prescribed item such as equipment; 4) discretionary funds may be expended on any item determined to be relevant to the agency's objectives; 5) inside formula funds are funds received from one source and which must be deducted from any costs reported for reimbursement from another source; 6) outside formula funds are funds that an agency receives that will not be deducted from its primary source; 7) matching funds are those available from a source only if matched in part or equally by another source; and 8) mixed funds share characteristics of two or more types of funding, such as noncontinuing/targeted funds.

"Source" was defined by Crowner as the agency from which the revenue flows. He provided a list of five sources: 1) Federal source such as P.L. 94-142 Part B funds which flow directly or indirectly to local school districts; 2) state source is funding to local districts from the state; 3) intermediate source is funding which comes from a revenue-generating agency which operates on a regional level; 4) local source is funding which is generated at the local level through some taxing mechanism such as local property tax; and 5) private source is funding which is solicited or volunteered by

an individual, business, or charity.

Using Crowner's taxonomy of special education finance, Iowa's "Weighting Plan" can be described as a pupil base, mixed formula because it utilizes a weighted formula developed as an excess cost comparison to regular education funding. The type of funding employed by the "Weighting Plan" can also be described as a mixed type; specifically, a continuing/discretionary funding mechanism with outside formula funds since unexpended funds are reduced annually and receipts from other sources such as AEA funds or P.L. 94-142 funds must be deducted from reported expenditures. Local and state sources generate the funds for Iowa's "Weighting Plan." Twenty-two percent of the additional weighted funds was derived from local property tax levies and seventy-eight percent was derived from state aid payments to local school districts in 1983-84.

#### Pupil Information

Table 5 represents Iowa's public enrollment counts and special education weighted (instructional) headcounts for the school years 1975-76 through 1983-84. The public enrollment counts are conducted on the second Friday in September each year and include identified special education pupils. The special education weighted counts represent mid-year counts which were conducted either January 15, or December 1, of each year.

Public enrollments decreased by 113,276 pupils during this

period while special education weighted enrollments increased by 7,856 pupils.

The cumulative percentages of change in the public and weighted counts from the previous year are depicted in Table 5 and Figures 2 and 3. Public enrollment counts declined 21.24 percent while special education weighted counts increased by 22.53 percent. Since the 1975-76 school year was the first year that special education count was conducted there is no change shown from the previous year, 1974-75.

TABLE 5  
PUBLIC AND WEIGHTED ENROLLMENT COUNTS  
1975-76 THROUGH 1983-84

Year	Public Enrollment Count	% Change From Previous Year	Weighted Enrollment Count	& Change From Previous Year
1975-76	610,838	-1.01	33,140	NA
1976-77	603,596	-1.19	36,257	9.41
1977-78	587,113	-2.73	38,032	4.90
1978-79	569,729	-2.96	39,145	2.93
1979-80	550,023	-3.46	41,046	4.86
1980-81	535,732	-2.60	43,647	6.34
1981-82	518,838	-3.16	40,198	-7.90
1982-83	505,407	-2.58	40,070	-0.32
1983-84	497,562	-1.55	40,996	2.31

Figure 4 shows the percentage special education weighted (instructional) enrollments are of the total public enrollments for each school year, 1975-76 through 1983-84. This percentage grew steadily from 1975-76 through 1980-81 with rates of 5.43 through 8.15 percent respectively. In 1981-82, the special education weighted count declined slightly to 7.75 percent of the total public enrollment then increased again to 7.93 and 8.24 percent respectively for 1982-83 and 1983-84.

Figures 5, 6, 7, and 8 represent the numbers of handicapped pupils that generated special education weighted (instructional) dollars for each school year 1975-76 through 1983-84. Figure 4 shows the numbers of mildly handicapped pupils weighted at 1.8 or 1.7 (see Table 3). This number ranged from 23,215 in 1975-76 to 35,673 pupils in the peak year of 1981-82. Subsequent reductions to 32,830 and 32,659 occurred in 1982-83 and 1983-84 respectively. The overall increase amounts to 40.68 percent.

Figure 6 shows the number of moderately handicapped pupils generating funds at 2.2 or 2.0 weightings. This number has increased each year with the largest increase occurring between the 1975-76 and 1976-77 years. It has ranged from 3,842 to 6,311 pupils, which represents an overall increase of 64.26 percent.

Figure 7 represents the number of severely handicapped pupils generating funds at 4.4, 4.2, 4.0, or 3.6 weightings. This number ranged from 1,321 in 1975-76 to 2,687 in 1983-84. The largest

increases occurred between the 1975-76 and 1976-77 years, and the 1979-80 and 1980-81 years when the increase totaled 786 and 414 pupils respectively. The overall increase of 1,376 pupils represents 104.16 percent growth in this category.

Figure 8 represents the combined total number of handicapped pupils generating weighted funds from 1975-76 through 1983-84, which ranged from 28,378 to 41,667 pupils respectively. The 1982-83 year was the only one in which fewer pupils generated weighted funds than in the prior year. The small reduction in the mildly handicapped category in 1983-84 was more than offset by increases in the moderately and severely handicapped categories. The overall increase of 13,289 pupils generating weighted dollars from 1975-76 to 1983-84 represents a total increase of 46.83 percent.

Figure 9 represents the proportion of special education instructional funds generated by each weighted category. The mildly handicapped category ranged from 75.41 percent of the total weighted funds generated to 70.76 percent in 1983-84. The moderately handicapped category increased from 14.85 percent of the total in 1975-76 to 17.11 percent in 1983-84. In the severely handicapped category, the proportional range was 9.74 percent in 1975-76 to 13.55 percent in 1976-77. The mean proportion for all years, 1975-76 through 1983-84 equaled 73.07 percent in the mildly handicapped category and 15.16 percent and 11.77 percent in the moderately and severely handicapped categories respectively.

Tables 6-9 shows the number of special education pupils served in each instructional program model for the 1975-76 through 1983-84 school years. These numbers are reported on a headcount basis on each district's Secretary's Annual Report, Special Education Supplement, and do not represent an unduplicated count. The number of pupils reported as served is a count of all pupils who received instructional services at some time during the school year. Pupils served in two different programs may be counted as two children. The numbers of pupils served will not correspond with the numbers of pupils generating funds since service is on-going throughout the year with a substantial number of pupils entering and exiting at different times while the count taken to determine fund generation is a combination of unduplicated counts of the base and budget years.

Table 6 represents the number of mildly handicapped pupils served in supplemental assistance, resource teaching, and special class with integration program models (see Appendix A for program model descriptions). This number has ranged from 22,223 pupils in 1975-76 to 38,793 pupils in 1980-81. Decreases were experienced in the 1981-82 and 1982-83 years, and then increased again in 1983-84. The overall increase from 1975-76 to 1983-84 totaled 66.24 percent. The mean number of mildly handicapped pupils served equals 33,155.

Table 7 represents the number of moderately handicapped pupils served in school age and preschool self-contained class with little integration programs. The total number has ranged from 3,998 pupils



in 1975-76 to 6,822 pupils in 1982-83 with a mean of 5,855 over the nine year period of 1975-76 to 1983-84. The mean number of school age moderately handicapped represents 83.88 percent of the total mean with 16.12 percent for preschool age moderately handicapped. The overall increase during that period totaled 70.44 percent.

Table 8 represents the number of severely handicapped pupils served in school age and preschool self-contained class programs. The total has ranged from 1,259 pupils in 1975-76 to 2,908 in 1983-84 with a mean total over the nine year period of 2,262 pupils. The mean number of school age severely handicapped equals 85.19 percent of the total mean while the preschool age number equals 14.81 percent. The overall increase in the number of severely handicapped pupils served equals 1,649 pupils, a 130.98 percent increase from 1975-76 through 1983-84.

Table 9 and Figure 10 show the grand total number of special education pupils served in all instructional program models for the 1975-76 through 1983-84 school years. This total has ranged from 27,480 pupils in 1975-76 to 47,480 in 1980-81. Reductions from the prior year's total number served occurred in 1981-82 and 1982-83 as a result of the reevaluation of approximately 4,000 learning disabled students but increased again in 1983-84. The overall mean number of pupils served in all instructional models equals 41,272 pupils from 1975-76 through 1983-84. The mean for the mildly handicapped equals 80.33 percent of the total mean with 14.19 percent and 5.48 percent

in the moderately and severely handicapped categories respectively.

#### Budget Information

Figure 11 represents regular program budgets in Iowa's public elementary and secondary schools from the 1975-76 through 1983-84 school years. These figures were calculated by deducting funds earmarked for special education from the total controlled budget of each school district. Total regular program budgets increased from \$693,531,362 in 1975-76 to \$1,022,398,633 in 1983-84. This represents a 47.42 percent increase during the nine year period.

Figure 12 represents special education instructional budgets from 1975-76 through 1983-84 school years. Special education budgets (weighted dollars generated) increased from \$64,279,072 in 1975-76 to \$176,194,748 in 1983-84. This represents an increase of 174.11 percent during the nine year period.

Figure 13 shows the percentage of school districts total instructional budgets which are devoted to special education instructional programs. This percentage has ranged from 8.48 percent in 1975-76 to 14.70 percent in 1983-84. An increase has occurred each year in the percentage of the total instructional funds devoted to special education except for a slight dip from 14.53 percent in 1981-83 to 14.29 percent in 1982-83. Over the nine year period, special education instructional budgets averaged 12.47 percent of total instructional budgets.

Figure 14 compares regular and special education instructional program budget growth from 1975-76 through 1983-84. The figures represent the percentage of growth from the previous year. Special education budget growth has been much greater than regular program budget growth in all years except 1982-83 when special education budgets grew 2.44 percent over the previous year, and regular program budgets grew 4.49 percent.

The percentage of increase for special education ranged from 2.44 percent in 1982-83 to 34.90 percent in 1976-77. The percentage of increase for regular program budgets ranged from 0.53 percent in 1977-78 to 8.80 percent in 1980-81.

Table 10 and Figures 15, 16, and 17, compares deflated regular and special education instructional program budgets from 1975-76 through 1983-84. Actual budget dollar amounts were deflated by the mean implicit price deflator (for overall gross national product) for the two calendar years comprising one half each of the school years. Regular program deflated budgets declined 13.26 percent from \$537,329,637 in 1975-76 to \$466,082,528 in 1983-84 while special education deflated budgets increased 61.28 percent from \$49,801,714 to \$80,322,186 during the same period. Figures 15 and 16 represent these dollar amounts. Figure 17 depicts the percent of deflated budget growth from each previous year beginning with 1976-77.

Only the 1976-77 year represented regular program deflated budget growth during this period. All subsequent years experienced a

decline ranging from .39 percent to 5.72 percent. Special education instructional program budgets experienced an increase in deflated budget growth each year ranging from 27.85 percent in 1976-77 to 0.03 percent in 1981-82 except for a decline of 2.35 percent in 1982-83.

In contrast, the sum of each year's regular program deflated budget growth is a decline of 13.91 percent, while the sum of each years' special education deflated budget growth is an increase of 52.25 percent.

Table 11 shows the breakdown of special education weighted funds between the amount generated by the 1.0 (headcount) weighting which is equivalent to regular program fund generation and the amount generated by the additional weighting above the 1.0 (headcount) weighting. For example, in 1975-76 a total of \$64,279,072 was generated and subsequently earmarked for special education instructional budgets. Of that amount, \$32,538,165 was generated for the 1.0 weighting, an amount that would have been generated for regular education if no handicapped pupils were identified. \$31,740,907 in additional funds were generated for the weighting above the 1.0; in 1975-76 the additional weightings were .8, 1.2, and 3.4 for mildly, moderately, and severely handicapped pupils respectively (see Table 3).

The percentage of total funds earmarked for special education instructional programs that was generated by the 1.0 weighting ranged from 49.56 percent in 1976-77 to 53.99 percent in 1979-80.

Consequently, the percentage of total funds generated by additional weightings above the 1.0 ranged from 46.01 percent in 1979-80 to 50.44 percent in 1976-77.

Tables 12, 13, 14, and 15 show the receipts generated for each special education program model. Generation of funds specifically for supplemental assistance programs began in 1979-80 and have increased from \$413,472 then to \$1,156,620 in 1983-84, a 179.73 percent increase. Funds generated for resource teaching programs have grown from \$34,233,833 in 1975-76 to \$89,396,830 in 1983-84. This represents a 161.14 percent increase. Special class with integration program funds have increased from \$14,236,802 to \$34,128,390 or 139.72 percent.

In the moderately handicapped category, \$9,216,622 was generated for school age programs in 1975-76 and \$23,538,084 in 1983-84. This represents an increase of 155.39 percent. Funds generated for preschool moderately handicapped programs increased from \$495,180 in 1976-77 (when those funds were separated from those generated for severely handicapped preschool programs) to \$6,616,375 in 1983-84. This is an increase of 1236.16 percent.

Funds generated for the severely handicapped category increased from \$1,159,769 to \$3,043,139 and \$5,432,046 to \$18,315,310 for the preschool and school age programs respectively during this period. These amount to increases of 162.39 percent in the preschool programs and 237.17 percent in the school age programs.

The total columns on Tables 12, 13, and 14 show the total receipts generated for each weighted category: mildly handicapped, moderately handicapped, and severely handicapped respectively. Over the nine year period of 1975-76 through 1983-84, \$1,125,441,472 was generated for special education instructional programs: 76.93 percent or \$820,792,065 for mildly handicapped programs; 15.20 percent or \$177,013,821 for moderately handicapped programs; and 11.87 percent or \$133,635,595 for severely handicapped programs.

Table 15 reports the total funds generated for all special education instructional programs from 1975-76 to 1983-84 and correspond with Figure 17. These funds increased from a total of \$64,279,072 to \$176,194,748 or 174.11 overall.

#### Expenditure Information

Tables 16, 17, 18, and 19 show special education instructional expenditures by program model from 1975-76 through 1983-84. Specification of expenditures for supplemental assistance programs began in 1979-80 with \$474,785 reported and grew to \$1,523,616 in 1983-84. This represents an increase in supplemental assistance expenditures of 220.91 percent.

Expenditures for resource teaching and special class with integration programs increased from \$33,706,995 to \$89,419,313 and from \$11,894,117 to \$33,884,675 respectively. Percentage increases from 1975-76 to 1983-84 equal 165.28 percent for the resource

teaching programs and 184.89 percent for the special class with integration programs.

Table 17 shows the special education expenditures for the moderately handicapped categories, school age and preschool programs. Expenditures for the school age programs increased 182.27 percent from \$8,571,076 to \$24,193,214. Preschool instructional programs for moderately handicapped pupils increased from \$301,042 in 1975-76 to \$6,345,118 in 1983-84. This represents an increase of 2007.72 percent from 1975-76.

Expenditures for instructional programs for severely handicapped pupils both preschool and school age are depicted in Table 18. Preschool expenditures increased from \$935,841 to \$2,688,825 while school age expenditures increased from \$3,604,821 to \$18,527,984. These figures equal increases of 187.32 percent for the preschool and 413.98 percent for the school age severely handicapped programs from 1975-76 to 1983-84.

The total columns of Tables 16, 17, and 18 show the total expenditures for each special education weighted category; mildly handicapped, moderately handicapped, and severely handicapped respectively. Over the nine year period of 1975-76 through 1983-84, \$1,101,687,941 was expended for special education instructional programs: 73.59 percent or \$810,749,771 for mildly handicapped programs; 16.04 percent or \$176,744,204 for moderately handicapped programs; and 10.37 percent of \$114,193,966 for severely handicapped

programs.

Table 20 reports the special education instructional expenditures in dollars for each year, 1976-77 through 1983-84 by object classification comparable information is not available for 1975-76. Salaries and employee benefits, expenditures grew from \$22,406,892 to \$54,235,346 and from \$3,076,350 to \$10,666,325 respectively. Employee travel less than doubled from \$83,136 to \$146,315 and expenditures for supplies/material items went from \$1,872,963 to \$2,290,459. Expenditures for contracted service/non tuition expanded from \$190,078 to \$348,538. Pupil transportation expenditures increased over three and one-half time from \$2,124,768 to \$7,816,910 while capital outlay expenditures more than doubled from \$789,535 to \$1,631,884. Indirect and administration expenditures increased from \$208,897 to \$792,440 and \$165,102 to \$558,025 respectively.

Expenditures from special education budgets for the costs incurred by the regular program on behalf of handicapped students such as integration, regular transportation, facility maintenance, and ordinary administration categories is determined by an accounting formula used by all school districts. These costs are called regular program expenditures and increased from \$32,214,285 to \$63,619,899.

Tuition expenditures for handicapped pupils served by agencies other than the resident district increased from \$15,652,467 in 1976-77 to \$34,476,604 in 1983-84. 50.28 percent of the 1983-84



total tuition expenditures was expended to AEA 4, 7, and 10, which operated most of the instructional programs in behalf of their constituent districts.

Figures 18, 19, 20, 21, and 22 depict in pie graph form the percentage of expenditures by object classification: 1976-77 and 1977-78 data are included in Figure 18; 1978-79 and 1979-80 data in Figure 19, 1980-81 and 1981-82 data in Figure 20; 1982-83 and 1983-84 data in Figure 21; and a composite of 1976-77 through 1983-84 is represented in Figure 22.

Only small differences exist between the composite graph in Figure 22 and the component graphs in Figures 18-21. The percentage of total expenditures devoted to regular program costs went down from 41.53 percent in Figure 18 to 38.72 percent in Figure 22 while salaries increased from 28.35 percent of total expenditures to 30.03 percent when a comparison with the same year is made. The other expenditure categories remained even more constant from 1976-77 through 1983-84.

Table 21 depicts the amount of the 1.0 generated funds transferred to the regular program of school districts as regular program expenditures (see Appendix F). Comparable figures are not available for 1975-76. In 1976-77, \$42,975,884 was generated for the 1.0 headcount of handicapped pupils. Of this amount, \$32,214,285 or 74.96 percent was transferred to districts' regular program budgets to be expended in support of handicapped pupils for integration,

facility, regular transportation, and administration costs. \$10,761,599 or 25.04 percent remained available for other direct special education program costs in addition to the funds generated for the additional weighting above the 1.0. In 1983-84, 68.01 percent of the 1.0 funds was transferred to districts' regular programs, and 31.99 percent remained available for special education direct program expenditure.

Tables 22-28 shows average expenditures per pupil by program models. Three different averages are reported for each program model: the average expenditures per pupil generated funds, the average expenditures per pupil served, and the mean of the other two averages. The expenditure per pupil generating funds is an inflated amount since the number generating funds is based on counts taken on one day of the school year. The expenditures per pupil served is a deflated amount since the service count is not unduplicated and represents composite numbers for the school year. The most likely expenditure per pupil is the average of the other two.

Table 29 shows the total expenditures per pupil for all program models from 1975-76 through 1983-84. All three averages increased each year over the preceding year's average expenditure per pupil. The range of expenditures per pupil generating funds was \$2,080 to \$4,238. The range of expenditures per pupil was \$2,148 to \$3,784 while the range of mean expenditures per pupil was \$2,114 to \$4,011.

Balance of Funds Information

Tables 30-32 depict the balance of special education instructional funds for each year 1975-76 through 1983-84 by program model and weighted category. Balances are calculated by subtracting total expenditures from total receipts or funds generated. Negative signs at the right of a figure indicates a deficit balance of funds; expenditures exceeding receipts.

Table 30 indicates deficit balances which occurred in supplemental assistance programs each year since the model was established as a separate one; the deficit balances have grown from \$61,312 to \$366,996. Deficit balances have occurred only twice in resource teaching programs and once in special class with integration models. In total, programs for the mildly handicapped generated more funds than was expended in six out of nine years.

Table 31 reports the data for moderately handicapped programs. Here deficits have occurred each year in the school age programs since 1978-79 and in five out of nine years in preschool programs. Overall, six out of nine years' balances were deficit balances for moderately handicapped programs.

Table 32 shows the balance of funds for programs for the severely handicapped. The preschool programs here experienced a deficit only in 1975-76 when preschool moderately handicapped expenditures were reported on a combined basis. School age severely handicapped programs have generated more funds than expended in every

year except 1983-84 when the deficit balance totaled \$212,674.

Overall, programs for the severely handicapped have reported balance of funds ranging from \$141,640 in 1983-84 to \$4,410,820 in 1976-77.

Table 33 and Figure 23 depicts the total special education instructional balance of funds for each school year in dollar amounts, while Figures 24, 25, 26, and 27 represents the balance of funds as a percentage of dollars generated (budgeted receipts for mildly, moderately, severely, and the total handicapped programs respectively).

Figure 24 indicates that in 1975-76, 5.92 percent of the funds generated for mildly handicapped programs was unexpended, but by 1983-84 expenditures exceeded receipts by 0.12 percent. The range of balances compared to receipts for moderately handicapped programs ranged from 8.99 percent in 1976-77 to -10.79 percent in 1981-82 as shown in Figure 25. Programs for the severely handicapped reported the largest percentages of balances compared to receipts generated in Figure 26. This ranged from 37.54 percent of the generated receipts left unexpended in 1976-77 to 6.07 percent unexpended in 1982-83.

Figure 27 shows the total balance of funds compared to dollars generated for all special education instructional programs. This percentage ranged from 8.19 percent in 1975-76 to -0.94 percent in 1979-80. The total balance of funds in 1983-84 was about one quarter of one percent less than the total amount generated for all special education instructional programs.

Application of Bernstein's Evaluation  
Criteria and Crowner's Fiscal  
Policy Questions

Bernstein and his colleagues (2) proposed eight funding evaluation criteria which could be used in an assessment of the funding component of any special education delivery system. They cautioned that trade offs between the criteria are necessary and that no funding mechanism can satisfy all of the criteria completely. The following criteria proposed by Bernstein et al. are stated in terms of what a funding mechanism should or should not be. This dissertation author's assessment of how each criterion is met by Iowa's special education instructional funding mechanism, the "Weighting Plan" also follows:

1. A special education funding mechanism should be equitable. Handicapped children have a need for educational services in addition to, or instead of, those provided to regular students. There is considerable variation in educational needs between children with differing handicapping conditions and among children with the same condition. Therefore, equity of educational opportunity for handicapped children requires unequal amounts of expenditures for these children depending

upon their educational needs. Also, if the needs of handicapped children are to be met in an equitable fashion, provisions should be made to insure that educational resources provided a handicapped child are not a function of the wealth of his/her (resident) school district. Several factors insure that general equity is achieved by Iowa's "Weighting Plan." The weightings assigned to students and, therefore, the amount of funding generated for their special education programming needs are based on the severity of the handicapping condition, the type or intensity of instructional program needed, and the student-teacher ratio required for appropriate programming. In a general sense, higher weightings and funding levels are associated with more intensive special education services and lower student-teacher ratios. For example, severely handicapped students who receive all day self-contained programs provided by one teacher per five students generate more than twice the funding of mildly handicapped students who receive much of their education in the regular program and nearly four times as much funding as that of nonhandicapped students. Equity also seems to be achieved when district wealth is considered. Currently, eighty percent (as determined by the Foundation Plan) of weighted funds come from state aid and only twenty percent from local property tax sources. District wealth, therefore, has little influence. Another factor which enhances general equity

in the state's mechanism to deal with special education fund balances. Legislation which was retroactive to 1980-81 balances requires reduction of positive balances and payment of deficit balances in relation to the state aid and property tax mix. Thus, annually, all district's special education accounts are brought to zero balance level with state aid contribution toward the deficit balances. Districts which need more funds than the amount generated "up front" receive additional funding as a reimbursement "after the fact".

2. A special education funding mechanism should be comprehensive. A special education delivery system should accommodate the full range of exceptional conditions for all handicapped pupils if "appropriateness" of programming is expected. A comprehensive system must include flexible provisions for transportation and mobility aid costs which may vary greatly from district to district. Although comprehensiveness is primarily a programming criterion, the funding level is probably its most important determinant.

Iowa's "Weighting Plan" provides some degree of comprehensiveness of programming. The difference in the weightings are reflective of teacher-pupil ratios and other programming cost variances in a generalized sense. The state's mechanism to deal with balances as explained under the equity criterion also promotes comprehensive programming.

3. A special education funding mechanism should be flexible. A system should be adaptable to changes in factors influencing program costs. These factors include both price level changes over time and price level differences between different geographic areas. The system should be flexible enough to adjust for the variances in the incidence of a given handicap from one region of the state to another. The cost of initiating a new program will usually be higher than those of an existing program because of "start-up" expenditures and should be accommodated by the delivery system also.

Iowa's "Weighting Plan" has met this criteria better since 1980-81 when the provision for payment of advanced state aid during the budget year to districts which experience increases in the number of identified weighted students was implemented. This provision compensates for start up costs of new programs. Price level differences over time is also provided for by the same allowable growth mechanism that influences general education budget growth. The same number of students weighted at the same level will generate more funds each year as the district's cost per pupil is increased by the allowable growth rate. The growth rate is partially determined by the Consumer Price Index. Price level differences between geographic areas is addressed by the "Weighting Plan" through the mechanism dealing with the balance of funds of each district. Another



important factor in determining the flexibility of the "Weighting Plan" is the School Budget Review Committee's authority. Annually, the Committee reviews data and adjusts the weightings as it deems necessary under the limits established by the Code of Iowa.

4. A special education funding mechanism should promote accountability. The prime concern here should be that dollars generated for special education purposes actually reach the children for whom it was intended—a funding mechanism which can identify specific expenditure categories at least simplifies accountability and lends itself toward insuring it.

Iowa's "Weighting Plan" allows for accounting and reporting systems to be in place which identifies specific expenditure categories for each special education program model and, therefore, promotes accountability. The accounting and reporting systems and the "Weighting Plan" together help insure that funds generated for special education purposes actually reach the children for whom the money was intended.

5. A special education funding mechanism should strive to be cost effective. Input-output relationships in the field of education are not as concrete as in some fields of endeavor, but an effort should be made to promote opportunities for improving performance. The delivery system, therefore, should be dynamic enough to encourage productivity. Cost-effectiveness is a

function of the flexibility of a system's programming and the adaptability of the funding levels and formulas. While it may not be possible to design a funding mechanism which will guarantee cost-effectiveness, the mechanism must not at least preclude it. Funding mechanisms which provide no way short of legislative action to change allocation of funds between prescribed categories hinders local decision making directed toward maximizing overall instructional output.

Iowa's "Weighting Plan" provides for some degree of cost-effectiveness. This is primarily a result of the flexibility provided by the review and adjustment authority of the School Budget Review Committee which determines the weighting categories annually. Also, districts may allocate generated funds between program models by over expending in one and under expending in another. All program balances are summed to determine the district's overall balance of funds. This allows for local district officials to make decisions affecting overall instructional output.

6. A special education funding mechanism should be compatible with the total educational finance system. This is especially important when encouragement of the "least restrictive environment" or educational setting is desired. When the two finance systems are not well integrated, incompatible administrative procedures may prohibit participation of pupils

in both special and regular programs to some degree.

Iowa's "Weighting Plan" is compatible, in fact, an integral part of the total education finance system of the state, the Foundation Plan. Special education pupils are funded on a basis comparable to regular program pupils and are affected by the same allowable growth rates, timing of payments, and other provisions of the Foundation Plan. Budgeting, accounting, and reporting procedures are also integrated with those required for general education programs.

7. A special education funding mechanism should not be in conflict with the educational policies of the state. It is essential that policy decisions such as program models, immediate placement procedures, full service goals, etc., be complemented and enhanced by the funding mechanism. The need for consistency between programming goals and funding goals should not be ignored in the design of the funding mechanism.

Most of these issues are addressed under the equity and flexibility criteria. However, initially Iowa's "Weighting Plan" was not completely congruent to the special education policies of the state in one important area. Continuous identification and immediate programming for special education students was mandated by the state, but funds were often not generated until a year or more later. This was due to the utilization of a base year September count for fund generation.

This situation has largely been alleviated since 1980-81 when districts became eligible for increased funding when increased special education enrollments and weightings occurred during the budget year based on December 1 count dates. Also, through an accounting mechanism known as the Regular Program Expenditure Calculation, more special education funds are paid to districts' general education program as those programs provide more integration opportunities for handicapped students. In this way the policies of "least restrictive environment" and "regular education preferred" are at least encouraged monetarily.

8. A special education funding mechanism should avoid needless complexity. The funding of special education programs must involve some complexity since large amounts of monies are transferred between different levels of government. Because of the diversity of needs of children with handicapping conditions, it is extremely difficult to design a simple system for distributing state and local dollars that provide for the particular problems of each child. Consequently, the intent should be to avoid unnecessary complexity, while still accommodating individual differences.

Iowa's "Weighting Plan" is relatively simple. Only three weighted categories exist for special education purposes, currently: 1.7, 2.2, and 3.6. These categories for the mildly,

moderately, and severely handicapped categories have been expanded to seven program models by the Rules of Special Education. Budgeting, accounting, and reporting procedures have made implementation of the "Weighting Plan" more complex, however.

Crowner (10) also suggested the following questions be asked as part of a fiscal policy analysis: 1) What funding base does the state use? 2) What formula does the state apply to the base? 3) What elements do the state allow inside and outside its formula? 4) To what extent is state funding more or less discretionary? and 5) What percent of the local funding comes from which sources? Responses to these questions relative to Iowa's "Weighting Plan" are as follows: 1) the funding base is a pupil base in which funds are generated on the number of identified handicapped pupils requiring special education instruction; 2) the formula applied to the base is a mixed formula because it utilizes a weighted formula developed as an excess cost comparison to regular education funding; 3) and 4) only instructional costs which are not reimbursed from other sources are allowed inside the formula (special education support and related services are funded separately or outside the formula); limited discretion on the expenditure of funds is provided by the definitions of program models and by accounting/reporting procedures; and 5) for 1983-84, seventy-eight percent of the additional weighted funds was provided from state aid and twenty-two percent from property tax

generation. Currently (1985-86), the percentages are eighty and twenty percent respectively.

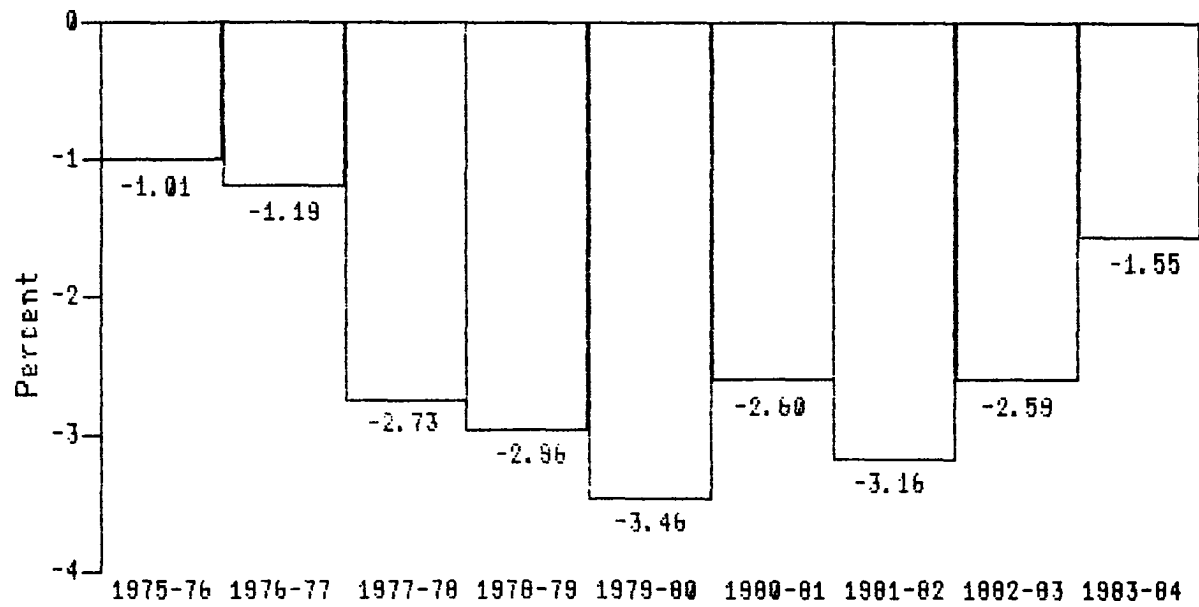


FIGURE 2 PERCENT OF CHANGE FROM PREVIOUS YEAR IN TOTAL PUBLIC ENROLLMENTS  
1975-76 THROUGH 1983-84

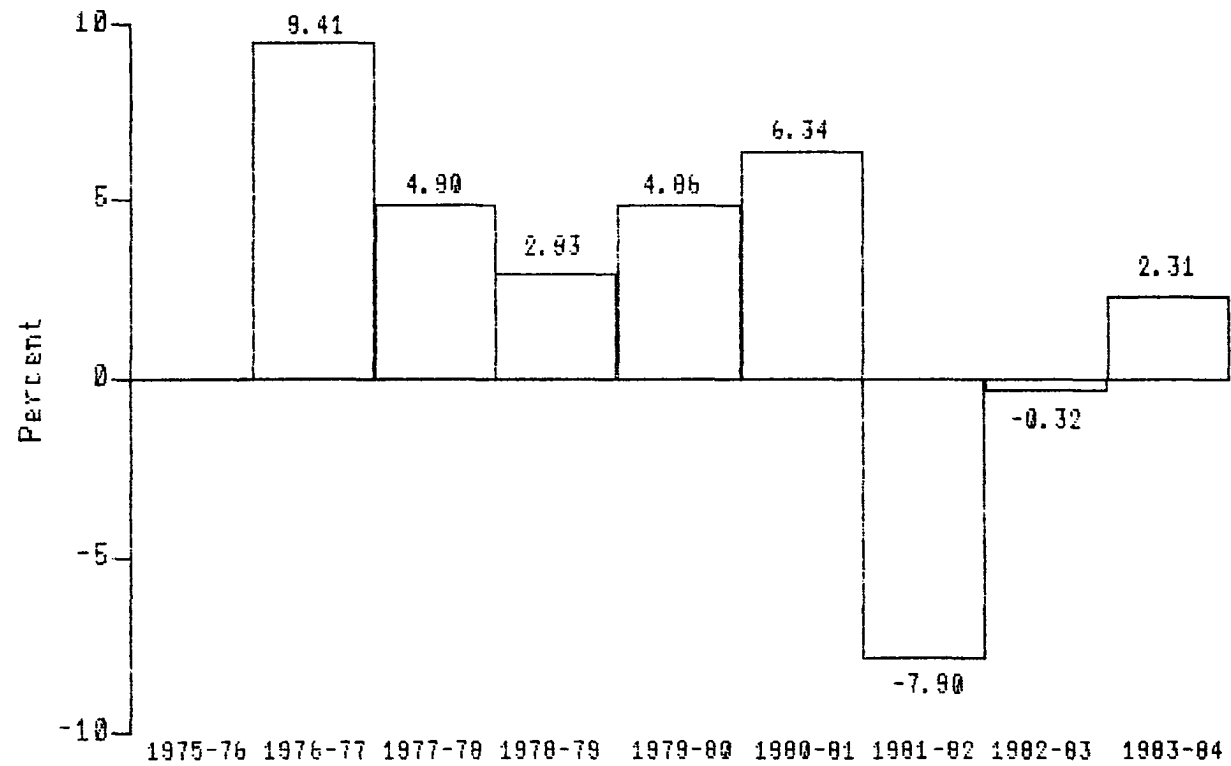


FIGURE 3 PERCENT OF CHANGE FROM PREVIOUS YEAR IN TOTAL WEIGHTED ENROLLMENTS  
1975-76 THROUGH 1983-84



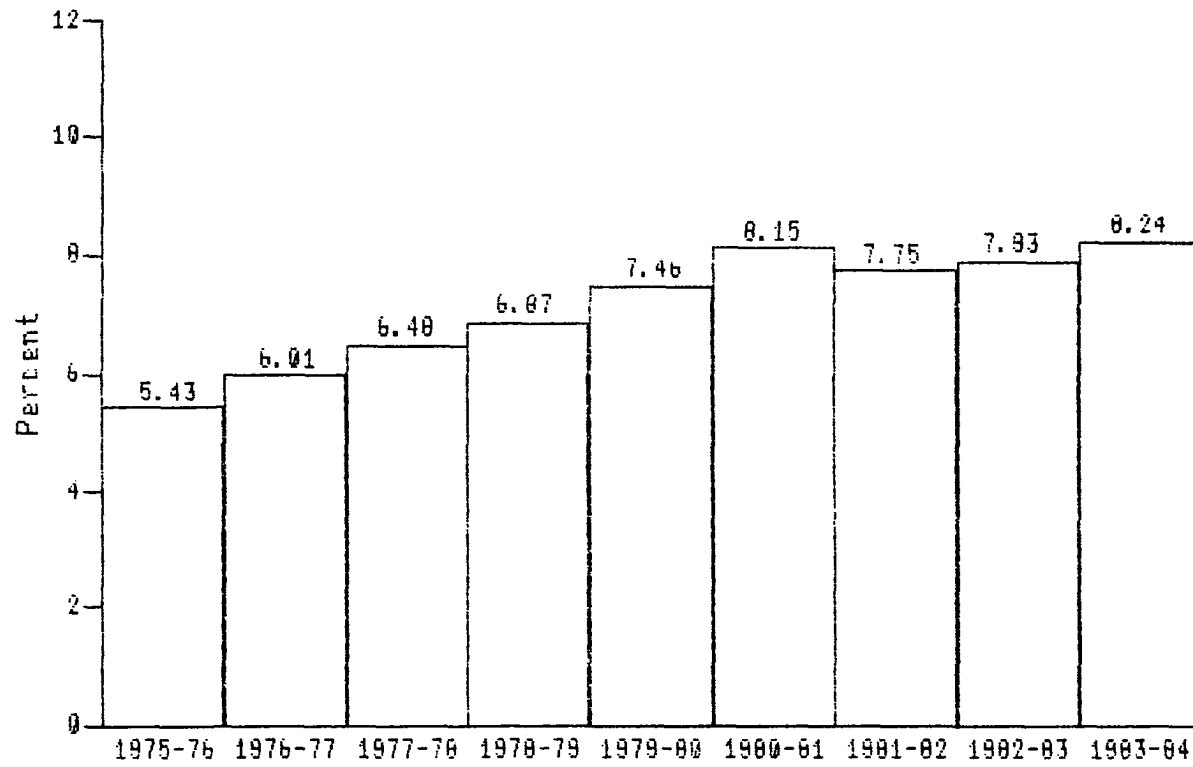


FIGURE 4 PROPORTION OF WEIGHTED ENROLLMENTS (HEADCOUNTS) TO TOTAL PUBLIC ENROLLMENTS 1975-76 THROUGH 1983-84

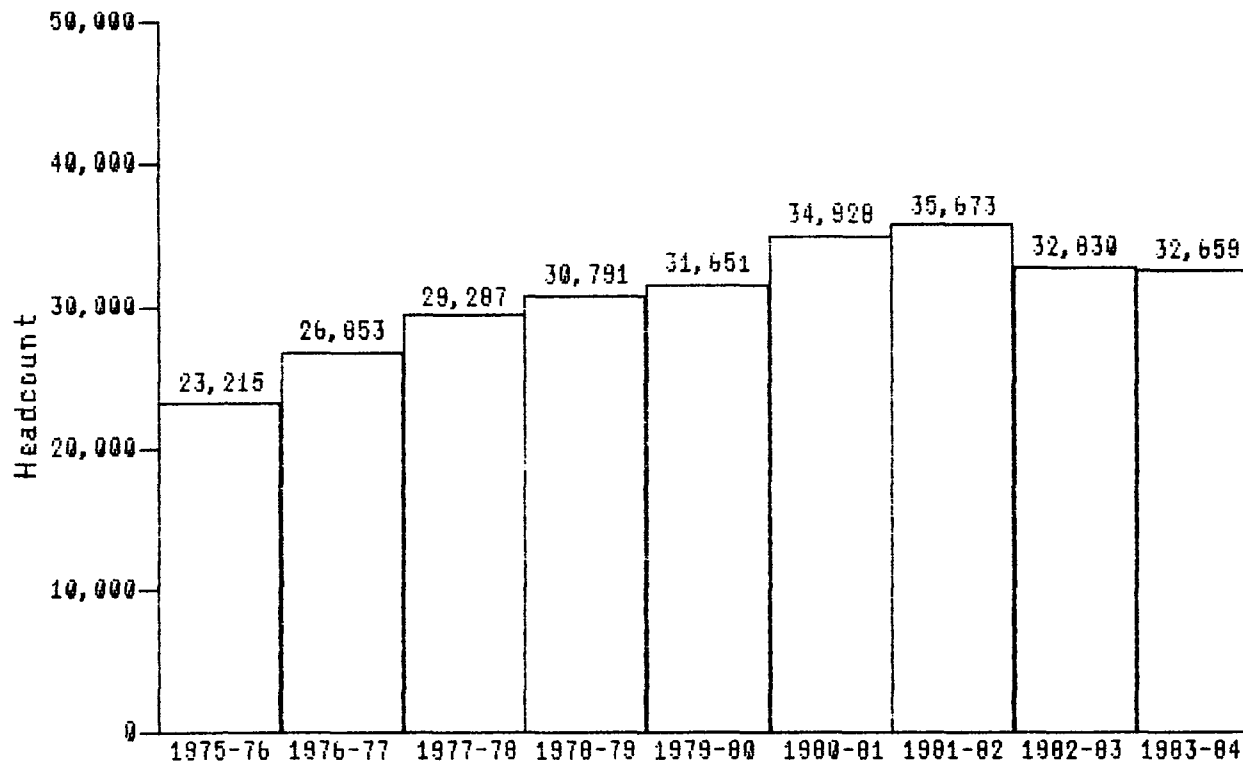


FIGURE 5 NUMBER OF MILDLY HANDICAPPED STUDENTS GENERATING SPECIAL EDUCATION INSTRUCTIONAL DOLLARS 1975-76 THROUGH 1983-84

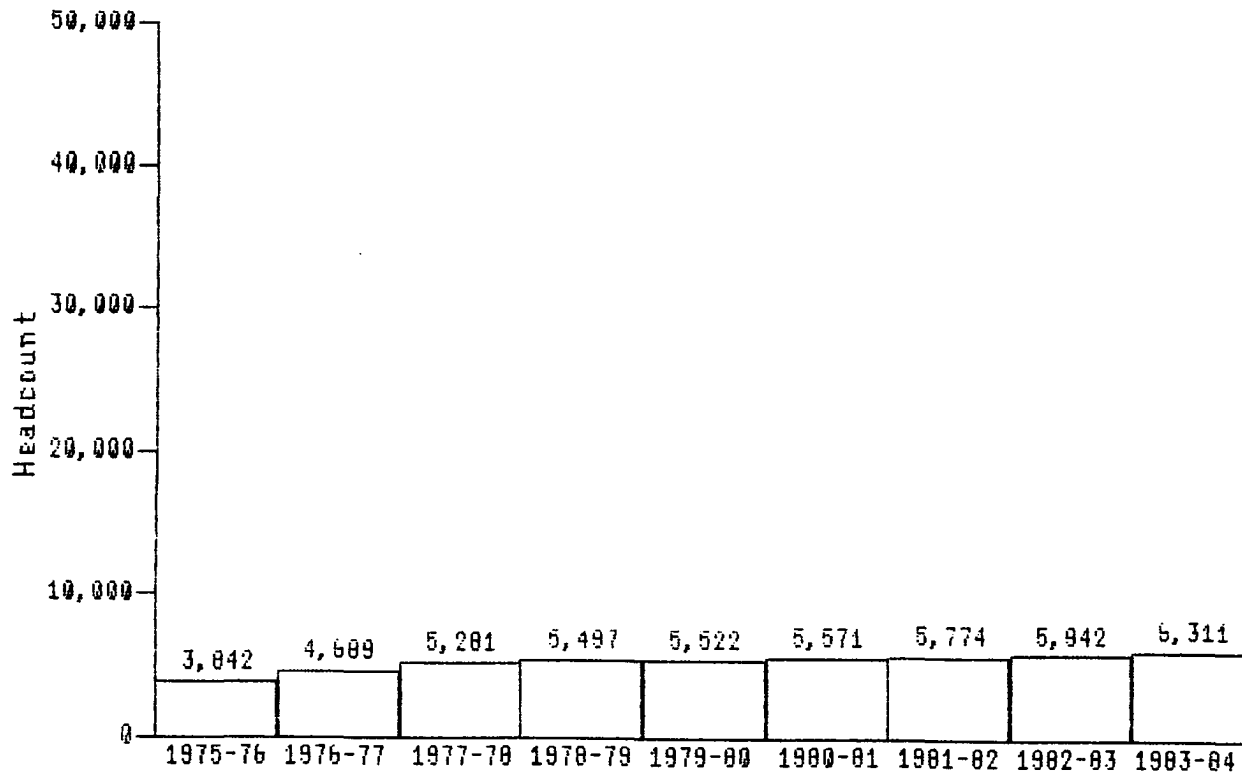


FIGURE 6 NUMBER OF MODERATELY HANDICAPPED STUDENTS GENERATING SPECIAL EDUCATION INSTRUCTIONAL DOLLARS 1975-76 THROUGH 1983-84

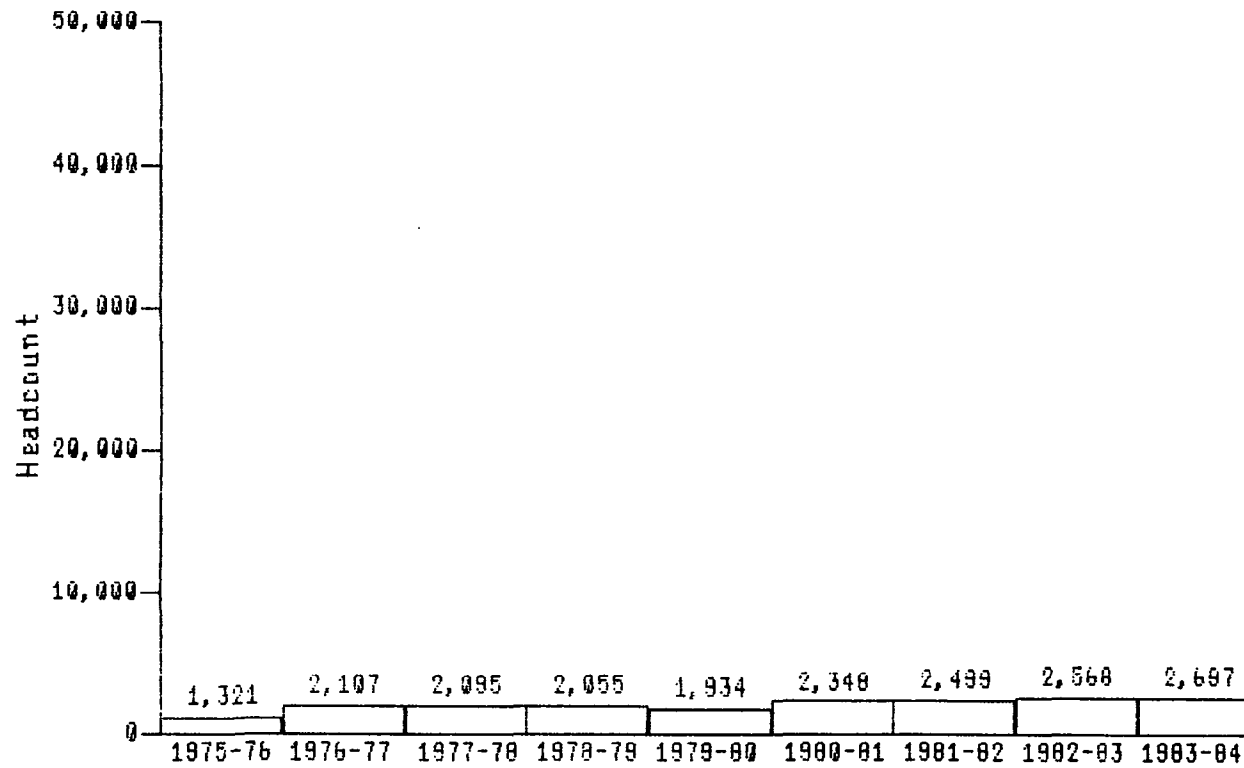


FIGURE 7 NUMBER OF SEVERELY HANDICAPPED STUDENTS GENERATING SPECIAL EDUCATION INSTRUCTIONAL DOLLARS  
1975-76 THROUGH 1983-84

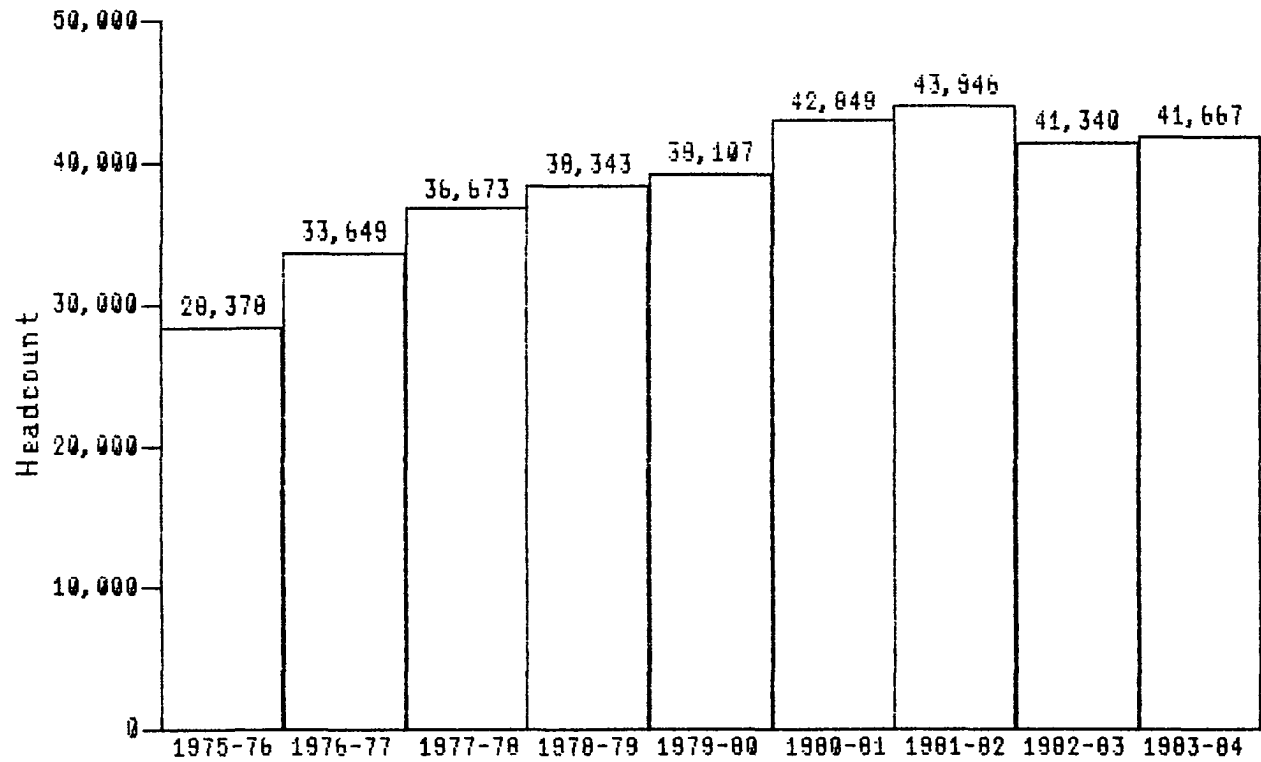


FIGURE 8 TOTAL NUMBER OF HANDICAPPED STUDENTS GENERATING SPECIAL EDUCATION INSTRUCTIONAL DOLLARS 1975-76 THROUGH 1983-84

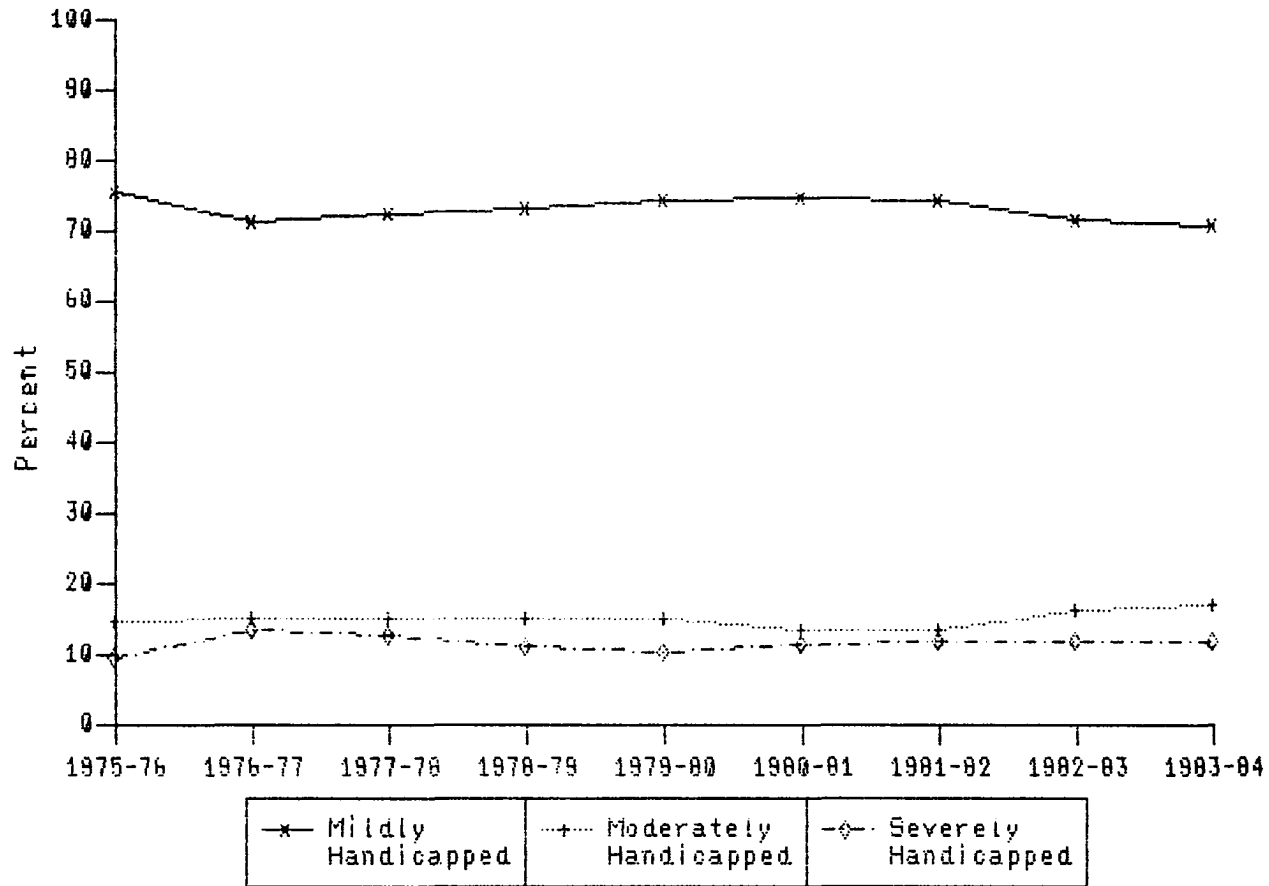


FIGURE 9 PROPORTION OF SPECIAL EDUCATION INSTRUCTIONAL FUNDS GENERATED BY WEIGHTING CATEGORY MILDLY, MODERATELY, SEVERELY HANDICAPPED 1975-76 THROUGH 1983-84

TABLE 6

NUMBER (HEADCOUNT) OF PUPILS SERVED BY PROGRAM  
 MODEL: SPECIAL EDUCATION INSTRUCTION  
 1975-76 THROUGH 1983-84

Mildly Handicapped

	Supplemental Assistance Program	Resource teaching Program	Special Class With Integration	Total
1975-76	NA	15,564	6,659	22,223
1976-77	NA	20,678	6,579	27,257
1977-78	NA	23,571	6,947	30,518
1978-79	NA	26,398	7,554	33,952
1979-80	213	28,116	8,453	36,782
1980-81	290	29,350	9,153	38,793
1981-82	306	26,708	9,309	36,323
1982-83	334	25,711	9,560	35,605
1983-84	333	26,075	10,536	36,944

TABLE 7

NUMBER (HEADCOUNT) OF PUPILS SERVED BY PROGRAM  
 MODEL: SPECIAL EDUCATION INSTRUCTION  
 1975-76 THROUGH 1983-84

Moderately Handicapped

	School Age Self-Contained Class With Little Integration	Preschool Self-Contained Class With Little Integration	Total
1975-76	3,803	195	3,998
1976-77	4,924	204	5,128
1977-78	5,177	563	5,740
1978-79	5,172	707	5,879
1979-80	5,056	805	5,861
1980-81	5,006	1,240	6,246
1981-82	4,798	1,409	6,207
1982-83	5,268	1,554	6,822
1983-84	4,996	1,818	6,814



TABLE 8

NUMBER (HEADCOUNT) OF PUPILS SERVED BY PROGRAM  
 MODEL: SPECIAL EDUCATION INSTRUCTION  
 1975-76 THROUGH 1983-84

Severely Handicapped

	Preschool Self-Contained Class	School age Self-Contained Class	Total
1975-76	121	1,138	1,259
1976-77	338	1,588	1,926
1977-78	332	1,801	2,133
1978-79	380	1,777	2,157
1979-80	320	1,841	2,161
1980-81	335	2,106	2,441
1981-82	330	2,352	2,682
1982-83	360	2,330	2,690
1983-84	495	2,413	2,908

TABLE 9

NUMBER (HEADCOUNT) OF PUPILS SERVED BY PROGRAM  
 MODEL: SPECIAL EDUCATION INSTRUCTION  
 1975-76 THROUGH 1983-84

	Grand Total
1975-76	27,480
1976-77	34,311
1977-78	38,381
1978-79	41,988
1979-80	44,804
1980-81	47,480
1981-82	45,212
1982-83	45,117
1983-84	46,666

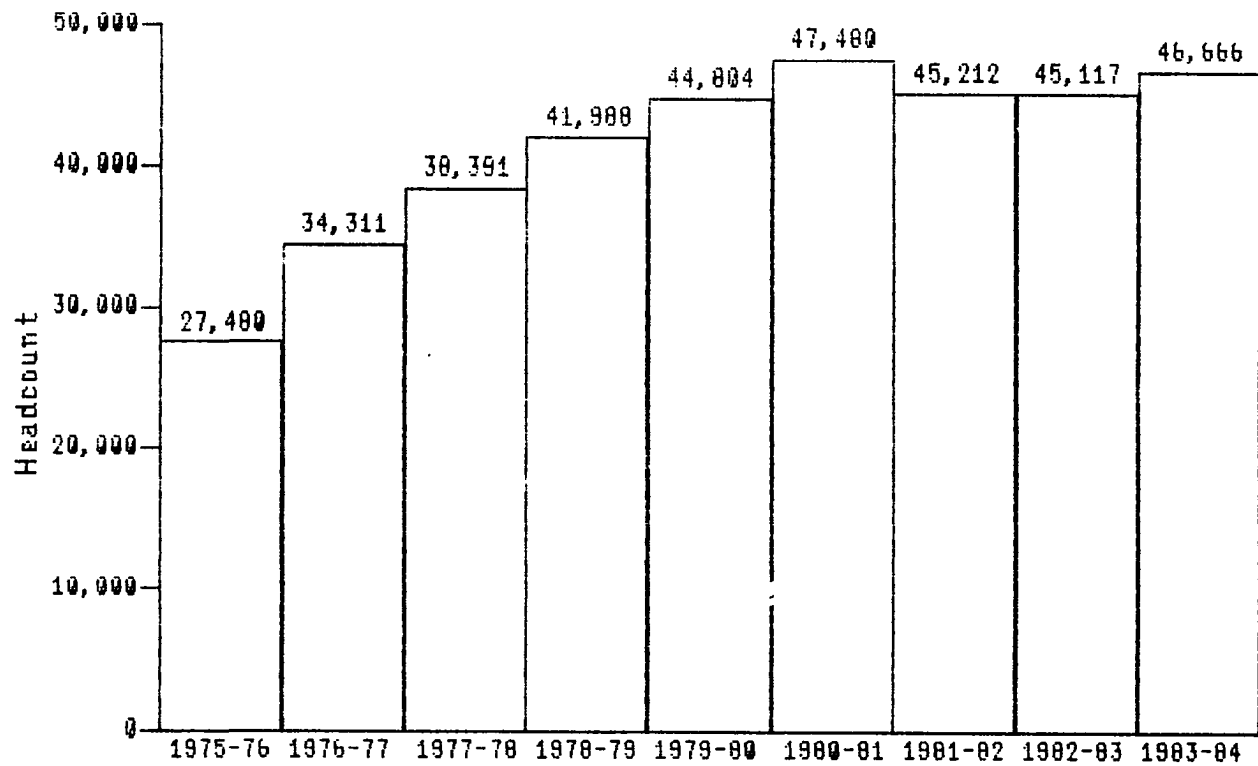


FIGURE 10 NUMBER (HEADCOUNT) OF PUPILS SERVED IN SPECIAL EDUCATION INSTRUCTIONAL PROGRAMS TOTAL 1975-76 THROUGH 1983-84

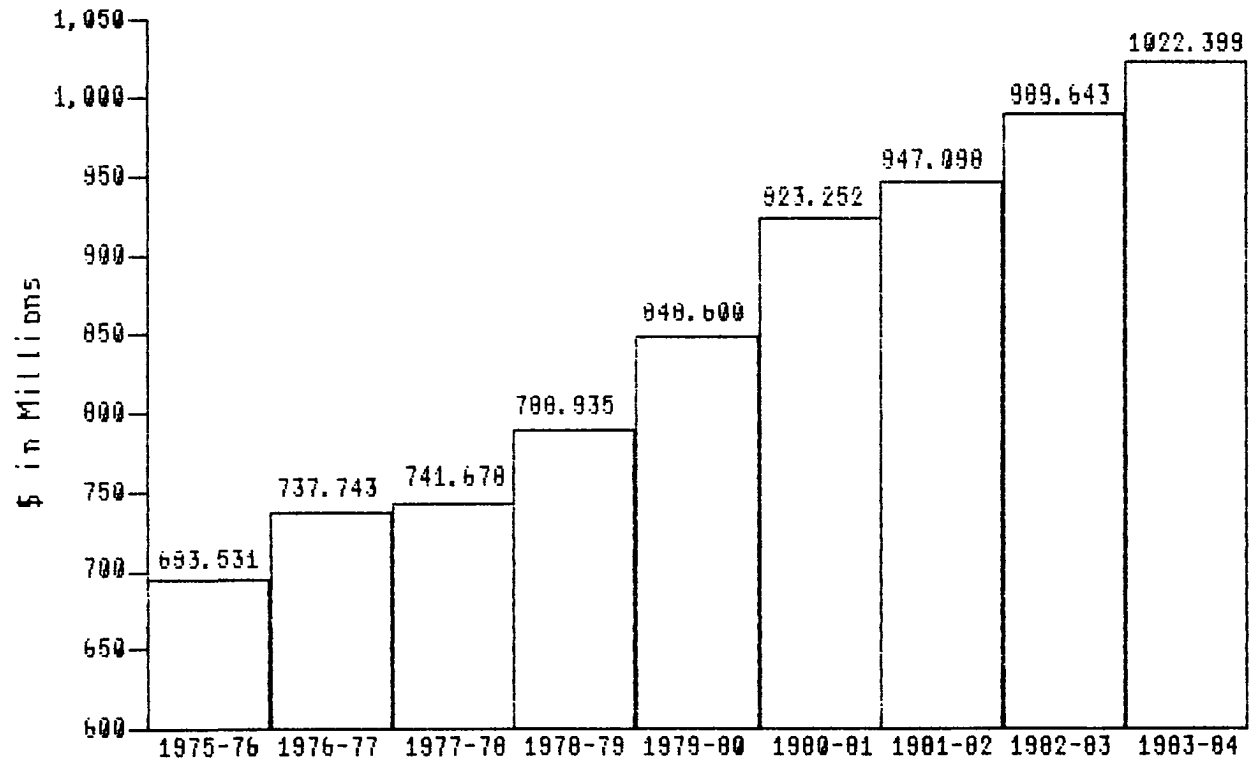


FIGURE 11 REGULAR PROGRAM BUDGET GROWTH  
1975-76 THROUGH 1983-84

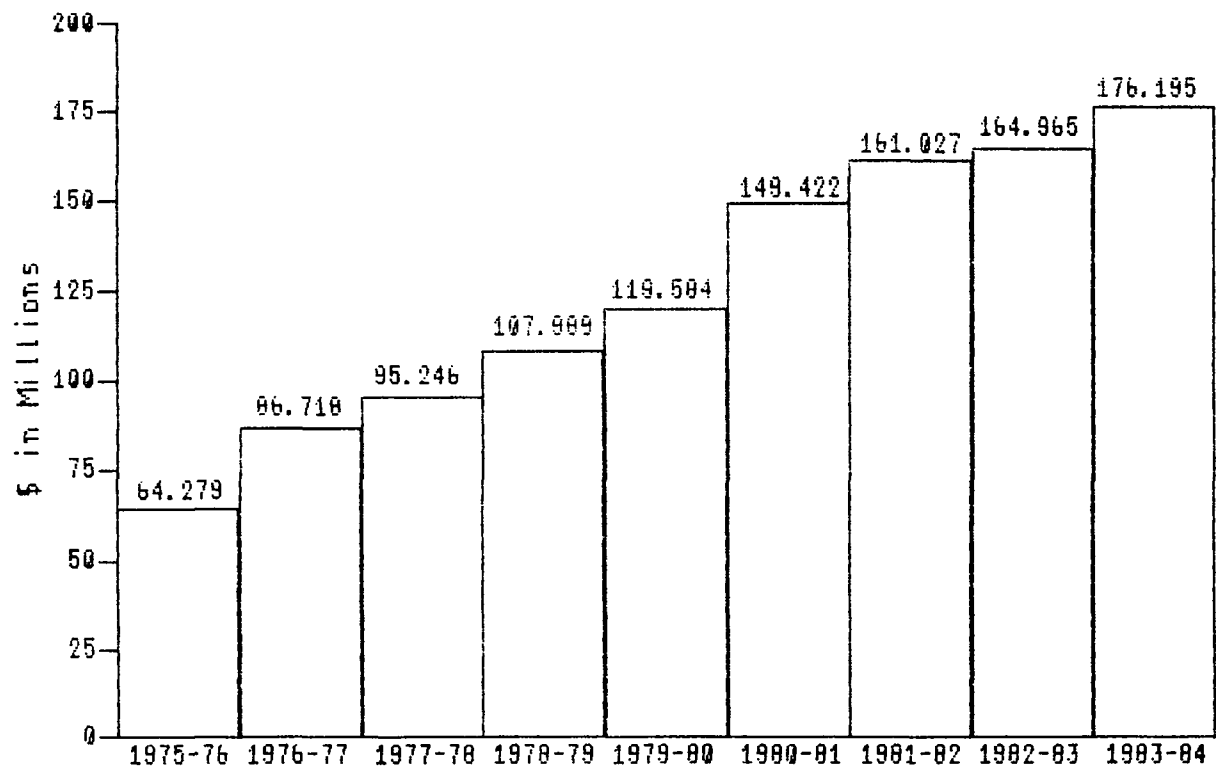


FIGURE 12 DOLLARS GENERATED FOR SPECIAL EDUCATION INSTRUCTION  
1975-76 THROUGH 1983-84

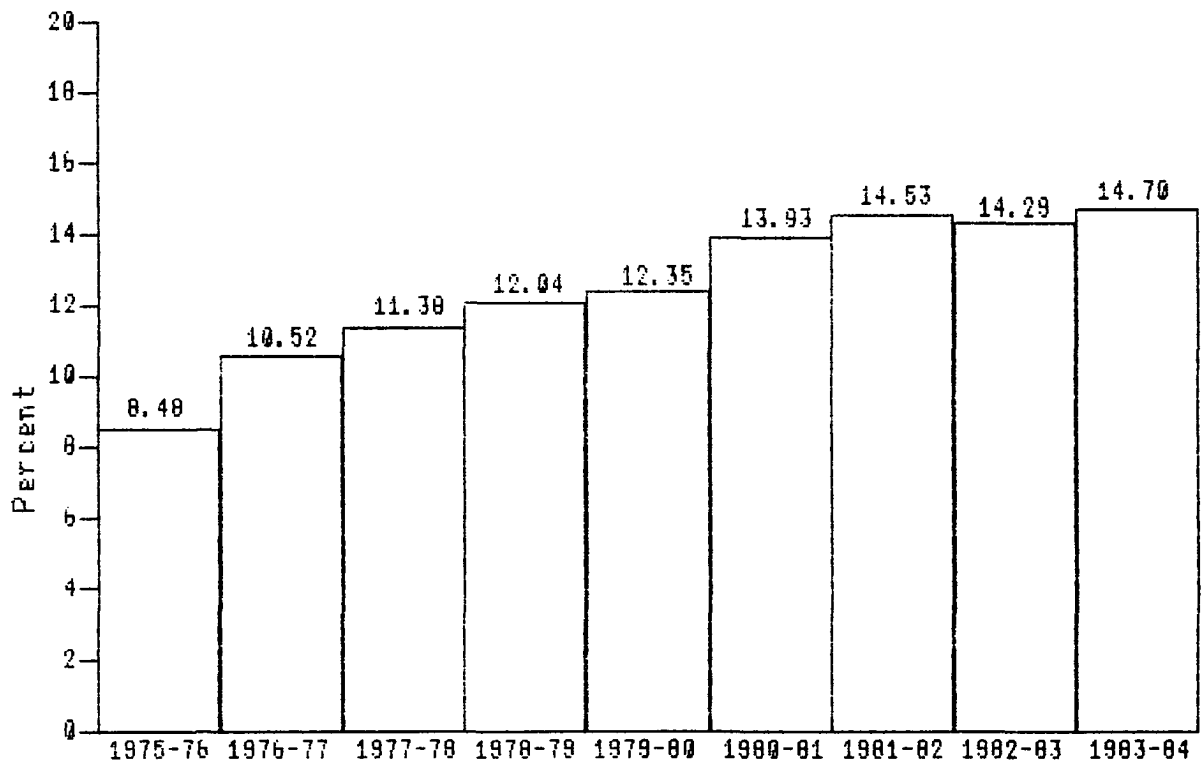


FIGURE 13 PERCENT OF TOTAL INSTRUCTIONAL BUDGETS DEVOTED TO SPECIAL EDUCATION  
1975-76 THROUGH 1983-84

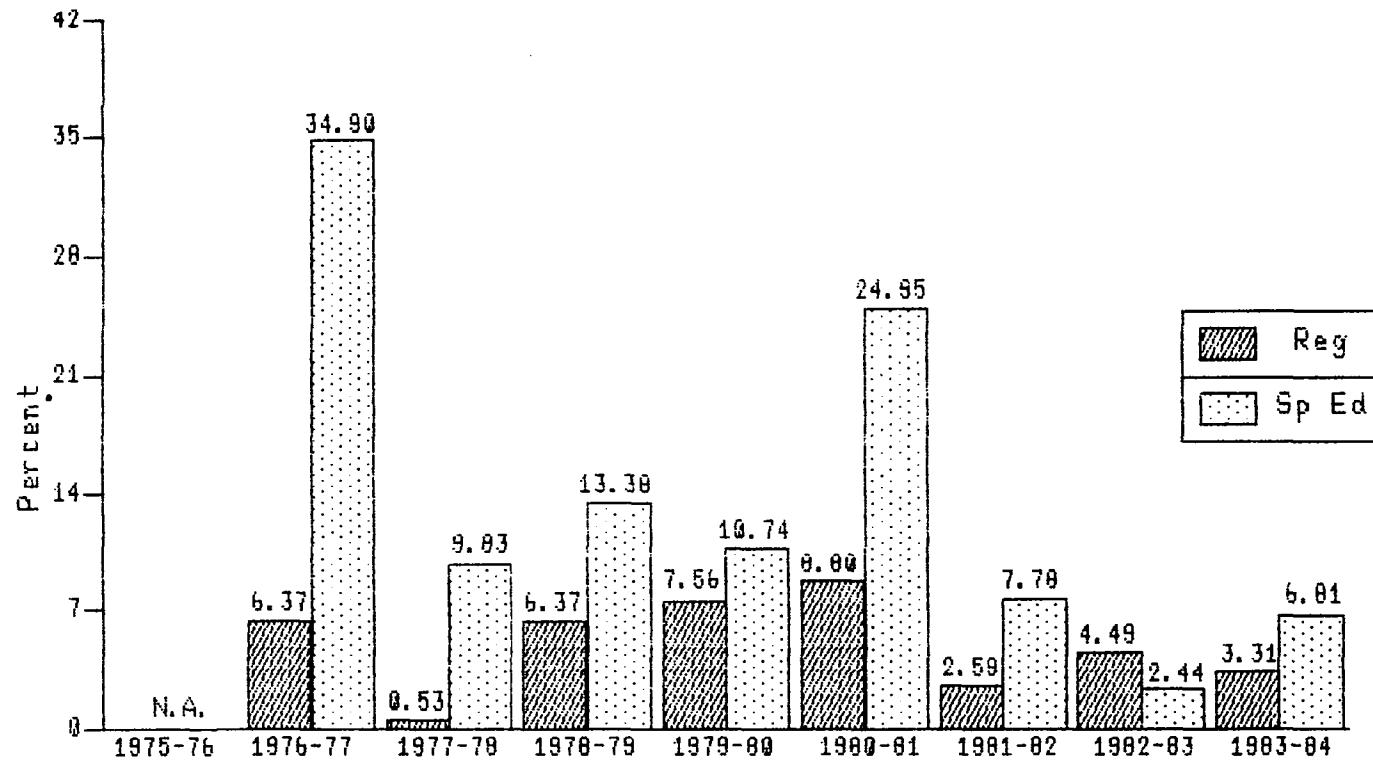


FIGURE 14 PERCENT OF REGULAR AND SPECIAL EDUCATION INSTRUCTIONAL BUDGET GROWTH FROM PREVIOUS YEAR 1975-76 THROUGH 1983-84

TABLE 10

DEFLATED BUDGET GROWTH REGULAR PROGRAM  
AND SPECIAL EDUCATION INSTRUCTION  
FROM PREVIOUS YEARS  
1975-76 THROUGH 1983-84

	Deflated Regular Program	% Change from Previous Year	Deflated Special Education	% Change from Previous Year
1975-76	\$ 537,329,637	—	\$ 49,801,714	—
1976-77	541,661,658	0.81	63,669,786	27.85
1977-78	510,657,090	-5.72	65,578,327	3.00
1978-79	502,762,855	-1.55	68,818,233	4.94
1979-80	496,489,313	-1.25	69,964,619	1.67
1980-81	493,691,324	-0.56	79,800,302	14.20
1981-82	470,047,370	-4.79	79,926,394	0.03
1982-83	468,226,040	-0.39	478,049,346	-2.35
1983-84	466,082,528	-0.46	80,322,186	2.91
<b>TOTALS</b>	<b>\$4,486,947,833</b>	<b>-13.91</b>	<b>\$636,030,907</b>	<b>52.25%</b>



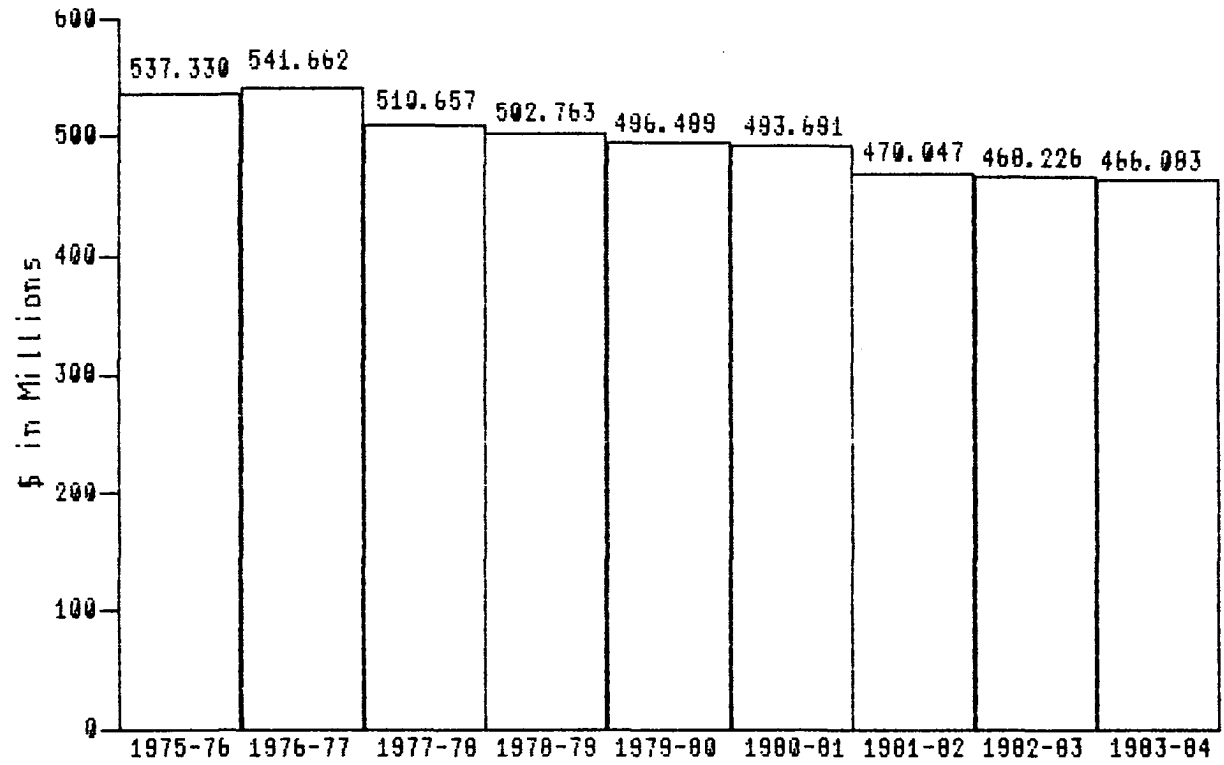


FIGURE 15 REGULAR PROGRAM DEFLATED BUDGET GROWTH  
1975-76 THROUGH 1983-84

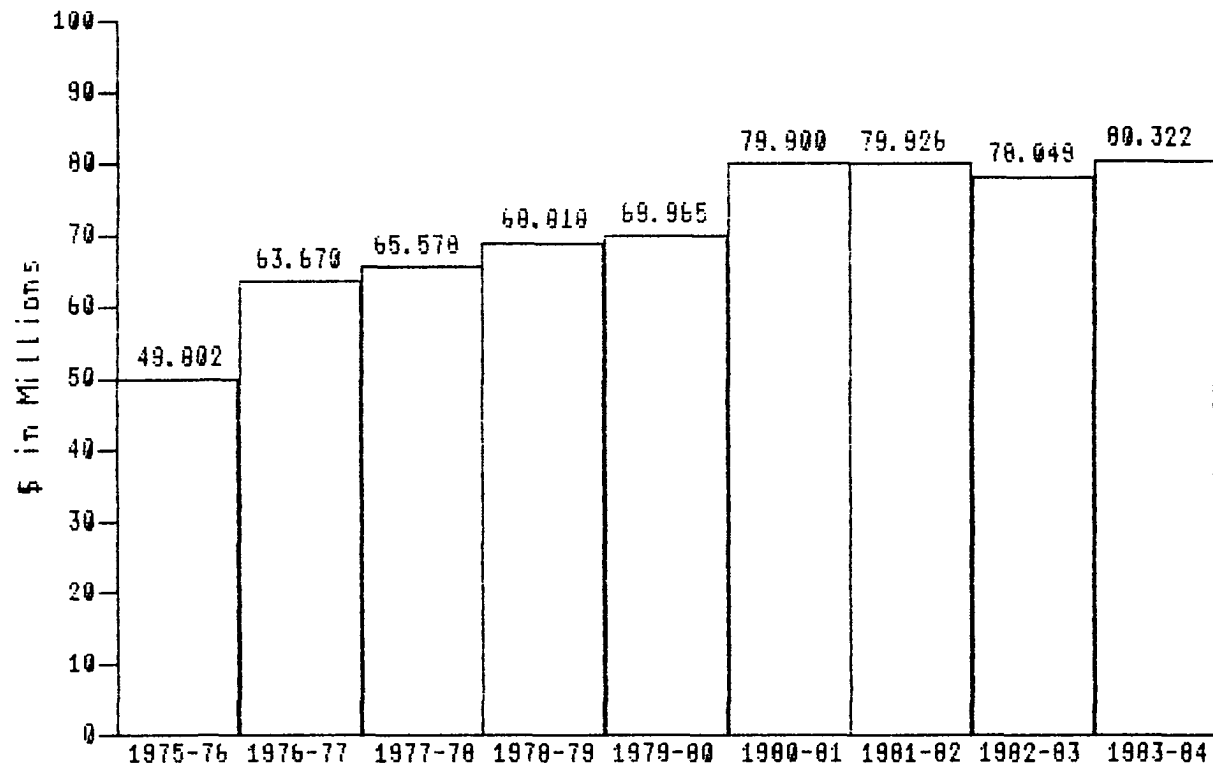


FIGURE 16 SPECIAL EDUCATION (INSTRUCTION) DEINFLATED BUDGET GROWTH  
1975-76 THROUGH 1983-84

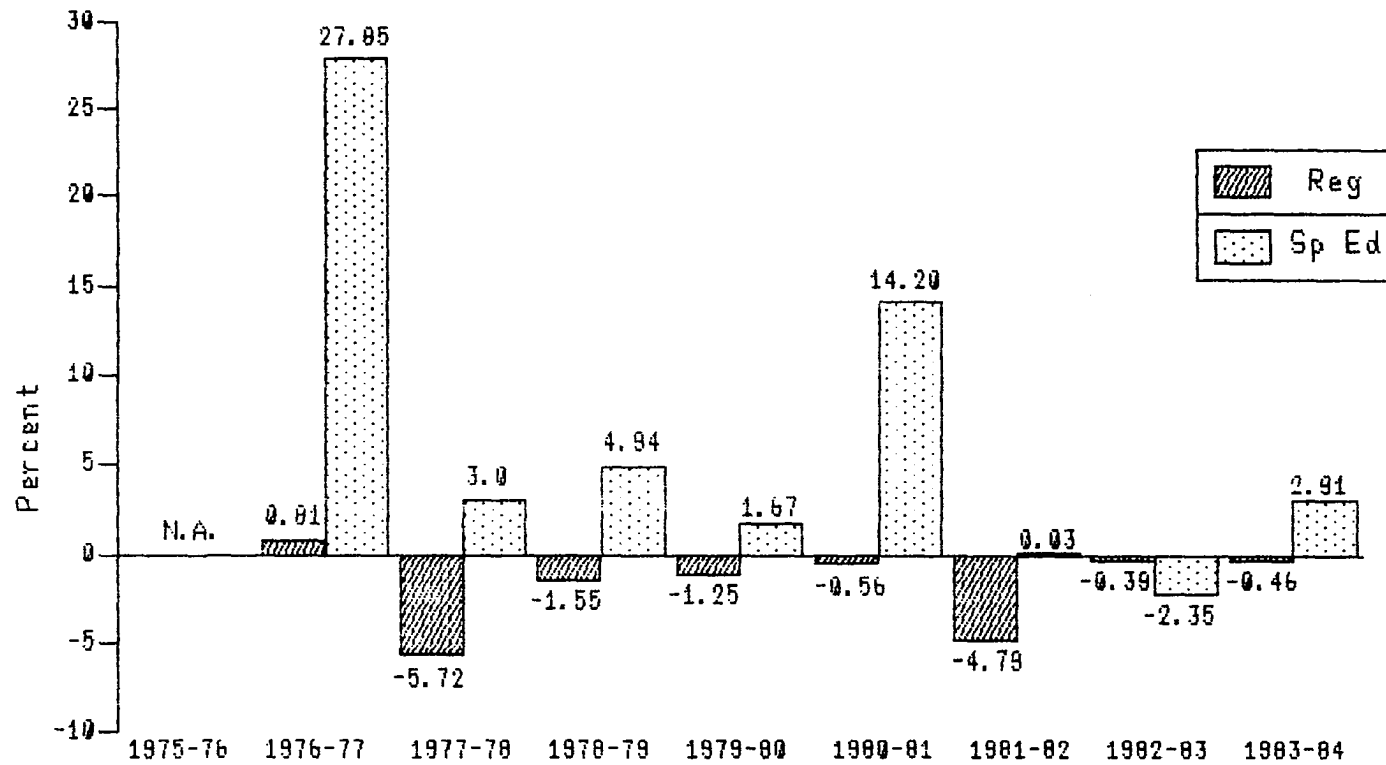


FIGURE 17 PERCENT OF DEFLATED BUDGET GROWTH FROM PREVIOUS YEAR  
1975-76 THROUGH 1983-84

TABLE 11  
 FUNDS GENERATED BY THE 1.0 AND ADDITIONAL  
 WEIGHTINGS SPECIAL EDUCATION INSTRUCTION  
 1975-76 THROUGH 1983-84

	1.0 Funds	Percent of Total Funds	Additional Weighted Funds	Percent of Total Funds	Total Funds
1975-76	\$32,538,165	50.62	\$31,740,907	49.38	\$ 64,279,072
1976-77	42,975,884	49.56	43,742,364	50.44	86,718,248
1977-78	50,525,986	53.05	44,719,976	46.95	95,245,962
1978-79	57,921,805	53.64	50,067,767	46.36	107,989,572
1979-80	64,563,324	53.99	55,020,202	46.01	119,583,526
1980-81	80,451,415	53.84	68,970,133	46.16	149,421,554
1981-82	86,530,652	53.74	74,495,712	46.26	161,026,364
1982-83	87,327,150	52.94	77,637,948	47.06	164,965,098
1983-84	93,547,441	53.09	82,653,242	46.91	176,194,748

TABLE 12

RECEIPTS GENERATED BY PROGRAM MODEL:  
SPECIAL EDUCATION INSTRUCTION  
1975-76 THROUGH 1983-84

Mildly Handicapped

	Supplemental Assistance Program	Resource Teaching Program	Special Class With Integration	Total
1975-76	NA	\$34,233,833	\$14,236,802	\$ 48,470,635
1976-77	NA	47,330,659	14,494,185	61,824,844
1977-78	NA	53,585,708	15,130,398	68,716,106
1978-79	NA	62,206,328	16,932,720	79,139,048
1979-80	\$ 413,472	69,316,523	19,169,824	88,899,819
1980-81	759,604	84,593,529	26,280,933	111,634,066
1981-82	936,555	89,959,192	28,588,128	119,483,875
1982-83	1,155,714	85,921,216	30,864,902	117,941,832
1983-84	1,156,620	89,396,830	34,128,390	124,681,840

TABLE 13

RECEIPTS GENERATED BY PROGRAM MODEL:  
SPECIAL EDUCATION INSTRUCTION  
1975-76 THROUGH 1983-84

Moderately Handicapped

	School age Self-Contained With Little Integration	Preschool Self-Contained With Little Integration	Total
1975-76	\$ 9,216,622	Preschool Comb.	\$ 9,216,622
1976-77	12,647,910	\$ 495,180	13,143,090
1977-78	13,253,116	1,207,127	14,460,243
1978-79	14,703,975	1,783,588	16,487,563
1979-80	16,011,973	2,067,501	18,079,474
1980-81	17,079,405	3,332,179	20,411,584
1981-82	18,023,808	4,213,301	22,237,109
1982-83	21,472,424	5,351,244	26,823,668
1983-84	23,538,084	6,616,375	30,154,459

TABLE 14

RECEIPTS GENERATED BY PROGRAM MODEL:  
SPECIAL EDUCATION INSTRUCTION  
1975-76 THROUGH 1983-84

Severely Handicapped

	Preschool Self-Contained Class	School Age Self-Contained Class	Total
1975-76	\$1,159,769	\$ 5,432,046	\$ 6,591,815
1976-77	1,659,103	10,091,211	11,750,314
1977-78	2,139,863	9,929,750	12,069,613
1978-79	1,857,779	10,505,182	12,362,961
1979-80	1,557,304	11,046,929	12,604,233
1980-81	2,104,025	15,271,879	17,375,904
1981-82	2,224,387	17,098,321	19,322,708
1982-83	2,766,438	17,433,160	20,199,598
1983-84	3,043,139	18,315,310	21,358,449

TABLE 15

RECEIPTS GENERATED BY PROGRAM MODEL:  
SPECIAL EDUCATION INSTRUCTION  
1975-76 THROUGH 1983-84Total Handicapped

	Total
1975-76	\$ 64,279,072
1976-77	86,718,248
1977-78	95,245,962
1978-79	107,989,572
1979-80	119,583,526
1980-81	149,421,554
1981-82	161,026,364
1982-83	164,965,098
1983-84	176,194,748



TABLE 16

EXPENDITURES BY PROGRAM MODEL:  
SPECIAL EDUCATION INSTRUCTION  
1975-76 THROUGH 1983-84

Mildly Handicapped

	Supplemental Assistance Program	Resource teaching Program	Special Class With Integration	Total
1975-76	NA	\$33,706,995	\$11,894,117	\$ 45,601,112
1976-77	NA	46,139,468	13,343,932	59,483,400
1977-78	NA	55,563,407	14,968,886	70,532,293
1978-79	NA	61,099,346	16,898,767	77,998,113
1979-80	\$ 474,785	69,061,771	20,517,798	90,054,350
1980-81	875,228	83,239,497	25,270,797	109,385,522
1981-82	1,162,816	87,298,483	27,025,612	115,477,911
1982-83	1,389,714	85,850,049	30,149,699	117,389,462
1983-84	1,523,616	89,419,313	33,884,675	124,827,604

TABLE 17

EXPENDITURES BY PROGRAM MODEL:  
SPECIAL EDUCATION INSTRUCTION  
1975-76 THROUGH 1983-84

Moderately Handicapped

	School age Self-Contained With Little Integration	Preschool Self-Contained With Little Integration	Total
1975-76	\$ 8,571,076	\$ 301,042	\$ 8,872,118
1976-77	11,412,049	549,530	11,961,579
1977-78	13,220,740	1,143,594	14,364,334
1978-79	15,631,027	1,650,747	17,281,774
1979-80	17,176,825	2,172,740	19,349,565
1980-81	18,793,501	3,782,495	22,575,996
1981-82	19,971,689	4,663,969	24,635,658
1982-83	21,674,832	5,490,016	27,164,848
1983-84	24,193,214	6,345,118	30,538,332

TABLE 18

EXPENDITURES BY PROGRAM MODEL:  
SPECIAL EDUCATION INSTRUCTION  
1975-76 THROUGH 1983-84

Severely Handicapped

	Preschool Self-Contained Class	School Age Self-Contained Class	Total
1975-76	\$ 935,841	\$ 3,604,821	\$ 4,540,662
1976-77	1,017,700	6,321,794	7,339,494
1977-78	1,443,753	7,516,786	8,960,539
1978-79	1,203,780	8,688,545	9,892,325
1979-80	1,305,076	9,996,135	11,301,211
1980-81	1,660,675	12,917,321	14,577,996
1981-82	1,967,417	15,423,445	17,390,862
1982-83	2,326,694	16,647,374	18,974,068
1983-84	2,688,825	18,527,984	21,216,809

TABLE 19

EXPENDITURES BY PROGRAM MODEL:  
SPECIAL EDUCATION INSTRUCTION  
1975-76 THROUGH 1983-84

Total Handicapped

	Total
1975-76	\$ 59,013,892
1976-77	78,784,473
1977-78	93,857,166
1978-79	105,172,212
1979-80	120,705,130
1980-81	146,539,514
1981-82	157,504,431
1982-83	163,528,378
1983-84	176,582,745

TABLE 20

EXPENDITURES BY OBJECT:  
SPECIAL EDUCATION INSTRUCTION  
1975-76 THROUGH 1983-84

	Salaries	Employees Benefits	Employees Travel	Supplies/ Materials	Contracted Service Non-Tuition	Pupil Transportation
1975-76	NA	NA	NA	NA	NA	NA
1976-77	\$22,406,892	\$ 3,076,350	\$ 83,136	\$1,872,963	\$190,078	\$2,124,768
1977-78	26,537,477	4,032,440	86,494	1,881,238	84,442	\$2,867,229
1978-79	31,215,240	4,793,301	89,628	1,898,743	255,537	3,795,892
1979-80	36,964,200	5,990,756	121,193	2,021,580	240,884	4,719,035
1980-81	44,067,831	7,519,851	120,725	1,972,114	250,675	5,834,932
1981-82	47,315,781	8,355,323	119,426	1,945,387	318,975	6,764,873
1982-83	50,347,163	9,492,291	136,119	2,112,342	300,509	6,978,209
1983-84	54,235,346	10,666,325	146,315	2,290,459	348,538	7,816,910

TABLE 20 (Continued)

	Capital Outlay	Indirect Costs	Admini- stration	Regular Program Expenditures	Tuition	Total
1975-76	NA	NA	NA	NA	NA	NA
1976-77	\$ 789,535	\$208,897	\$165,102	\$32,214,285	\$15,652,467	\$ 78,784,473
1977-78	803,059	323,351	416,329	39,490,856	17,334,251	93,857,166
1978-79	760,839	427,840	361,504	41,899,046	19,674,642	105,172,212
1979-80	689,286	597,502	352,396	46,986,508	22,021,790	120,705,130
1980-81	932,491	573,923	362,291	57,962,937	26,941,744	146,539,514
1981-82	1,065,993	653,096	495,131	61,293,041	29,177,405	157,504,431
1982-83	1,476,522	680,707	525,412	60,207,429	31,271,675	163,528,378
1983-84	1,631,884	792,440	558,025	63,619,899	34,476,604	176,582,745

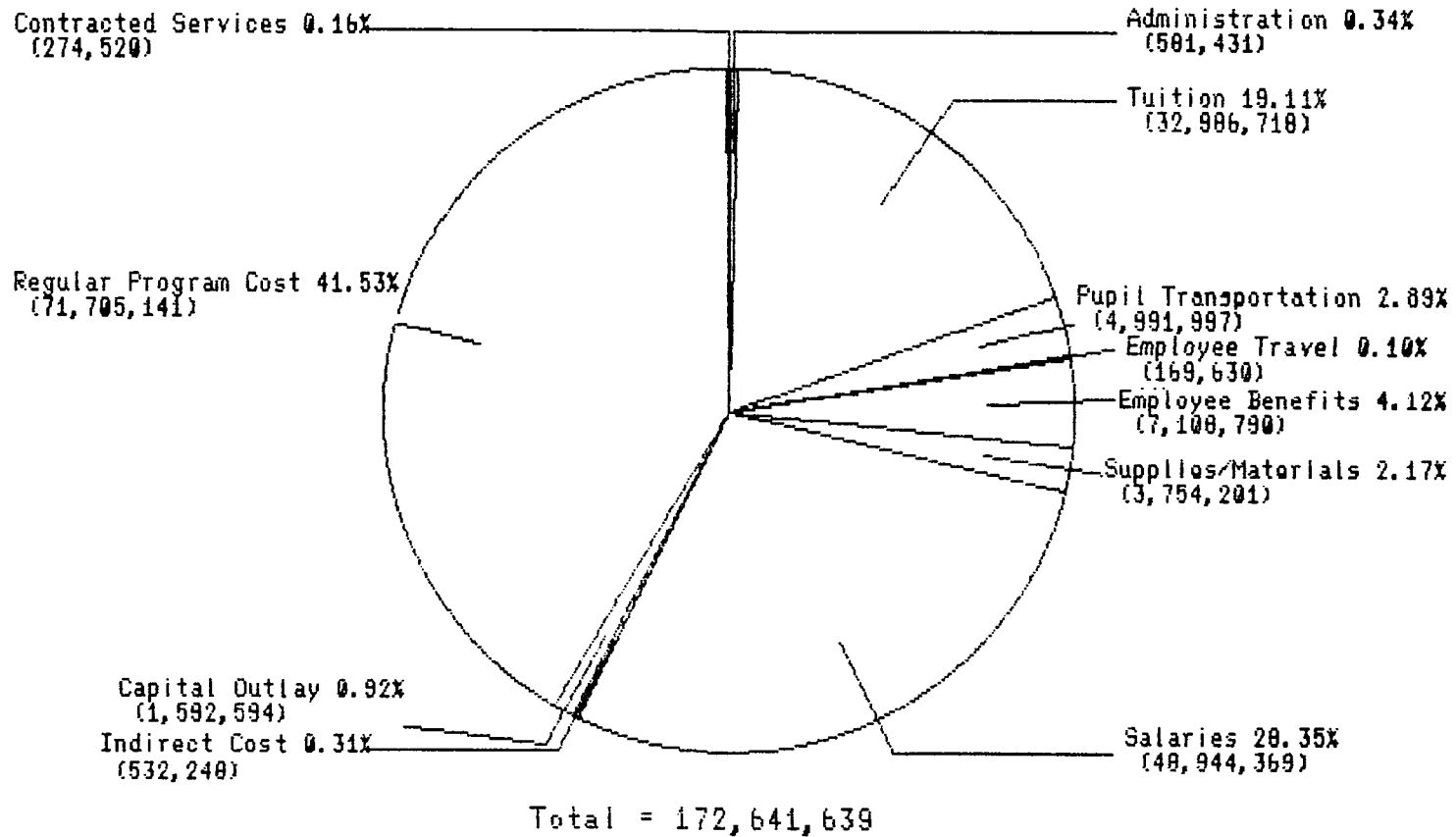


FIGURE 18 EXPENDITURES BY OBJECT: SPECIAL EDUCATION INSTRUCTION  
1976-77 + 1977-78

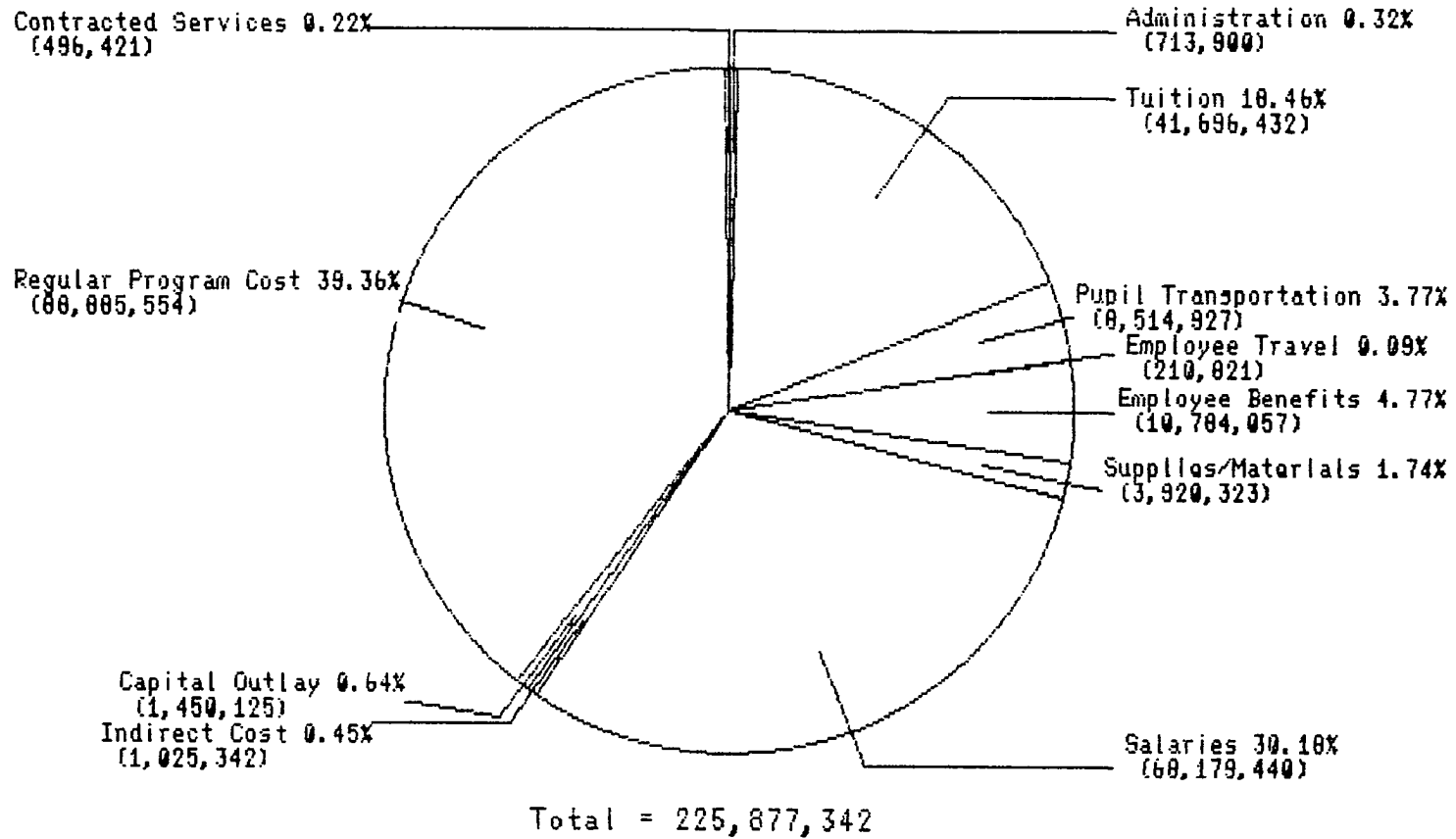


FIGURE 19 EXPENDITURES BY OBJECT: SPECIAL EDUCATION INSTRUCTION  
1978-79 + 1979-80



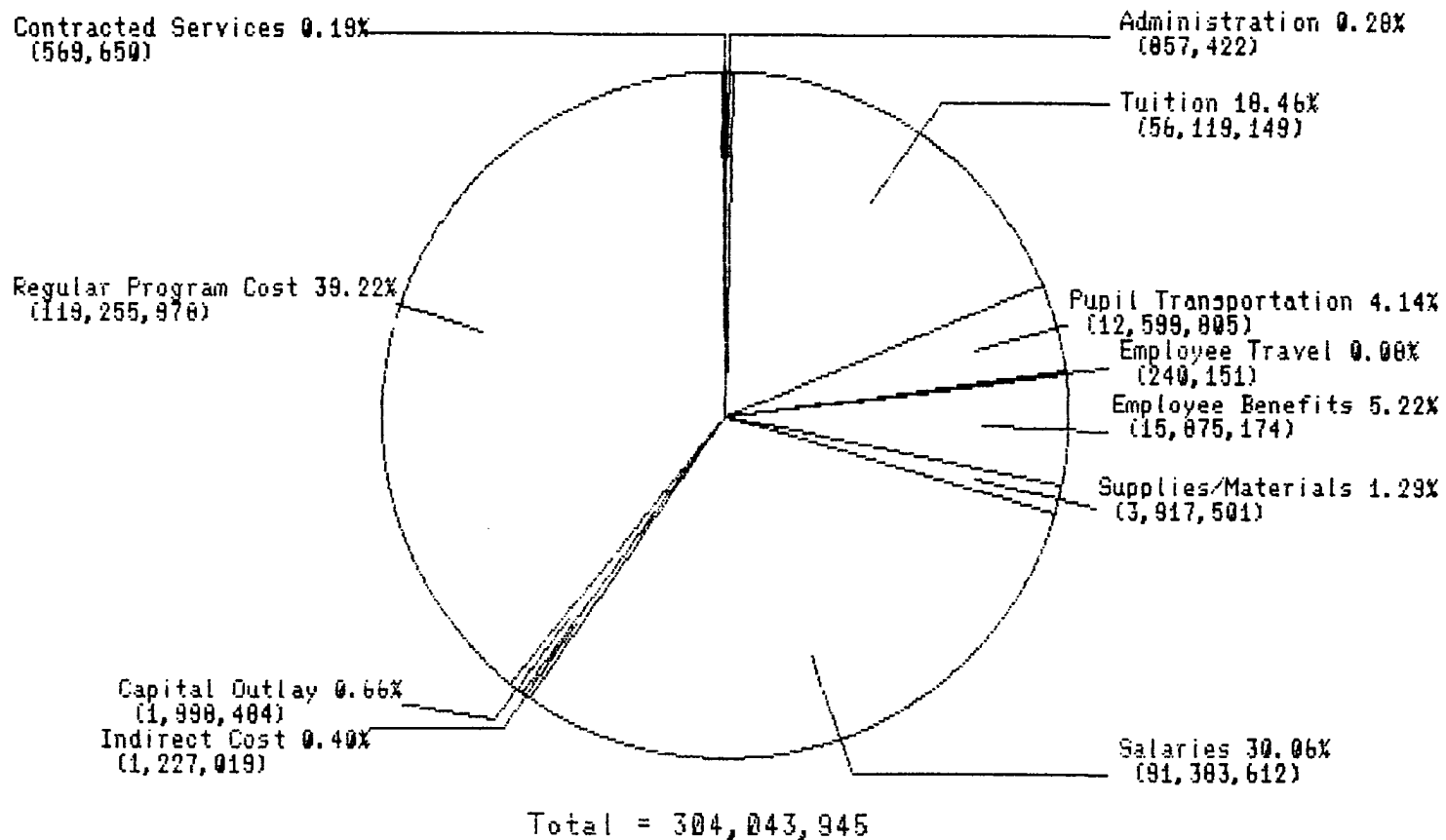


FIGURE 20 EXPENDITURES BY OBJECT: SPECIAL EDUCATION INSTRUCTION  
1980-81 + 1981-82

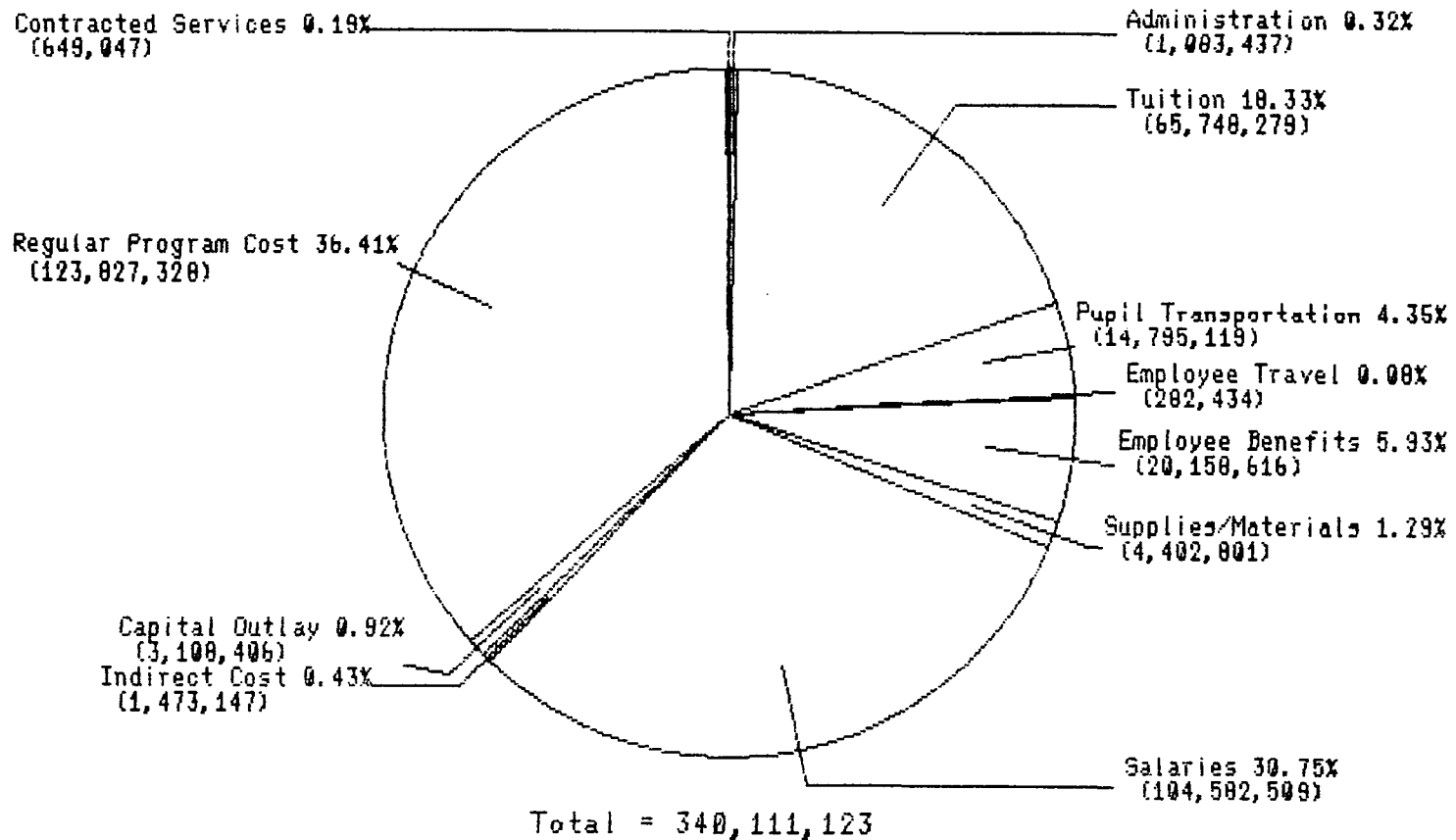


FIGURE 21 EXPENDITURES BY OBJECT: SPECIAL EDUCATION INSTRUCTION  
1982-83 + 1983-84

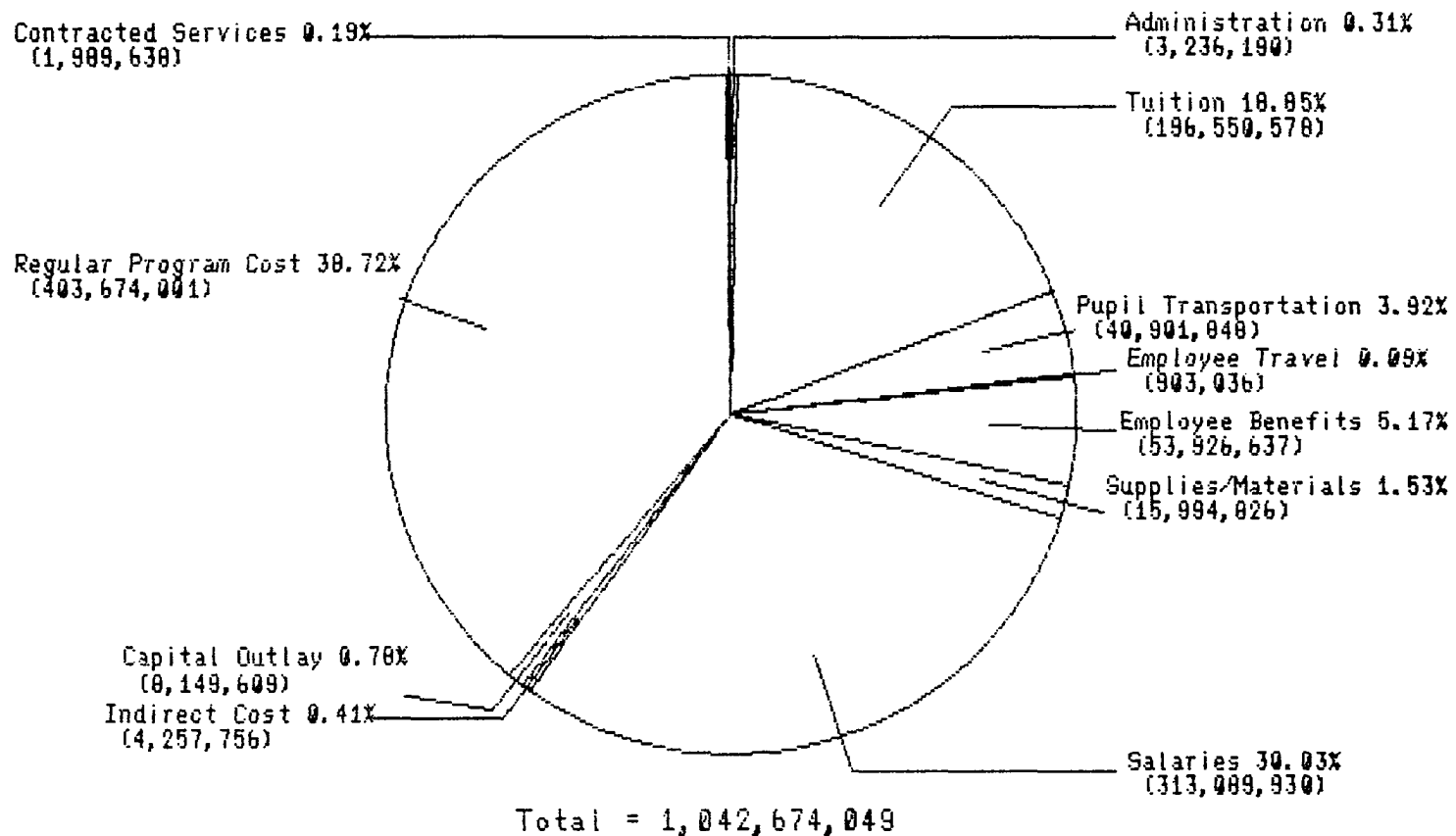


FIGURE 22 EXPENDITURES BY OBJECT: SPECIAL EDUCATION INSTRUCTION  
1976-77 THROUGH 1983-84

TABLE 21

1.0 FUNDS AND REGULAR PROGRAM EXPENDITURES  
SPECIAL EDUCATION INSTRUCTION  
1975-76 THROUGH 1983-84

	1.0 Funds Generated \$	Regular Program Expenditures \$	Percentage of 1.0 Funds to Reg. Program %	1.0 Funds to Special Ed. Direct Program \$	% of 1.0 Funds to Special Ed. Direct Program %
1975-76	32,538,165	NA	NA	NA	NA
1976-77	42,975,884	32,214,285	74.96	10,761,599	25.04
1977-78	50,525,986	39,490,856	78.16	11,035,130	21.84
1978-79	57,921,805	41,899,046	72.34	16,022,759	27.66
1979-80	64,563,324	46,986,508	72.78	17,576,816	27.22
1980-81	80,451,415	57,962,937	72.05	22,488,478	27.95
1981-82	86,530,652	61,293,041	70.83	25,237,611	29.17
1982-83	87,327,150	60,207,429	68.94	27,119,721	31.06
1983-84	93,547,441	63,619,899	68.01	29,927,542	31.99

TABLE 22  
 SPECIAL EDUCATION INSTRUCTIONAL EXPENDITURES/  
 PUPIL BY PROGRAM MODEL  
 1975-76 THROUGH 1983-84

Supplemental Assistance 1.7

	Expenditures/ Pupil Generating Funds	Expenditures/ Pupil Served	Mean Expenditures/ Pupil
1975-76	NA	NA	NA
1976-77	NA	NA	NA
1977-78	NA	NA	NA
1978-79	NA	NA	NA
1979-80	\$3,230	\$2,229	\$2,730
1980-81	\$3,677	\$3,018	\$3,348
1981-82	\$4,168	\$3,800	\$3,984
1982-83	\$4,329	\$4,161	\$4,245
1983-84	\$5,028	\$4,575	\$4,802

TABLE 23  
 SPECIAL EDUCATION INSTRUCTIONAL EXPENDITURES/  
 PUPIL BY PROGRAM MODEL  
 1975-76 THROUGH 1983-84

Resource Teaching Program 1.7

	Expenditures/ Pupil Generating Funds	Expenditures/ Pupil Served	Mean Expenditures/ Pupil
1975-76	NA	\$2,166	NA
1976-77	\$2,248	\$2,231	\$2,240
1977-78	\$2,438	\$2,357	\$2,398
1978-79	\$2,529	\$2,315	\$2,422
1979-80	\$2,802	\$2,459	\$2,631
1980-81	\$3,145	\$2,836	\$2,991
1981-82	\$3,253	\$3,268	\$3,261
1982-83	\$3,554	\$3,339	\$3,447
1983-84	\$3,821	\$3,429	\$3,625

TABLE 24

SPECIAL EDUCATION INSTRUCTIONAL EXPENDITURES/  
 PUPIL BY PROGRAM MODEL  
 1975-76 THROUGH 1983-84

Special Class With Integration 1.7

	Expenditures/ Pupil Generating Funds	Expenditures/ Pupil Served	Mean Expenditures/ Pupils
1975-76	NA	\$1,786	NA
1976-77	\$2,285	\$2,028	\$4,313
1977-78	\$2,304	\$2,155	\$4,459
1978-79	\$2,547	\$2,237	\$2,392
1979-80	\$2,990	\$2,427	\$2,709
1980-81	\$3,060	\$2,761	\$2,911
1981-82	\$3,156	\$2,903	\$3,030
1982-83	\$3,498	\$3,154	\$3,326
1983-84	\$3,784	\$3,216	\$3,500

TABLE 25

SPECIAL EDUCATION INSTRUCTIONAL EXPENDITURES/  
 PUPIL BY PROGRAM MODEL  
 1975-76 THROUGH 1983-84

School Age Self-Contained Special  
Class With Little Integration 2.2

	Expenditures/ Pupil Generating Funds	Expenditures/ Pupils Served	Mean Expenditures/ Pupil
1975-76	NA	\$2,254	NA
1976-77	\$2,528	\$2,318	\$2,423
1977-78	\$2,736	\$2,554	\$2,645
1978-79	\$3,202	\$3,022	\$3,112
1979-80	\$3,532	\$3,402	\$3,467
1980-81	\$4,123	\$3,754	\$3,939
1981-82	\$4,358	\$4,163	\$4,261
1982-83	\$4,657	\$4,114	\$4,386
1983-84	\$5,053	\$4,843	\$4,948



TABLE 26

SPECIAL EDUCATION INSTRUCTIONAL EXPENDITURES/  
 PUPIL BY PROGRAM MODEL  
 1975-76 THROUGH 1983-84

Preschool Self-Contained Special  
 Class With Little Integration 2.2

	Expenditures/ Pupil Generating Funds	Expenditures/ Pupils Served	Mean Expenditures/ Pupil
1975-76	NA	\$1,544	NA
1976-77	\$3,140	\$2,694	\$2,917
1977-78	\$2,553	\$2,031	\$2,292
1978-79	\$2,689	\$2,335	\$2,512
1979-80	\$3,317	\$2,699	\$3,008
1980-81	\$3,856	\$3,050	\$3,453
1981-82	\$3,913	\$3,310	\$3,612
1982-83	\$4,197	\$3,533	\$3,865
1983-84	\$4,166	\$3,490	\$3,828

TABLE 27

SPECIAL EDUCATION INSTRUCTIONAL EXPENDITURES/  
 PUPIL BY PROGRAM MODEL  
 1975-76 THROUGH 1983-84

Preschool Self-Contained  
Special Class 3.6

	Expenditures/ Pupil Generating Funds	Expenditures/ Pupils Served	Mean Expenditures/ Pupil
1975-76	NA	\$7,734	NA
1976-77	\$3,427	\$3,011	\$3,219
1977-78	\$3,892	\$4,349	\$4,121
1978-79	\$3,921	\$3,168	\$3,545
1979-80	\$5,097	\$4,078	\$4,588
1980-81	\$5,340	\$4,957	\$5,149
1981-82	\$6,072	\$5,962	\$6,017
1982-83	\$6,188	\$6,463	\$6,326
1983-84	\$6,342	\$5,432	\$5,887

TABLE 28  
 SPECIAL EDUCATION INSTRUCTIONAL EXPENDITURES/  
 PUPIL BY PROGRAM MODEL  
 1975-76 THROUGH 1983-84

School Age Self-Contained  
Special Class 3.6

	Expenditures/ Pupil Generating Funds	Expenditures/ Pupils Served	Mean Expenditures/ Pupil
1975-76	NA	\$3,168	NA
1976-77	\$3,510	\$3,981	\$3,746
1977-78	\$4,360	\$4,174	\$4,267
1978-79	\$4,976	\$4,889	\$4,933
1979-80	\$5,954	\$5,427	\$5,691
1980-81	\$6,344	\$6,134	\$6,239
1981-82	\$7,095	\$6,558	\$6,827
1982-83	\$7,577	\$7,145	\$7,361
1983-84	\$8,151	\$7,678	\$7,915

TABLE 29

SPECIAL EDUCATION INSTRUCTIONAL EXPENDITURES/  
PUPIL BY PROGRAM MODEL  
1975-76 THROUGH 1983-84

Total Handicapped

	Expenditures/ Pupil Generating Funds	Expenditures/ Pupils Served	Mean Expenditures/ Pupil
1975-76	\$2,080	\$2,148	\$2,114
1976-77	\$2,260	\$2,296	\$2,278
1977-78	\$2,560	\$2,438	\$2,499
1978-79	\$2,743	\$2,505	\$2,624
1979-80	\$3,087	\$2,691	\$2,889
1980-81	\$3,420	\$3,086	\$3,253
1981-82	\$3,584	\$3,484	\$3,534
1982-83	\$3,928	\$3,625	\$3,777
1983-84	\$4,238	\$3,784	\$4,011

TABLE 30

BALANCE OF FUND BY PROGRAM MODEL:  
 SPECIAL EDUCATION INSTRUCTION  
 1975-76 THROUGH 1983-84

Mildly Handicapped

	Supplemental Assistance Program	Resource Teaching Program	Special Class With Integration	Total
1975-76	NA	\$ 526,838	\$2,342,685	\$2,869,523
1976-77	NA	1,191,190	1,150,254	2,341,444
1977-78	NA	1,977,699-	161,512	1,816,187-
1978-79	NA	1,106,982	33,954	1,140,936
1979-80	\$ 61,312-	266,312	1,359,534-	1,154,534-
1980-81	115,624-	1,354,032	1,010,136	2,248,544
1981-82	226,261-	2,669,709	1,562,516	4,005,964
1982-83	234,000-	71,167	715,203	552,370
1983-84	366,966-	22,483-	243,715	145,764-

TABLE 31

BALANCE OF FUND BY PROGRAM MODEL:  
SPECIAL EDUCATION INSTRUCTION  
1975-76 THROUGH 1983-84

Moderately Handicapped

	School Age Self-Contained Class	Preschool Self-Contained Class	Total
1975-76	\$ 645,546	Preschool Combined	\$ 645,546
1976-77	1,235,861	\$ 54,350-	1,181,511
1977-78	32,376	63,533	95,909
1978-79	927,053-	132,841	794,212-
1979-80	1,164,853-	105,238-	1,270,091-
1980-81	1,714,096-	450,316-	2,164,412-
1981-82	1,947,881-	450,668-	2,398,550-
1982-83	202,408-	138,772-	341,180-
1983-84	655,130-	271,257	383,873-

TABLE 32

BALANCE OF FUND BY PROGRAM MODEL:  
SPECIAL EDUCATION INSTRUCTION  
1975-76 THROUGH 1983-84

Severely Handicapped

	School Age Self-Contained Class	Preschool Self-Contained Class	Total
1975-76	\$ 77,114-	\$1,827,225	\$1,750,111
1976-77	641,403	3,769,417	4,410,820
1977-78	696,110	2,412,964	3,109,074
1978-79	653,999	1,816,637	2,470,636
1979-80	252,228	1,050,793	1,303,021
1980-81	443,350	2,354,558	2,797,908
1981-82	256,970	1,674,876	1,931,846
1982-83	439,744	785,786	1,225,530
1983-84	354,314	212,674-	141,640

TABLE 33

BALANCE OF FUND BY PROGRAM MODEL:  
 SPECIAL EDUCATION INSTRUCTION  
 1975-76 THROUGH 1983-84

Total Handicapped

	Grand Total
1975-76	\$5,265,180
1976-77	7,933,775
1977-78	1,388,796
1978-79	2,817,360
1979-80	1,121,604-
1980-81	2,882,040
1981-82	3,539,261
1982-83	1,436,720
1983-84	387,997-



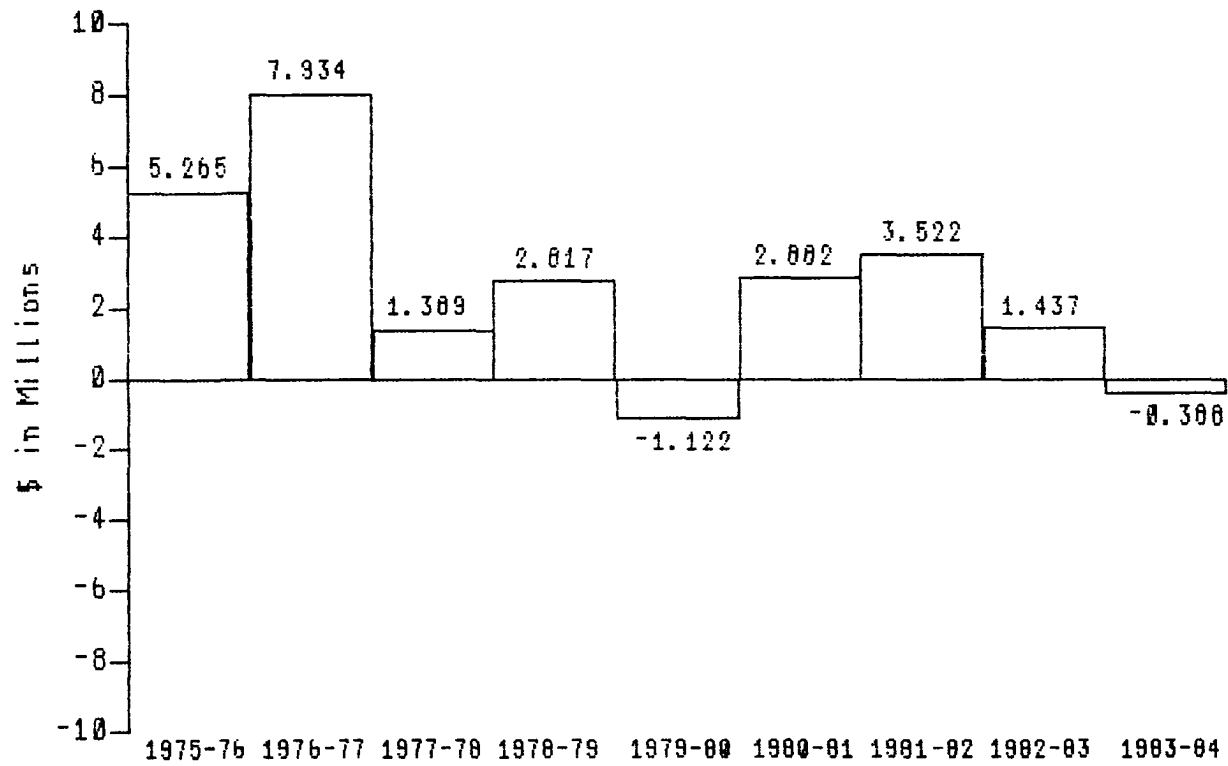


FIGURE 23 BALANCE OF FUNDS: SPECIAL EDUCATION INSTRUCTION  
1975-76 THROUGH 1983-84

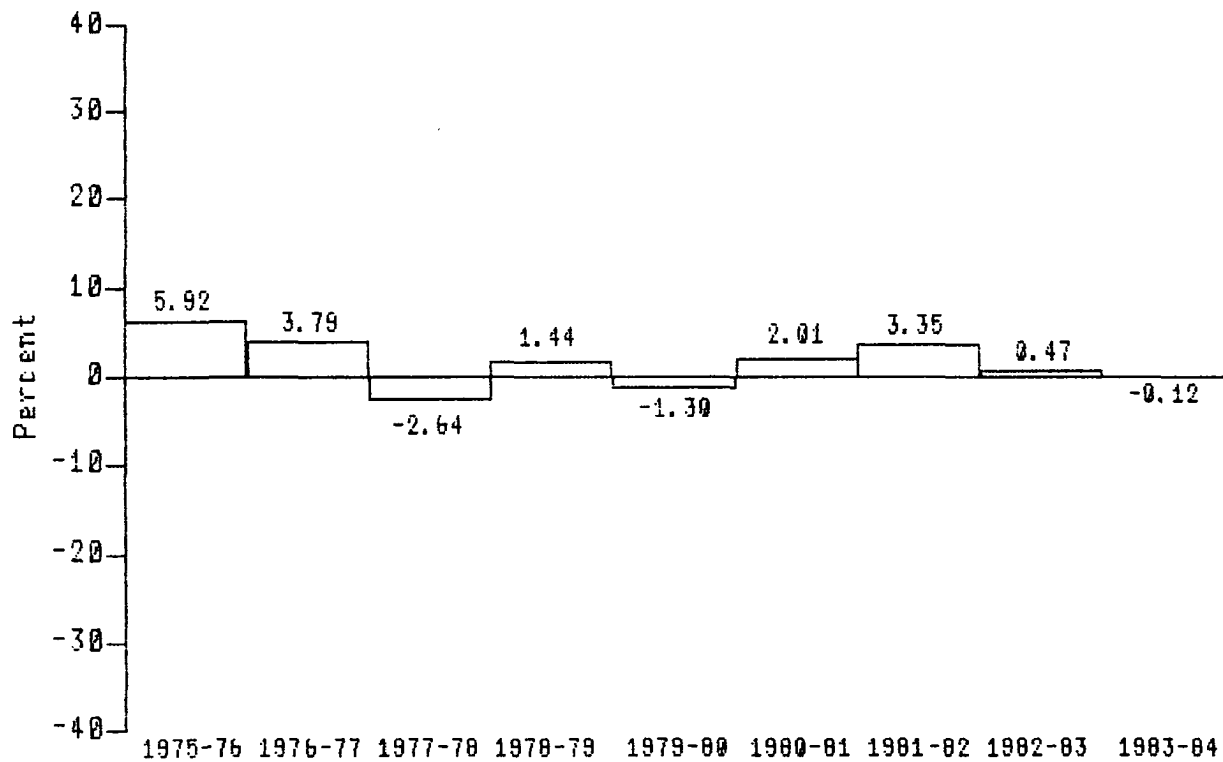


FIGURE 24 PERCENT OF BALANCE OF FUNDS TO DOLLARS GENERATED: SPECIAL EDUCATION INSTRUCTION (MILDLY HANDICAPPED) 1975-76 THROUGH 1983-84

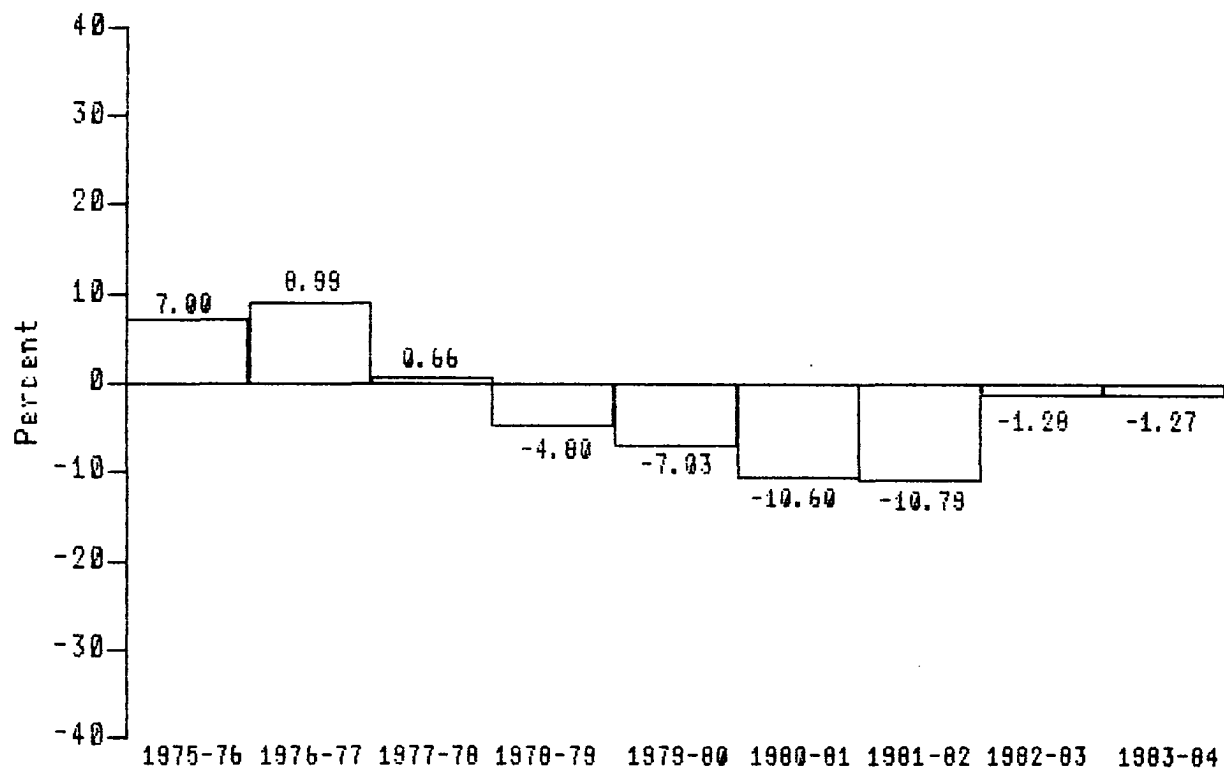
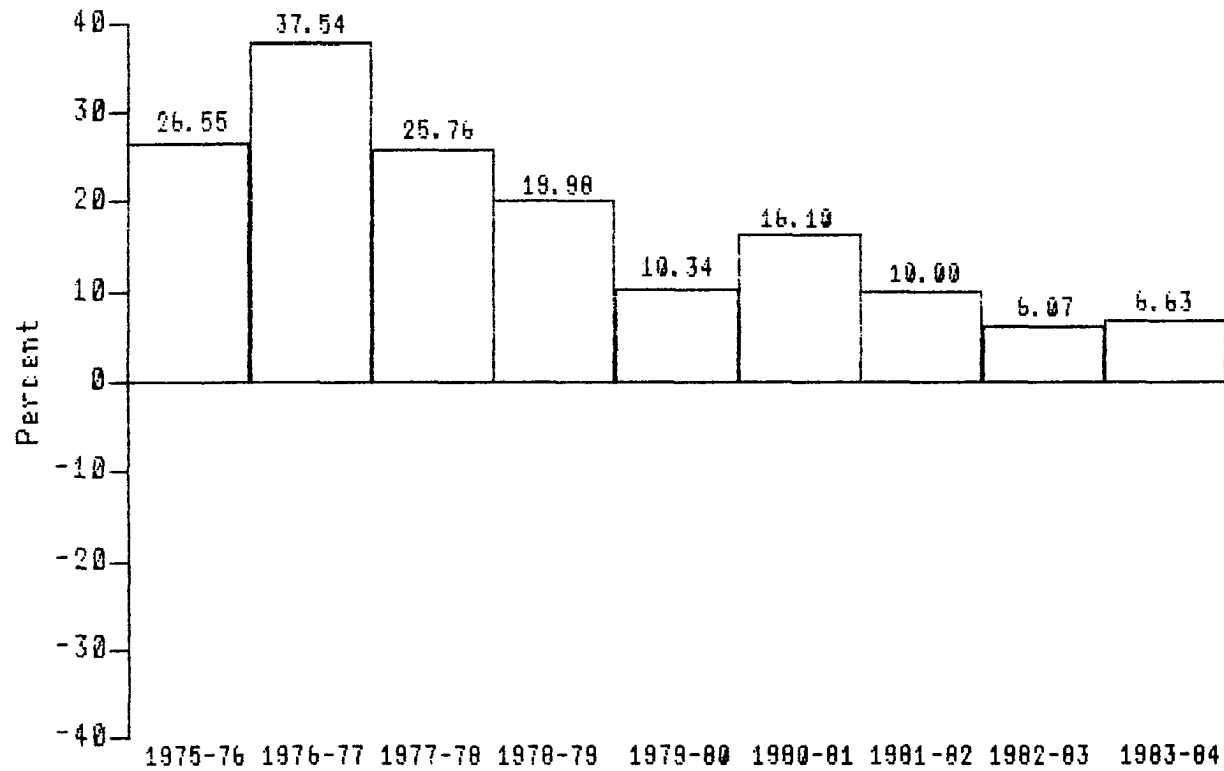


FIGURE 25 PERCENT OF BALANCE OF FUNDS TO DOLLARS GENERATED: SPECIAL EDUCATION INSTRUCTION (MODERATELY HANDICAPPED) 1975-76 THROUGH 1983-84



**FIGURE 26 PERCENT OF BALANCE OF FUNDS TO DOLLARS GENERATED: SPECIAL EDUCATION INSTRUCTION (SEVERELY HANDICAPPED) 1975-76 THROUGH 1983-84**

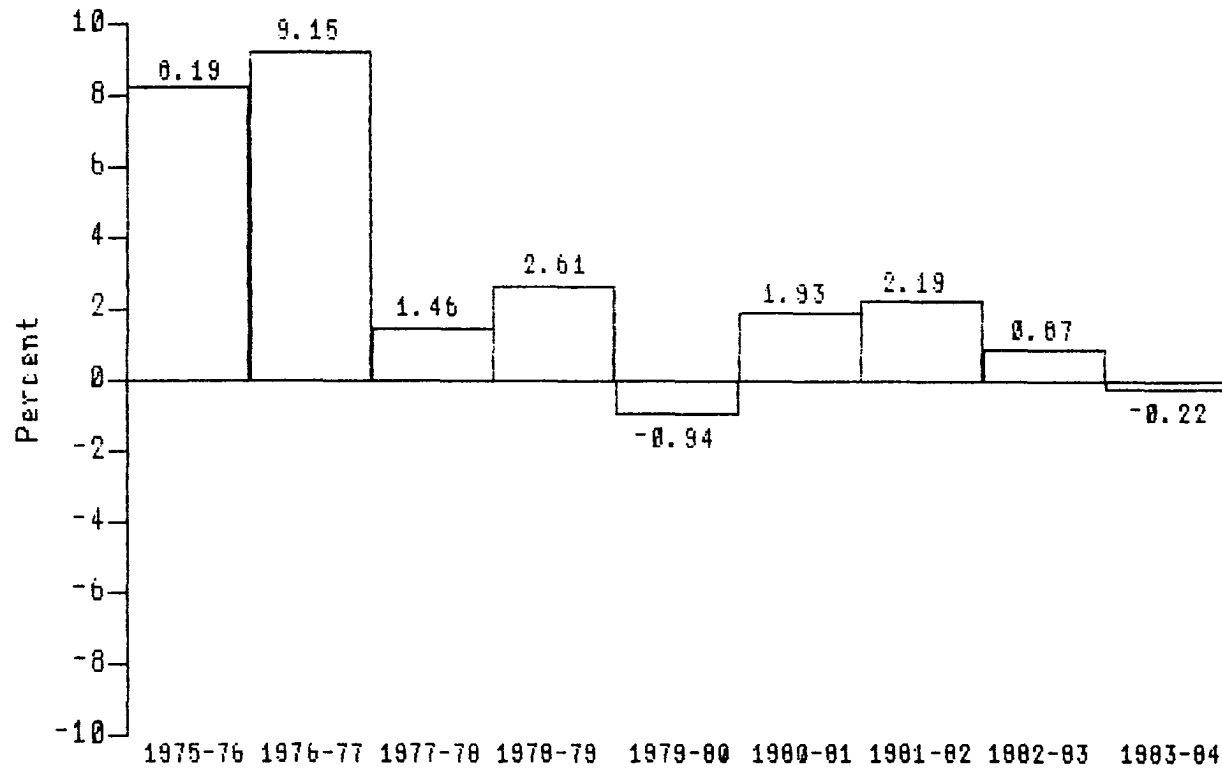


FIGURE 27 PERCENT OF BALANCE OF FUNDS TO DOLLARS GENERATED: SPECIAL EDUCATION INSTRUCTION (TOTAL HANDICAPPED) 1975-76 THROUGH 1983-84

## CHAPTER V

## CONCLUSIONS, DISCUSSION, AND RECOMMENDATIONS

Iowa's history of providing education for handicapped children generally parallels that of the nation. Prior to 1975 it was only permissible for Iowa public school districts to provide educational programs for the handicapped. Additional funding for the excess costs of such programs was very limited. Evaluation and identification procedures were generally loose and unstructured. Program content was largely left to individual teachers' determination. Formal due process procedures and those ensuring parent involvement did not exist. While many of the larger school districts in Iowa provided some programming for handicapped children under the guidance and direction of the county school system, comprehensive programming was rare.

Following the national trend, Iowa's legislature mandated special education services for handicapped children in 1974 with the passage of Senate File 1163. These changes in State Code became effective on July 1, 1975, and preceded the September 1, 1978, date established by Congress for initial compliance with P.L. 94-142. Iowa's special education laws have been considered to be some of the most comprehensive promulgated at the state level because they

contain essentially all of the elements of and the philosophy underlying P.L. 94-142. Iowa's state mandate also extended the federal mandate of services to handicapped students from age three through twenty-one to birth through twenty-one and established funding mechanisms to provide additional funds for the excess cost of providing the special education instructional and related (support) services.

Included in S.F. 1163 was the abolishment of the county school system and the establishment of Iowa's intermediate educational agencies called area education agencies (AEAs) with the expressed responsibilities for the identification of handicapped children, assurance of appropriate programming by local school districts, and the direct provision of special education related (support) services.

There are two major components of Iowa's special education funding mechanism. One is the funding of the AEAs for special education support services including personnel such as a director of special education, coordinators, school psychologists, speech and language clinicians, school social workers, occupational and physical therapists, hospital-homebound teachers, itinerant teachers, consultants, and others. The second component is the financing of excess costs of special education instructional programs which are the direct responsibility of local school districts. This second component is accomplished by utilization of the "Weighting Plan" which is the focus of this study.

Iowa's "Weighting Plan," like other weighted systems, provides funds on a per pupil basis as a multiple of the regular program cost per pupil. The "Weighting Plan" is developed around a modified continuum of service model in which the amount of funding for a handicapped student is associated with the degree of integration into the regular classes. Students' integration is based on the severity of their handicapping condition which in turn determines the teacher/student ratio prescribed by the Iowa Rules of Special Education to provide appropriate special education instructional service. Weightings are assigned to handicapped students as part of the School Foundation Program based on those factors.

Current weightings are 1.7 for mildly handicapped students who are in regular classes for a major part of the school day, 2.2 for moderately handicapped students who need more intensive service through placement in a self-contained special class with little integration, and 3.6 for severely and multiply handicapped students. Non-handicapped students in the regular curriculum are assigned a weighting of 1.0. by the "Weighting Plan."

#### Conclusions

This study presents statewide pupil and finance data for the school years 1975-76 through 1983-84 in an attempt to analyze the results of the "Weighting Plan" and to compare special education instruction and regular program growth. Several months from now,



1984-85 data will be available. This information may alter trends established by this study's data analysis. With this limitation in mind, the following conclusions are presented in statement form:

1. Unduplicated, certified special education instructional enrollments increased by 22.53 percent while public enrollments declined by 21.24 percent from 1975-76 through 1983-84.
2. The percentage of the total public enrollment identified for special education instructional programs increased from 5.43 percent of the total in 1975-76 to 8.24 percent in 1983-84.
3. The numbers of mildly, moderately, and severely handicapped pupils generating weighted funds increased by 40.68 percent, 64.26 percent and 104.16 percent respectively from 1975-76 through 1983-84 with a combined increase of 46.83 percent.
4. The total number of handicapped students served in special education instructional programs has increased from 27,480 students in 1975-76 to 46,666 students in 1983-84. Over the nine year period, an average of 80.33 percent of the students was served in programs for the mildly handicapped, 14.19 percent in programs for the moderately handicapped, and 5.48 percent in programs for the severely handicapped respectively.

5. For the school years 1975-76 through 1983-84, \$1,125,430,072 has been generated for special education instructional programs through a combination of state aid and property tax payments to school districts; \$596,381,822 from the 1.0 weighting equivalent to that of nonhandicapped students, and \$529,048,250 from the additional weighting.
  
6. During the nine year period of 1975-76 through 1983-84, regular program budgets increased by 47.42 percent in actual dollars while special education instructional budgets grew 174.11 percent. The percentage of the total instructional budget devoted to special education increased from 8.48 percent of the total to 14.70 percent.
  
7. When regular and special education budget growth was converted to constant 1972 dollar values by the implicit price deflator (annual series), regular program budgets declined 13.91 percent while an increase of 52.2 percent for special education budgets occurred over the nine year period.
  
8. Mean expenditures per pupil in 1983-84 for each special education program model were \$4,802 in supplemental assistance, \$3,625 in resource teaching, \$3,500 in special class with integration, \$4,948 in school age self-contained with little

integration, \$3,828 in preschool self-contained with little integration, \$5,887 in preschool self contained, and \$7,915 in school age self-contained programs respectively.

9. The proportions of expenditures in each object classification varied little over the eight year period 1976-77 through 1983-84 for which this data was available. A composite for those years indicated 38.72 percent of special education instructional funds were expended for regular program services such as integration, 35.20 percent for instructional salaries and employee benefits, and 18.85 percent for tuition expenditures.
  
10. Substantial proportions of the special education instructional funds were unexpended during the first two years of operation of the "Weighting Plan"; 8.19 percent and 9.15 percent respectively in 1975-76 and 1976-77. The balance of funds averaged only 1.13 percent of the total funds generated from 1977-78 through 1983-84 with statewide deficit balances occurring in 1979-80 and 1983-84.
  
11. Implementation of Iowa's special education "Weighting Plan" has been modified over the years by School Budget Review Committee and legislative actions, namely: the original 1.8 weighting for programs for the mildly handicapped has been decreased to 1.7;

the original 2.2 weighting for programs for the moderately handicapped has been reduced to 2.0 and increased again to 2.2; the original 4.4 weighting for programs for the severely handicapped has been reduced to 4.2, 4.0, 3.8, and 3.6; utilization of a December 1 count for fund generation with a provision for advanced state aid payments to districts with increased pupil counts in the budget year; and reduction of special education instructional fund balances to a zero level annually.

12. The "Weighting Plan" as adjusted by legislative action and decisions of the School Budget Review Committee, meet most of Bernstein's evaluation criteria for funding mechanisms. The equity criteria is generally met because the "Weighting Plan" provides increased funding for perceived student educational needs without regard to school district wealth. Equity and flexibility has been enhanced with changes allowing for funding to be more commensurate with actual delivery of special education service and for payment for overexpenditure of budgeted funds. The "Weighting Plan" allows for accountability and is relatively simple. It is an integral part of Iowa's total public education finance plan, The Foundation Plan, and generally is compatible with state educational policies. The "Weighting Plan" provides for some degree of cost-effectiveness

through the review and adjustment authority of the School Budget Review Committee and because districts may allocate budgeted funds between program models as required.

#### Discussion

Since the state mandate for special education services and its accompanying funding procedures became effective in 1975-76, both programs and funds earmarked for handicapped students in Iowa have experienced substantial growth. Howe's (21) 1978 projections that special education enrollments would level off in 1981-82 at nine percent of the total public enrollment and subsequently begin to decline on a headcount basis in conjunction with total public enrollment decline has not materialized. While the projected leveling off of handicapped enrollments has not taken place, the funding has exceeded the projection that accompanied the enrollment projections. Special education instructional enrollments increased to 8.4% of the total public enrollments in 1983-84. However, Howe's projection that 1983-84 special education instructional costs would total \$167,249,000 was exceeded by 5.58 percent, i.e., \$9,333,745. There is no indication that similar increases will not continue. One may conclude that all eligible pupils requiring special education have not been identified even after nine years of the state's special education mandate. A more likely conclusion might be that identification criteria and/or their implementation have allowed over

identification of handicapped pupils to occur. This realization must cause educators and state policymakers to reassess Iowa's special education instructional program delivery system including the funding component, the "Weighting Plan."

Iowa's special education program delivery system was designed to include a check and balance mechanism. In 1975, intermediate education agencies (AEAs) became responsible for the identification of handicapped students, assurance of appropriate programming, and delivery of related services. Local school districts were charged with the responsibility of providing appropriate instructional programs. However they were and remain unable to identify and generate funds for handicapped pupils independent of the AEAs. Continuing increases in the number of identified handicapped students indicate that the check and balance mechanism has failed. There seems to be several reasons for this dilemma. State and Federal mandates for special education programs and funding procedures have created a sharper division between general and special education. General education may be less than willing to accommodate pupils' individual differences and special education may be too eager to accept the responsibility for too many pupils experiencing problems in general education. This situation is compounded with reduced federal resources for remedial and other alternative programs in the general education setting, limited state financial resources, and increased pressures from the Excellence in Education Movement.

The "Weighting Plan" historically has provided financial incentives to local districts for special education program growth and continues to do so. The funding level has been primarily determined by the numbers of identified handicapped students without restriction on the total number. Therefore, while the amount of funds generated per pupil has some restrictions, there is no restriction on the total amount generated for special education instructional programs. More funds are generated as the number of identified students increases. This situation provides an incentive for school districts to identify sufficient numbers of students to fill special education class rosters and a disincentive to serve students within general education where funding is more limited.

#### Recommendations

This study was designed to explain and evaluate Iowa's funding mechanism for special education instructional programs and to present the resulting pupil and finance data through 1984. It was not intended to identify variables which may have produced the results indicated by the data or to evaluate the total special education program delivery system. Further study is recommended in the following areas:

1. Differences between area education agency's identification, weighting, and placement procedures for handicapped students should be investigated. Such a study should focus on the total

number of handicapped students identified, the disability/handicapping conditions assigned to them, as well as the type of program in which the students are placed. Judgments should be made about whether or not significant differences exist among the AEAs, and if so, what the causes for these differences are.

2. Since the largest number of special education students are identified as mildly handicapped with minimal adjustments to the regular program provided, alternative methods to deliver instructional services to mildly handicapped and "borderline" students should be investigated. Students who need more than the usual amount of time or different instructional strategies employed in order to be successful in the regular curriculum should be provided that opportunity within general education.

The results of these studies could lead to a more cost effective funding mechanism; one in which financial resources and program responsibility are shared between general and special education and one in which the concept of "least restrictive environment" is better applied.



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**APPENDIX A: RULES OF SPECIAL EDUCATION, 1985, DEFINITIONS OF  
INSTRUCTIONAL PROGRAM MODELS**

## APPENDIX A

Rules of Special Education 1985  
Definition of Instructional Program Models

12.5(1) Self-contained special class. An educational program for pupils with similar educational needs who are severely handicapped and whose instructional program is provided by a special education teacher. The pupils shall be offered opportunities to participate in activities with nonhandicapped peers and adults. Preschool programs of this type may be operated on a multicategorical basis. (Reference Iowa Code section 281.91(1)"d")

12.5(2) Self-contained special class with little integration. An educational program for pupils with similar educational needs who require special education but who can benefit from limited participation in the general education curriculum with nonhandicapped pupils. The maximum class size for this model is eight (8) at the preschool and the elementary levels and ten (10) at the secondary level. Preschool programs of this type may be operated on a multicategorical basis. (Reference Iowa Code section 281.9(1)"e")

12.5(3) Special class with integration.

a. An educational program for pupils requiring special education who have similar educational needs and who can benefit from participation in the general education curriculum in one or more academic subjects with pupils who are not handicapped. The maximum class size for this model is twelve (12) at the elementary level and fifteen (15) at the secondary level with the exception of the hearing impaired which is ten (10) at both levels. This program shall include provisions for ongoing consultation and demonstration with the pupil's teachers.

b. Programs of this type may be operated on multicategorical basis with approval of the director. For approval to be granted, the following conditions shall be considered: Support services provided to the program including appropriately authorized consultant services; the need for and availability of paraprofessionals to assist the teacher; served pupils have comparable educational needs; the chronological age range does not exceed four years; and program curriculum consists of appropriate content for handicapping condition served. (Reference Iowa Code section 281.9(1)"b")

12.5(4) Resource teaching program. An educational program for pupils requiring special education who are enrolled in a general education curriculum for a majority of the school day but require

special education in specific skill areas on a part-time basis. Pupils enrolled in this type of program require special education for a minimal average of thirty minutes per day. The maximum class size is eighteen (18) at the elementary and secondary level with the exception of the hearing and visually impaired which is fifteen (15) at both levels. The teacher of a resource teaching program shall serve in no more than two attendance centers. The teacher of a resource teaching program shall serve in no more than two attendance centers. This program shall include provisions for ongoing consultation and demonstration with the pupils' teachers and may be operated on a multicategorical basis. (Reference Iowa Code section 281.9(1)"b")

12.5(8) Special adaptations (supplemental assistance). Handicapped pupils may be weighted in accord with Iowa Code section 281.9(1)"b" when the diagnostic-educational team recommends that through special adaptations the pupil can appropriately be served in the general education classroom. Authorized programs may include: Intensive short-term special education instructional intervention; interpreters for hearing impaired pupils; readers for visually impaired pupils' educational aides; aides for physically disabled pupils or other handicapped pupils for assistance in and about school; materials; and, specialized or modified instructionally related equipment for use in the school.



APPENDIX B: RULES OF SPECIAL EDUCATION, 1985, MAXIMUM CLASS SIZE

## APPENDIX B

Rules of Special Education, 1985  
Maximum Class Size

670—12.6(281) Maximum class size. Maximum class size limits are set forth in 12.6(5) and are predicated upon one teacher to the specified class size. In instances where a teacher is employed less than full time, the maximum class size shall be proportionate to the full-time equivalency of the teacher employed.

12.6(1) Class size and age span (subrule 12.30(2)). If, in unique circumstances, it is necessary to exceed the class size maximum for a resource teaching program, a special class with integration or a self-contained special class with little integration, the director shall review the proposed placement for appropriateness in accord with Iowa Code section 273.5 and maintain appropriateness of the program for all pupils in the class; that support services are provided to the program, including appropriately authorized consultant services; that consideration has been given to the need for and availability of paraprofessionals to assist the teacher; that consideration has been given to the need for additional instructional staff; that served pupils have comparable educational needs; that the chronological age range does not exceed six years (four years for a multicategorical special class with integration); and, that program curriculum consists of appropriate content for the handicapping conditions served.

12.6(2) Special circumstances. When circumstances necessitate placing a handicapped pupil in a less restrictive model for receipt of the recommended program, that pupil shall count as two pupils in computing class size maximum.

12.6(3) Staff-to-pupil ratio. The staff-to-pupil ratio in self-contained special classes for severely handicapped pupils shall be one teacher and one educational aid for each five pupils. When pupils numbering six through nine are added, an additional educational aide must be employed. When the tenth pupil is placed, another teacher must be employed for that program. The chronological age range of pupils enrolled in a self-contained special class shall not exceed six years.

12.6(4) Secondary level classes. Self-contained special classes with little integration at the secondary level may be operated with enrollments of fifteen pupils if an AEA work experience

co-ordinator co-ordinates and supervises on and off campus work experiences for those pupils requiring specially designed career exploration and vocational preparation.

12.6(5) Maximum class size.

	Resource Teaching Program	Special Class With integration		Self-Contained Special Class With Little Integration			Self-Contained Special Class
		Elementary	Secondary	Preschool <sup>a</sup>	Elementary	Secondary <sup>b</sup>	Severely Handicapped <sup>c</sup>
Speech and Language Impairment	18	12	15	8	8	10	5
Hearing Impairment	15	10	10	8	8	10	5
Behaviorally Disordered	18	12	15	8	8	10	5
Learning Disability	18	12	15	8	8	10	5
Mental Disability	18	12	15	8	8	10	5
Physical Impairment	18	12	15	8	8	10	5
Visual Impairment	15	12	15	8	8	10	5
Multicategorical	18	12 <sup>d</sup>	15 <sup>d</sup>	8	Not An Option		
Prefoundly Multiply Handicapped	Not An Option						5

<sup>a</sup>The staff-to-pupil ratio for handicapped preschool age pupils shall be one teacher and one educational aide for each class.

<sup>b</sup> See 12.6(4).

<sup>c</sup> See 12.6(3).

<sup>d</sup> See 12.5(3) "b".

APPENDIX C: RULES OF SPECIAL EDUCATION, 1985, DEFINITIONS OF  
DISABILITIES

## APPENDIX C

Rules of Special Education, 1985  
Definitions of Disabilities

"Speech and language impairment," a communication disability, includes:

1. Impairment in language. A disability in verbal language resulting in a markedly impaired ability to acquire, use or comprehend spoken, read or written language due to difficulties in acquisition and usage of syntax, morphology, phonology and semantics.
2. Impairment in voice: An abnormality in pitch, loudness or quality resulting from pathological conditions, psychogenic factors or inappropriate use of the vocal mechanism which interferes with community or results in maladjustment.
3. Impairment in fluency: A disruption in the normal flow of verbal expression which occurs frequently, or is markedly noticeable and not readily controllable by the pupil. The disruption occurs to the degree that the pupil or the pupil's listeners evidence reactions to the manner of the pupil's communication so that communication is impeded.
4. Impairment in articulation: Defective production of phonemes which interferes with ready intelligibility of speech.

"Communication disability" is the inclusive term denoting speech and language impairments and hearing impairments.

"Learning disability" is the inclusive term denoting the inability to learn efficiently, in keeping with one's potential, when presented with the instructional approaches of the general education curriculum. The inability to learn efficiently is manifested as a disability in an individual's reception, organization, or expression of information relevant to school function. This disability is demonstrated as a severe discrepancy between an individual's general intellectual functioning and achievement in one or more of the following areas: School readiness skills, basic reading skills, reading comprehension, mathematical calculation, mathematical reasoning, written expression and listening comprehension. A learning disability is not primarily the result of sensory or physical impairments, mental disabilities, behavioral disorders, cultural or language difference, environmental disadvantage, or a history of an inconsistent educational program. The following criteria shall be applied in identifying a pupil as learning disabled and in need of special education.

1. Hearing sensitivity must be within normal limits unless the

hearing loss is temporary or not educationally relevant, such as a high frequency loss above the speech range.

2. Vision must be within normal limits after correction unless the impairment is temporary or not educationally relevant.

3. Intellectual functioning must be at or above one standard deviation below the mean as measured by an instrument recognized as a valid measure of intellectual functioning. A total or full-scale score shall be used in applying the intellectual criterion. In cases where measured intellectual functioning does not meet this criterion, but the results are suspect and the pupil's level of intellectual functioning is believed to be within the stated criterion, the individual responsible for assessing intellectual functioning shall state in writing the specific data which support that conclusion.

4. A severe discrepancy between current achievement and intellectual functioning exists when a pupil has been provided with learning experiences that are appropriate for the pupil's age and ability levels, and obtained scores in the achievement area(s) of concern are below the pupil's present grade placement and are more than one standard deviation below the mean on the distribution of achievement scores predicted from obtained intellectual functioning scores. In establishing the difference of one standard deviation, the effects of regression toward the mean and errors of measurement must be applied. If the technical data necessary to account for the effects of regression are not available, the discrepancy between the obtained achievement and intellectual functioning standard scores must be at least two standard errors of measurement for the difference.

If norm-referenced tests are not available in a particular achievement area, the diagnostic-educational team shall state in writing the assessment procedures used, the assessment results, the criteria applied to judge the importance of any difference between expected and current achievement, and whether a severe discrepancy is present that is not correctable without the provision of special education.

In cases where a pupil's obtained scores on norm-referenced tests are not severely discrepant from intellectual functioning, but the results are suspect and the diagnostic-educational team believes that the pupil's current achievement is severely discrepant, the team shall state in writing the specific nonnorm-referenced data, including a description of the assessment procedures used and the criteria applied to determine the presence of a severe discrepancy, which supports the team's conclusion. In such cases, a copy of the supportive documentation will be reviewed and maintained by the director.

5. A member of the diagnostic-educational team must observe the pupil's performance in the general education classroom setting for school-aged pupils or in the home or center-based setting for preschool pupils. The primary purposes of the classroom observation

are to seek evidence for the existence of a learning disability and to determine the degree to which the disability, if any, affects learning. The individual responsible for the observation must be someone other than the pupil's classroom teacher who is trained to use observation as a diagnostic procedure.

6. The severe discrepancy between achievement and intellectual functioning must not be primarily attributable to behavioral disorders, chronic health problems, physical impairments, environmental disadvantages, cultural or language difference or a history of an inconsistent educational program.

7. The degree of the achievement-intellectual functioning discrepancy may decrease as a pupil receives special education, progresses academically and maintains that progress. Consideration of these factors will be used to determine a pupil's movement along the continuum of special and general education options, and in targeting appropriate transfer from a special education instructional program. A pupil who attains an achievement level commensurate with expected performance, given current grade level placement and intellectual functioning, and is able to maintain satisfactory educational performance in the general classroom setting shall be transferred from the special education instructional program.

"Mental disability" is the inclusive term denoting significant deficits in adaptive behavior and subaverage general intellectual functioning. For educational purposes, adaptive behavior refers to the individual's effectiveness in meeting the demands of one's environment and subaverage general intellectual functioning as evidenced by performance greater than one standard deviation below the mean on a reliable individual test of general intelligence valid for the individual pupil.

"Behaviorally disordered" is the inclusive term for patterns of situationally inappropriate behavior which deviates substantially from behavior appropriate to one's age and significantly interfere with the learning process, interpersonal relationships, or personal adjustment of the pupil to such an extent as to constitute a behavioral disorder.

1. Clusters of behavior characteristic of pupils who are behaviorally disordered include: Cluster I—Significantly deviant disruptive, aggressive or impulsive behaviors; Cluster II—Significantly deviant withdrawn or anxious behaviors; Cluster III—Significantly deviant thought processes manifested with unusual communication or behavioral patterns or both; and Cluster IV—Significantly deviant behavior patterns characterized by deficits in cognition, communication, sensory processing or social participation or a combination thereof that may be referred to as autistic behavior. A pupil's behavior pattern may fall into more than one of the above clusters.

2. The determination of significantly deviant behavior is the conclusion that the pupil's characteristic behavior is sufficiently distinct from that of the pupil's peer group to qualify the pupil as requiring special education programs or services on the basis of a behavioral disorder. The behavior of concern shall be observed in the school setting for school-aged pupils and in the home or center-based setting for preschool-aged pupils. It must be determined that the behavioral disorder is not maintained by primary intellectual, sensory, cultural or health factors.

3. In addition to those data required within the comprehensive educational evaluation for each pupil requiring special education, the following areas of data shall be gathered when identifying a pupil as behaviorally disordered which describe the qualitative nature, frequency, intensity, and duration of the behavior of concern. If it is determined that any of the areas of data collection are not relevant in assessing the behaviors of concern, documentation must be provided explaining the rationale for such a decision. Such documentation will be reviewed and maintained by the director.

(a) "Setting analysis data" is information gathered through informal observations, anecdotal record review and interviews describing the setting from which a pupil was referred; documented prior attempts to modify the pupil's educational program so as to make behavioral and academic achievement possible in the current placement; and, social functioning data that includes information, gathered from sources such as teacher interviews and sociometric measures, regarding the referred pupil's interaction with peers.

(b) "Pupil behavioral data" are measures of actual behavior that include the specific recording, through systematic formal observations, or a pupil's behavior, including the frequency of behaviors of concern; and, measures of reported behavior that include checklists or rating scales and interviews that document the perceptions of school personnel regarding the behavioral pattern of the referred pupil and the perceptions of the pupil's home and school behavior obtained from the parent or surrogate parent.

(c) "Individual trait data" is information about the unique personal attributes of the pupil. This information, gathered through pupil and teacher interviews and relevant personality assessments, describes any distinctive patterns of behavior which characterize the pupil's personal feelings, attitudes, moods, perceptions, thought processes and significant personality traits.

"Physical disability" is the inclusive term in denoting physical or visual impairments of pupils requiring special education.

"Physical impairment," a physical disability, is manifested as an aberration of an essential body structure, system or function. Physical impairments are defined operationally in terms of orthopedic, neuromuscular, other health impairments, or any



combination, which may be a result of congenital or acquired conditions of unknown or miscellaneous causes. These pupils may manifest functional impairments in body balance, ambulation and limb and hand utilization. The severity of these noncognitive functional limitations are such that the pupil needs special education.

"Hearing impairment," a communication disability, is a loss of auditory sensitivity ranging from mild to profound which may affect one's ability to communicate with others.

1. "Deaf" pupils include those individuals whose hearing impairment is so severe that they do not learn primarily by the auditory channel even with amplification, and who need extensive specialized instruction in order to develop language, communicative and learning skills.

2. "Hard of hearing" pupils include those individuals whose level of communication ability is adequate to allow them to acquire speech and language and to learn by auditory means although they may experience difficulty, under certain circumstances, in oral communication, language and learning skills with or without amplification, and who may need various classroom and instructional modifications in order to make full use of school experiences.

"IEP" means individualized education program.

"Severely handicapped" are pupils with any severe disability including pupils who are profoundly multiply handicapped.

"Profoundly multiply handicapped" are descriptive of pupils who may exhibit a combination of the following characteristics:

1. Use no means of communication beyond affect responses or use an augmented communication system that is not a standard symbol system to indicate needs and wants.

2. Are dependent in mobility or requires supervision in order to meaningfully traverse between points in the environment.

3. Are dependent in all daily living activities.

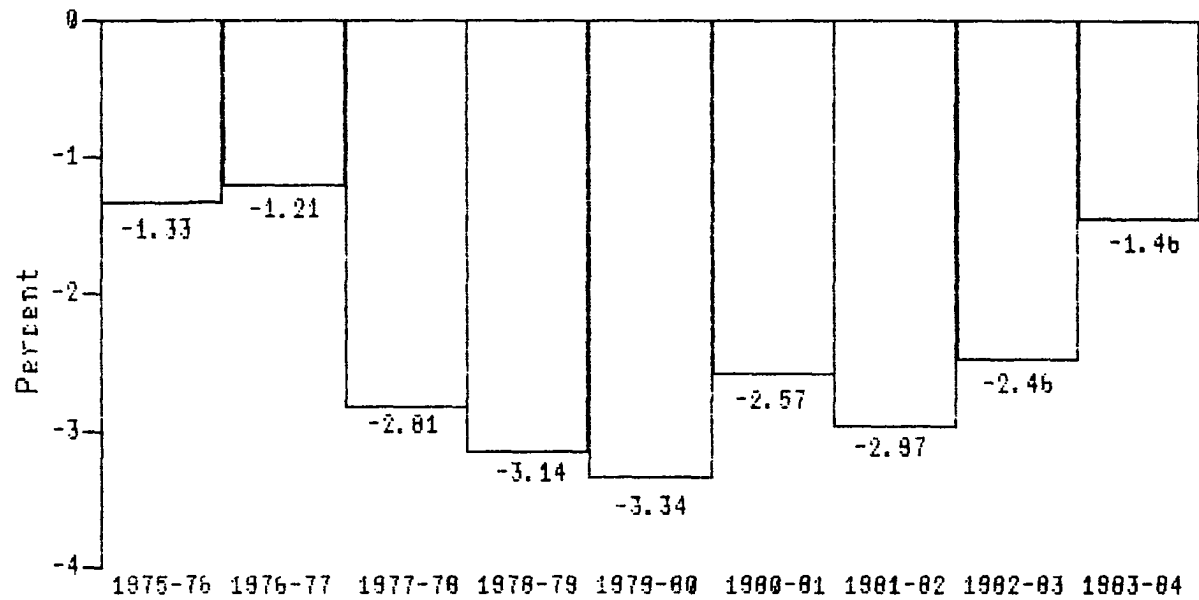
4. Have minimal social interaction skills and may exhibit severe maladaptive behaviors.

5. Have mental, physical or sensory handicaps.

6. Have fragile medical conditions, including seizures.

"Visual impairment," a physical disability, is characteristic of pupils whose vision deviates from the normal to such an extent that they require special education. Educational functioning and visual and adaptive skills are used in determining needs of pupils with visual impairments.

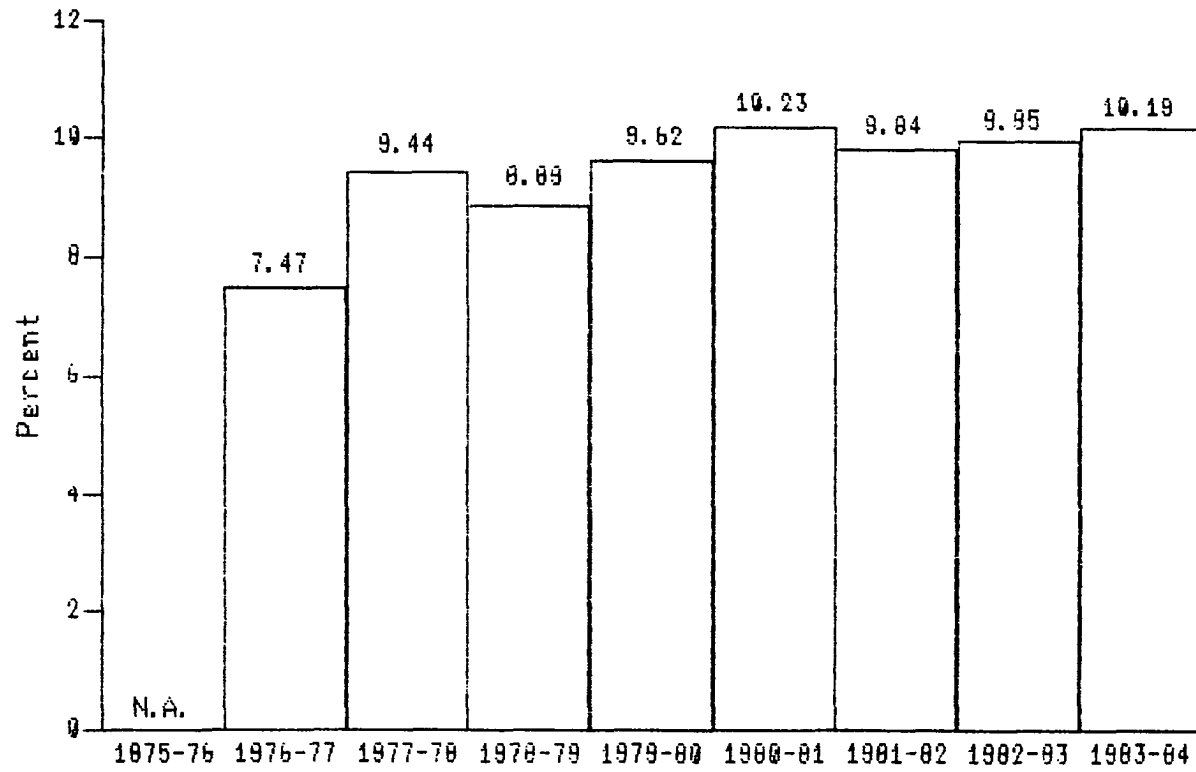
APPENDIX D: OTHER DATA EXAMINED



PERCENT OF CHANGE FROM PREVIOUS YEAR IN TOTAL PUBLIC AND NONPUBLIC ENROLLMENTS  
1975-76 THROUGH 1983-84

PART B, EHA COUNTS: AGES 3-21  
1975-76 THROUGH 1983-84

Year	Communi- cation/ Speech	LD	MD	BD	PD	HI	SP	VI	Total
1975-76	NA	NA	NA	NA	NA	NA	NA	NA	NA
1976-77	17,475	17,552	12,079	1,587	400	562	—	117	49,772
1977-78	16,838	18,971	12,413	1,958	422	630	—	148	51,380
1978-79	16,916	21,676	12,322	2,4529	551	737	677	168	55,476
1979-80	16,044	23,961	12,544	3,095	672	789	667	238	58,010
1980-81	15,753	25,771	12,268	3,872	764	784	677	204	60,093
1981-82	15,218	22,347	11,932	4,016	975	754	676	188	56,106
1982-83	14,656	21,340	11,965	4,612	1,052	779	723	202	55,329
1983-84	14,506	21,269	12,042	5,274	1,128	756	700	179	55,854



PROPORTION OF PART B EHA COUNTS TO TOTAL PUBLIC AND NONPUBLIC ENROLLMENTS  
1975-76 THROUGH 1983-84

GROWTH IN PART B, EHA COUNTS  
AND SPECIAL EDUCATION WEIGHTED COUNTS  
1975-76 THROUGH 1983-84

	Part B, EHA Child Count	% Growth from Previous Year	Weighted Count	% Growth from Previous Year
1975-76	NA	—	33140	—
1976-77	49772	—	36257	9.41
1977-78	51380	3.23	38032	4.90
1978-79	55476	7.97	39145	2.93
1979-80	58010	4.57	41046	4.86
1980-81	60093	3.59	43647	6.34
1981-82	56106	-6.63	40198	-7.90
1982-83	55329	-1.38	40070	-0.32
1983-84	55854	0.95	40996	2.31

**APPENDIX E: SECRETARY'S ANNUAL REPORT**

# SPECIAL EDUCATION SUPPLEMENT

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## SECTION 1. PROGRAM DATA

Name of District \_\_\_\_\_

AEA No.	County No.	District No.
1	3	

**ITEM A. PROGRAMS BY DISABILITY**  
**(HEAD COUNT OF SPECIAL EDUCATION TEACHERS AND HEAD COUNT OF RESIDENT PUPILS ONLY ENROLLED IN A SPECIAL EDUCATION PROGRAM PROVIDED BY YOUR DISTRICT)**

	SUPPLEMENTAL ASSISTANCE (1)		RESOURCE TEACHING PROGRAMS (2)		SPECIAL CLASS WITH INTEGRATION (3)		SELF CONTAINED CLASS (4)		PRESCHOOL HANDICAPPED (5)		PRESCHOOL HANDICAPPED (6)		SELF CONTAINED CLASS (7)		TOTAL (8)	
	No. of Tchrs.	No. of Pupils	No. of Tchrs.	No. of Pupils	No. of Tchrs.	No. of Pupils	No. of Tchrs.	No. of Pupils	No. of Tchrs.	No. of Pupils	No. of Tchrs.	No. of Pupils	No. of Tchrs.	No. of Pupils	No. of Tchrs.	No. of Pupils
	XXX	1.7	XXX	1.7	XXX	1.7	XXX	2.2	XXX	2.2	XXX	3.6	XXX	3.6	XXXX	XXXXXX
Physical .....	XXX														13	18
Communication .....	XXX														25	31
Hearing .....	XXX														37	43
Vision .....	XXX														48	55
Mental .....	XXX														61	67
Behavioral .....	XXX														73	13
Learning .....	XXX														31	37
Severe/Profound Multi-Categorical Teacher	XXX	XXX	XXX	XXXX	XXX	XXXX	XXX	XXXX	XXX	XXXX					43	48
Severe/Profound Multi-Categorical Teacher	XXX	XXX		XXXX		XXXX	XXX	XXXX		XXXX		XXXX	XXX	XXXX	55	XXXXXX
<b>GRAND TOTALS</b>	XXX	61	67	73	13	18	25	31	37	43	48	55	61	67	73	13

**ITEM B. NUMBER OF RESIDENT PUPILS IDENTIFIED/WEIGHTED ATTENDING REGULAR CLASS ONLY (NOT IN A SPECIAL EDUCATION PROGRAM)**

RESOURCE TEACHING PROGRAM 1.7 (1)	SPECIAL CLASS WITH INTEGRATION 1.7 (2)	SELF CONTAINED CLASS 2.2 (3)	PRESCHOOL HANDICAPPED 2.2 (4)	PRESCHOOL HANDICAPPED 3.6 (5)	SELF CONTAINED CLASS 3.6 (6)	TOTAL (7)
13	18	25	31	37	43	48

**ITEM C. NUMBER OF RESIDENT PUPILS IDENTIFIED/WEIGHTED NOT ATTENDING SCHOOL**

SA 1.7 (1)	RTP 1.7 (2)	SCIN 1.7 (3)	SCC 2.2 (4)	PS 2.2 (5)	PS 3.6 (6)	SCC 3.6 (7)	TOTAL (8)
13	18	25	31	37	43	48	55

**ITEM D. NUMBER OF SPECIAL EDUCATION CLASSES**

RTP 1.7 (1)	SCIN 1.7 (2)	SCC 2.2 (3)	PS 2.2 (4)	PS 3.6 (5)	SCC 3.6 (6)	TOTAL (7)
13	18	25	31	37	43	48

**ITEM E. NUMBER OF SPECIAL EDUCATION TEACHER AIDES (HEAD COUNT)**

SA 1.7 (1)	RTP 1.7 (2)	SCIN 1.7 (3)	SCC 2.2 (4)	PS 2.2 (5)	PS 3.6 (6)	SCC 3.6 (7)	TOTAL (8)
13	18	25	31	37	43	48	55

**ITEM F. PROGRAMS BY DISABILITY: [NUMBER OF NONRESIDENT PUPILS ONLY (HEAD COUNT) ENROLLED IN A SPECIAL EDUCATION PROGRAM PROVIDED BY YOUR DISTRICT INCLUDING DISTRICT COURT PLACED CHILDREN AND CERTAIN SPECIAL EDUCATION CHILDREN, AS DEFINED BY THE CODE OF IOWA, SECTIONS 281.12 and 282.27]**

	SUPPLEMENTAL ASSISTANCE (1)	RESOURCE TEACHING PROGRAMS (2)	SPECIAL CLASS WITH INTEGRATION (3)	SELF CONTAINED CLASS (4)	PRESCHOOL HANDICAPPED (5)	PRESCHOOL HANDICAPPED (6)	SELF CONTAINED CLASS (7)	TOTAL (8)
	No. of Pupils	No. of Pupils	No. of Pupils	No. of Pupils	No. of Pupils	No. of Pupils	No. of Pupils	No. of Pupils
	1.7	1.7	1.7	2.2	2.2	3.6	3.6	XXXXXXXXXXXXXX
Physical .....								13
Communication .....								18
Hearing .....								25
Vision .....								31
Mental .....								37
Behavioral .....								43
Learning .....								48
Severe/Profound	XXX	XXX	XXX	XXX	XXX			61
<b>GRAND TOTALS</b>	67	73	13	18	25	31	37	48





AEA No.	County No.	District No.

## SECTION II. FINANCIAL DATA

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**ITEM A.**

**BALANCE OF SPECIAL EDUCATION FUNDS CARRIED FORWARD FROM PREVIOUS YEARS: 1982-83, 1983-84**

1. 1982-83 Special Education Balance (Page 9 of 11, Item A, Line 6, 1983-84 S.A.R.) .....  
(Deficit Balances for Which Allowable Growth and/or State Aid was Granted by School Budget Review Committee = 0)
2. 1983-84 Special Education Balance (Page 10 of 11, Item F, Final Balance, Column 8, 1983-84 S.A.R.) .....  
(Deficit Balances for Which Allowable Growth and/or State Aid was Granted by School Budget Review Committee = 0)
3. Total 1982-83 + 1983-84 Special Education Balance .....  
(1 + 2)
4. State Board Approved Expenditures From Total 1982-83 + 1983-84.  
Special Education Balance .....
5. Special Education Balance of Funds Applied by the School Budget Review Committee .....
6. Remaining Balance of Special Education Funds Carried Forward From Previous Years: 1982-83, 1983-84.  
(3 - 4 - 5)

①	13
	25
	37
②	13
	25
	37

**ITEM B. RECEIPTS (SPECIAL EDUCATION CONTRACTED SERVICES TUITION)**

NAME OF DISTRICT (1)	NUMBER OF PUPILS (2)	TOTAL 1984-85 CONTRACT DOLLARS (3)	TOTAL DOLLARS RECEIVED 1984-85 CONTRACTS (4)	BALANCE PAID ON 1984-85 CONTRACTS (5)
1. TOTAL	⑬ 13	19	31	43
2. Total Dollars Received This Year on Previous Year Contracts (1983-84)			55	
3. GRAND TOTAL Contracted Dollars Received (1+2)			87	

**ITEM C. 1984-85 RECEIPTS: DOLLARS GENERATED BY SPECIAL EDUCATION PUPILS AS PRESCRIBED BY CHAPTERS 442 & 281 (RESIDENT PUPILS ONLY)**

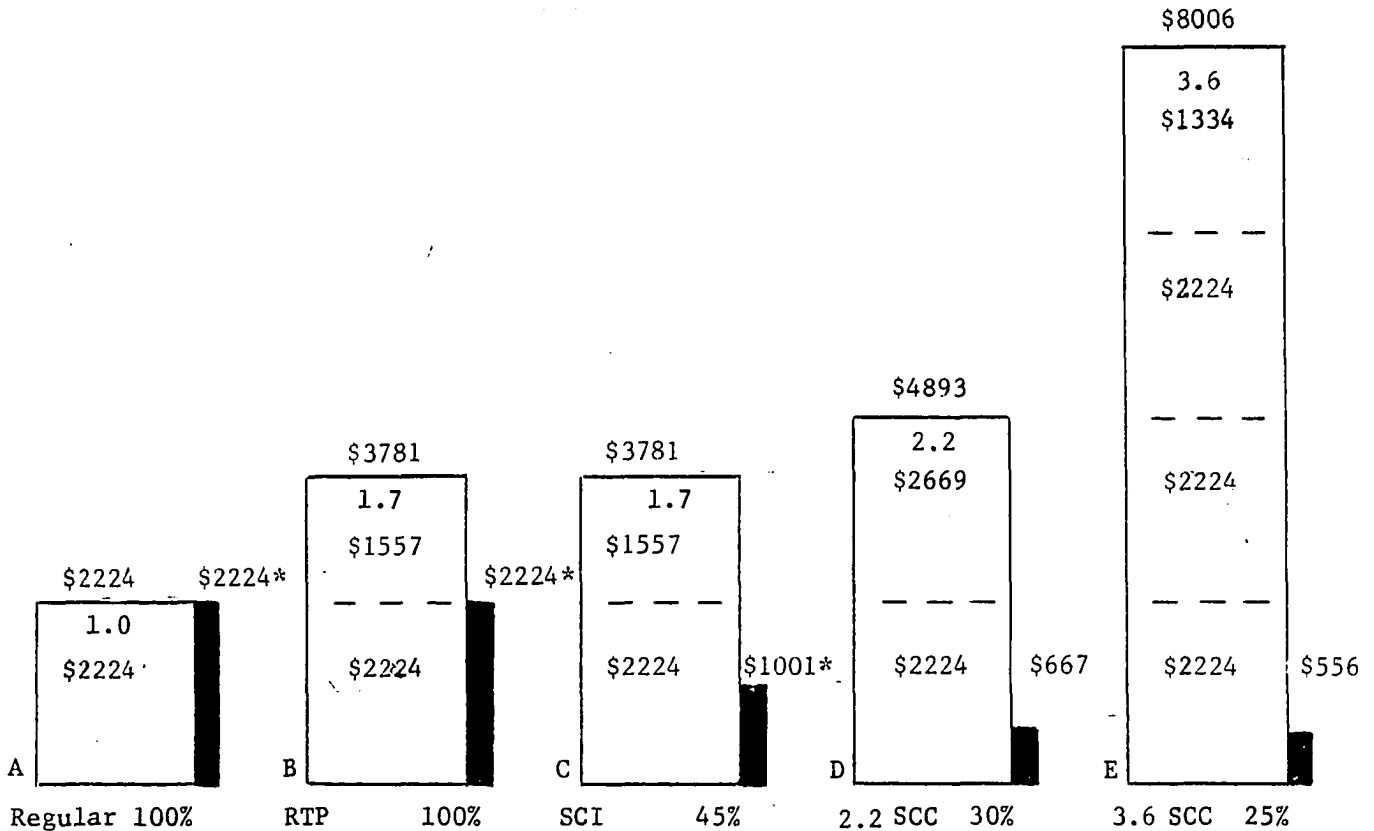
	1 No of Pupils	2 Weighting of Pupils	3 District Per Pupil Cost	4 Receipts for Col 1 x Col 3	5 Receipts for Additional Weight Col 2 x Col 3	6 TOTAL Col 4 + Col 5
(1) S.A. 1.7	⑬ 13	.	31			43
(2) R.T.P. 1.7	55	.	⑮ 13			25
(3) S.C. IN. 1.7	37	.	55			67
(4) S.C.C. 2.2	⑰ 13	.	31			43
(5) P.S. 2.2	55	.	⑮ 13			25
(6) P.S. 3.6	37	.	55			67
(7) S.C.C. 3.6	⑱ 13	.	31			43
1984-85 TOTAL Receipts Generated	55	.	⑳ 13	25	37	49

**ITEM D. REGULAR PROGRAM EXPENDITURES PER PUPIL CALCULATION**

	1 Percentage of District Per Pupil Cost to Apply	2 District Per Pupil Cost	3 Regular Program Expenditure Per Pupil Amount (Col 1 X Col 2)
(1) S.A. 1.7	100%		⑳ 13
(2) R.T.P. 1.7	100%		25
(3) S.C. IN. 1.7	45%		37
(4) S.C.C. 2.2	30%		49
(5) P.S. 2.2	30%		61
(6) P.S. 3.6	25%		⑳ 13
(7) S.C.C. 3.6	25%		25

APPENDIX F: COMPARISON OF REGULAR PROGRAM EXPENDITURES PER PUPIL TO  
TOTAL INSTRUCTIONAL PROGRAM DOLLARS GENERATED:  
WEIGHTING PLAN VIA FOUNDATION PLAN, 1983-84

Comparison of Regular Program Expenditures Per Pupil\*  
to Total Instructional Program Dollars Generated:  
Weighting Plan via Foundation Plan  
1983-84



- A. Pupils in a regular curriculum are assigned a weighting of 1.0.
- B. Children requiring special education who are enrolled in a regular classroom program for most of the school day, but who require special education instruction in specific skill areas on a part-time basis are assigned a weighting of 1.7; Resource Teaching Program (RTP).
- C. Children requiring special education with similar educational needs who are enrolled in a special education classroom but who can profit from participation in one or more academic subjects with pupils who are not handicapped are assigned a weighting of 1.7; Special Class with Integration (SCI).
- D. Children requiring special education who require full-time, self-contained special education placement with little integration into a regular classroom are assigned a weighting of 2.2; Self-Contained 2.2 Class (2.2 SCC).
- E. Children requiring special education who are severely handicapped or who have multiple handicaps or who are behaviorally disordered are assigned a weighting of 3.6 (3.6 SCC).

\*Based on 1983-84 state average cost per pupil of \$2224. Actual district per pupil cost will vary from district to district.

APPENDIX G: FOUNDATION PLAN, CHAPTER 442, 1983-84

FOUNDATION PLAN  
 Chapter 442  
 1983-84

Maximum Authorized  
Budget

	Unspent Balance	
Miscellaneous Income	Federal Aid Special State Aid SBRC Allow. (from Appr. Funds)	Controlled Budget =
\$1813*	Additional Mill Levy	District Cost Per Pupil x Weighted Enrollment
(78%) (\$2224+\$100)	State Aid	Foundation Level  (Approx. 60% State Average 1983-84) Including Ag. Land and Other Property Tax Relief
	Uniform Property Tax	\$5.40/\$1,000 Assessed Valuation

\*Includes AEA Support  
Flow-through Dollars  
in the amount of \$100.

APPENDIX H: AREA EDUCATION AGENCY CONTROLLED FUNDING: STATE AND  
LOCAL SOURCES, SPECIAL EDUCATION SUPPORT

AREA EDUCATION AGENCY CONTROLLED FUNDING  
STATE AND LOCAL SOURCES  
SPECIAL EDUCATION SUPPORT

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Year	Special Education Support Budgets
1975-76	\$26,452,545
1976-77	28,866,383
1977-78	35,269,488
1978-79	34,613,359
1979-80	46,150,191
1980-81	48,460,926
1981-82	52,840,850
1982-83	51,284,821
1983-84	55,629,875

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APPENDIX I: IOWA ENTITLEMENTS, PART B, E.H.A., P.L. 94-142

IOWA ENTITLEMENTS  
PART B, EHA, P.L. 94-142

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Year	\$ Pass Through AEAs	\$ DPI Allocation	Total Entitlement
1978-79	6,015,628	2,004,790	8,020,418
1979-80	9,003,808	2,998,456	12,002,264
1980-81	10,060,003	3,175,873	13,235,876
1981-82	10,088,878	3,178,893	13,267,771
1982-83	9,766,817	3,254,919	13,021,736
1983-84	10,308,287	3,434,109	13,742,396
1984-85	10,914,588	3,469,115	14,383,703

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