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ABSTRACT

This report describes the development, implementation, and impact of pupil weighting education finance systems in Florida, Utah, and New Mexico. Data, which were analyzed for pre- and post-reform periods, came from public documents and interviews with 217 state and local officials. Topics covered by the report include a general overview of the weighted pupil system, the research approach and methodology, adoption of the system in the three states, why weights differ from state to state, formula adjustments based on district differences, shifts in the distribution of formula funds since the reform, impact of the system on educational decision-making, issues associated with funding exceptional child education, analysis of distribution, and state efforts to implement a reform. (Author/LD)

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WEIGHTED PUPIL EDUCATION FINANCE SYSTEMS  
IN THREE STATES:  
FLORIDA, UTAH, AND NEW MEXICO

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## PREFACE

As state governments have increasingly attempted to expand educational services in special need program areas such as early childhood, vocational, bilingual, compensatory, and exceptional child education, the selection of an appropriate funding mechanism has emerged as a prominent issue in school finance. Most states initially viewed such services as supplemental programs and began funding them through separate categorical appropriations according to (1) a flat grant basis, (2) excess cost reimbursements (with the state funding various percentages of the total), or (3) classroom or teacher support grants.

A number of states have recently attempted a new approach to funding the special needs of students by establishing a formula based on the relative costs of serving different types of students. This distribution model, designated as the weighted pupil approach or pupil weighting system, has been implemented most extensively in Florida, Utah, and New Mexico, where the drive to broadly equalize the financial support of diverse program needs was considerable. This study focuses on the implementation of the reforms in those three states, from the initial legislative recognition for needed change to the actual fine tuning of the systems three and four years later. As applied policy research, the emphasis has been on generating information useful to those considering or implementing a weighted pupil approach.

An overriding concern has been to keep the report short and

useful, yet comprehensive. The latter agenda has somewhat precluded the former intent. There was simply an abundance of information that needed to be discussed. The following overview should serve to guide readers to those areas of most interest to them.

Chapter 1 presents the conceptual framework for the development of comprehensive weighted pupil systems. The distribution model is placed in context nationally, and the practice in other states of funding according to differential student need is described. A brief overview of the three subject states' pre- and postreform finance systems completes this introductory and background chapter.

The goals of policy research are discussed in Chapter 2, and the research methodology and sampling procedures are reported. Chapter 3 begins by examining the political and social forces that led to the reform and describes the process and rationale for establishing the various weights. Subsequent adjustments and respondent suggestions for changes are presented.

The critical technical options that account for weights differing from state to state are explained in Chapter 4. These include (1) defining the unit to be funded, (2) approving the unit, (3) determining the count, (4) establishing units, (5) setting the dollar value, and (6) prescribing the purpose for which the dollars may or shall be spent. This "nuts-and-bolts" chapter should be particularly useful to those seriously considering establishing a weighted pupil system.

Further formula adjustments based on district differences are the subject of Chapter 5. Sparsity factors, cost of living indices, and adjustments for varying teacher training and experience are discussed as they operate in pupil weighting states.

Chapter 6 analyzes shifts in the distribution of formula funds since the reform. Growth of vocational, bilingual, and exceptional child education programs are plotted for pre- and postreform years, and compared with the overall state educational finance picture and growth in the basic program. Additionally, pre- and postreform revenue earnings in special programs are compared for the sample districts, and emerging hypotheses relating district earnings, size, and assessed valuation per pupil are further explored.

Alterations in district and state management roles and responsibilities since the reform are the focus of Chapter 7. State and local perspectives, based on our approximately 220 interviews, are presented, replete with numerous direct quotes from well-informed and perceptive respondents.

The many issues associated with funding exceptional child education are pulled together in Chapter 8, since this program area is one of considerable concern to many state policymakers, particularly with the advent of Public Law 94-142. Different incidences of children being served in the various exceptional education programs are compared for the sample districts in each state, a difference which served as a fundamental assumption in establishing a weighted pupil system. The growth of the 15 programs

in Florida and Utah and the 3 programs in New Mexico is analyzed, and implications are discussed. Numerous implementation issues, identified by district exceptional education director respondents, are also discussed.

Chapter 9 concludes the report by focusing on two areas of analysis of interest to policymakers, analysts, and implementers. The first part of the chapter analyzes the weighted pupil system as a model for distributing state educational dollars and proposes a framework that may be applied to other distributional practices. Discussed next is the often overlooked, yet critical, process that begins after a bill becomes a law. Nine implementation issues are presented for consideration, relating the experience in Florida, Utah, and New Mexico with the growing literature in this area.

As we gathered information for this comprehensive study, a number of individuals contributed significantly. We appreciate the time, and the willing and thoughtful responses, of the more than 200 individuals we interviewed. Our in-state consultants, Heber Fuller in Utah and Harry Wugalter and Al Clemmons in New Mexico, assisted in acquiring much of our data and were invaluable in facilitating our interviews and in reviewing the accuracy of this report in relationship to their states. Additionally, through their enthusiasm, we came to fully appreciate the beauty of the people and the land in Utah and New Mexico. Of course, we were already familiar with Florida.

We hope this report responds to the numerous inquiries we have received and that it will be useful to those with the responsibility for

developing more informed state policy. A companion publication that is available from NIE or the authors focuses on practical advice for state policymakers and analysts: A Policy

Guide to Weighted Pupil Education  
Finance Systems.

Jack Leppert  
Dorothy Routh  
MGT of America, Inc.

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## 1. THE WEIGHTED PUPIL SYSTEM: THE NATIONAL AND STATE CONTEXT

Much of the school finance reform across the nation that took place in the early 1970's focused on minimizing the fiscal support inequities among districts which have existed for years. While many states are yet seeking ways to remove inequities due to local wealth disparities, three states, Florida, Utah, and New Mexico, have sought further equalization beyond the initial objective of providing equal dollars per child. Having first achieved the goal of substantial interdistrict equalization, they recognized a need to adjust for considerable variations in incidences of student program needs and their widely varying costs.

The states assumed that it was a state function, in equalizing educational opportunity, to guarantee differential dollars to districts in accordance with each district's own unique educational burden. For example, in Florida one very poor district has six times as high a percentage of mentally retarded children to educate as another district; therefore, the educational burden of that district is considerably greater.

In addition to the burden confronted by districts in providing higher cost exceptional child services, there were differential demands, and thus costs, associated with providing vocational services. Some districts needed to provide high-cost vocational education to prepare students for locally available jobs. One state wanted to put

more resources into the primary grades, feeling that a greater investment there would be most cost beneficial. Another state put more resources into secondary education, feeling that the highest cost programs existed there.

To respond to different needs and policy preferences, each of the states adopted a school finance approach known as the weighted pupil system. This approach simply distributes so many dollars per student, with each student "earning" an amount based on his or her specific needs. Educational needs and costs are determined in relationship to each other, and ratios, or weights, are generated. As one legislator-respondent sagely noted, "The concept is very simple and logical; the details are more challenging." This study focuses on the many details related to adopting and implementing a weighted pupil system, but first it is important to present some background information that places the weighted pupil reform in its appropriate national and state context.

### National View of Weighted Pupil Systems

Currently, 21 states appear to fund students directly according to at least one need differential. Maine, New Hampshire, Oklahoma, Oregon, and Pennsylvania use a weighted system to fund only elementary and secondary students differentially. Iowa has established weights for funding education needs

of exceptional students only. Fifteen states, Florida, Idaho, Illinois, Indiana, Minnesota, Montana, Nebraska, Nevada, New Jersey, New Mexico, New York, North Dakota, Tennessee, Utah, and Washington, each weight students by two or more factors to adjust for density, sparsity, grade level, vocational, and/or exceptional education needs. Two states, South Carolina and South Dakota, have enacted pupil weighting systems for future implementation. No two pupil weighting systems are alike; each state has used the approach to meet its own unique purposes and needs.

This study focuses on Florida, Utah, and New Mexico since they have developed the most comprehensive weighting systems. The emphasis has been on generating information useful to policymakers in the states that currently use pupil weights to fund one or more programs, as well as those who might be considering implementing a weighted pupil system.

## State Background

### Florida

Prior to its reform in 1973 Florida's Minimum Foundation Program was distributed according to instructional units based on varying pupil-teacher ratios related to different educational programs. Applications were made by school districts to the State Department of Education for units for kindergarten, vocational, adult, and exceptional children. Additional support personnel were allocated on a formula basis related to numbers of instructional units. Numerous other small categories were allocated primarily on a grant application basis.

Currently Florida supports 1.6 million students in 67 school districts. Students in grades 4 through 9 are weighted at a ratio of 1.00, having a value of \$822 in fiscal year 1977-78 (see Table 1.1). Primary school students receive approximately 23 percent more and high school students 10 percent more than this base through weights of 1.234 and 1.1 respectively.

Eight programs for full-time exceptional child needs are supported for students having mental, physical, or emotional handicaps. They are given weights from 2.30 for some mentally retarded students to 4.00 for deaf students. A ninth program, for the profoundly retarded, was begun during 1977-78. In addition, seven part-time programs for children are available. In those, values range from a low of 3.00 for gifted children to a high of 15.00 for hospitalized and homebound children.

Florida has also emphasized vocational education as a separately weighted program area. Full-time equivalent students at six different program cost levels are supported by weights ranging from 1.17 to 4.26. A limited number of adult education programs are also supported. The combined effect of this weighting is to produce approximately 2.0 million weighted full-time equivalent students (WFTE's). Since the incidence of need or demand for the services funded varies from district to district and from school to school (school sites are really the basis for earnings and accounting in Florida), a significant variation in dollar support per child occurs. Clearly then, an elementary school with a large number of exceptional or handicapped children would gen-

TABLE 1.1

## FLORIDA EDUCATION FINANCE PROGRAM PUPIL WEIGHTS

<u>Program</u>	<u>1977</u>
Grades K-3	1.234
Grades 4-9	1.00
Grades 10-12	1.10
<b>Full-Time Exceptional Students</b>	
Educable mentally retarded	2.30
Trainable mentally retarded	3.00
Severely & profoundly retarded	4.95
Physically handicapped	3.50
Deaf	4.00
Visually handicapped	3.50
Emotionally disturbed	3.70
Socially maladjusted	2.30
Specific learning disability	2.30
<b>Part-Time Exceptional Students</b>	
Physical therapy	6.00
Speech therapy	10.00
Visually handicapped	10.00
Emotionally disturbed	7.50
Specific learning disability	7.50
Hospitalized and homebound	15.00
Gifted	3.00
<b>Vocational-Technical</b>	
Voc Ed I	4.26
Voc Ed II	2.64
Voc Ed III	2.18
Voc Ed IV	1.69
Voc Ed V	1.40
Voc Ed VI	1.17
<b>Adult Programs</b>	
Adult basic and high school	1.28

erate several hundred dollars more per child than a middle school with fewer exceptional children and limited vocational offerings.

Once the number of WFTE's per district is established, one additional calculation is performed to arrive at the district's entitlement. An adjustment based on a cost of living index factor established for each district is made. Based on yearly studies, adjustments with a range of plus or minus 8 percent are the pattern. No other adjustments are currently made. In 1973 only, as a political condition for reform, an added equalizing leveling up provision was calculated and funded.

As in most states, the portions of the base earnings borne by both the state and the local district are based on local wealth. The required local effort of 6.3 mills in each Florida district provides from about 10 percent to 90 percent of the value per WFTE. The state pays the balance. Additional un-equalized millage up to 1.7 more mills may be levied for operating purposes by the local school board.

#### Utah

Prior to its reform in 1973, Utah's Basic School Program was allocated according to distribution units (approximately classroom units); based on average daily attendance (ADA). Applications were made to the State Board of Education for units for vocational and exceptional child education. Additional distribution units were awarded for administrative and support personnel at a rate of one per nine distributional units earned for programs. Numerous other relatively small categoricals were dis-

tributed, either according to district applications or prorated among districts.

Currently, over 300,000 public students in 40 school districts are supported under the recent reform act. Pupil weightings have been established in two areas where true cost differentials were apparent: special education and vocational education (see Table 1.2). Utah has established a base weight or factor of 1.00 for all grade levels. District weightings adjust for small schools and staff costs.

Fifteen special education categories have been set, of which eight provide supplemental support in regular classrooms and seven provide substantially higher support (up to a 3.09 weight) for students in full-time self-contained classes. The number of qualifying students is multiplied by the weight factors (.50 to 3.09) to establish the base for further entitlement calculation.

Vocational programs are also separately funded. Full-time equivalent student units in five program areas are multiplied by add-on weight factors of from .4 to 1.4 to derive supplemental weighted pupil units (WPU's). Two adjustments are made to the total WPU's in the basic, exceptional, and vocational categories. Small schools, determined as "necessarily existent" by a multi-staged set of size and grade level categories, are identified and earn supplemental WPU's under one of 21 classifications. These school by school extra WPU's are added to a district's count.

An additional adjustment is made for professional staff training and experience. An added cost fac-

TABLE 1.2

UTAH MINIMUM SCHOOL PROGRAM PUPIL WEIGHTS

<u>Program</u>	<u>1977</u>
Grades K-12	1.00
<b>Full-Time Handicapped Programs</b>	
Educable mentally retarded	2.28
Trainable mentally retarded	2.53
Emotionally disturbed	3.09
Deaf	2.50
Motor handicapped	2.88
Homebound & hospitalized	1.80
Multiple handicapped	2.78
<b>Part-Time Handicapped Programs (add on)</b>	
Educable mentally retarded	1.00
Trainable mentally retarded	1.00
Learning disabilities	1.00
Emotionally disturbed	1.00
Hard of hearing	1.60
Speech & hearing therapy	.50
Motor handicapped	1.20
Visually impaired	1.60
<b>Vocational (add on)</b>	
Agriculture	1.20
Business	.80
Distributive	.60
Home economics	.40
Technical & industrial	1.50

tor ranging from 1.00 to 1.70 within a matrix of 5 educational levels and 11 years of experience is applied to the staff of each district and multiplied by one-fourth of that district's WPU's. This provides for a portion of the extra salary costs of those districts having relatively greater numbers of teachers high on the salary index. The total WPU's for a district are then multiplied by the guaranteed base amount (\$683 in fiscal year 1976-77) to determine the total entitlement, which is funded jointly by local property taxes and state appropriations. The local share is the yield from 28 mills. The legislature provides the balance. Additionally, up to 10 unequalized mills may be levied locally for any purpose by referendum.

### New Mexico

Prior to its reform in 1974, New Mexico's basic support aid was distributed according to a staffing ratio formula based on 12 categories to cover instructional, administrative, and maintenance needs. Differentially funded staff units were allocated to districts in accordance with their 40-day membership reports. Staffing salary units for vocational and exceptional child education required approval by the state based upon the district's submission of a planned program. Supplemental funds were also distributed by the Chief of Public School Finance based on district need.

Currently, New Mexico recognizes the varying needs of some 275,000 students in 88 school districts by weighting grades 4 to 6 at a factor of 1.00, primary grades at 1.10, and grades 7 to 12 at 1.25 (see Table 1.3).

New Mexico also provides for three exceptional or special education weights. The first is a weight of 20.0, which provides funding for 20 students to be assisted by itinerant teachers in resource rooms. This was a program weight, not affected by student count directly, and was modified at the 1976 legislative session to allow a local district option to shift to an allocation based on a .12 weight in grades 1 to 3, thus avoiding certain program approval and accounting procedures. Two other full-time student weights exist: for the moderately handicapped, a weight of 1.9, and for the severely handicapped, a weight of 3.5.

To the amounts thus earned, New Mexico employed an add-on weighting system by providing an extra weight of .5 for eligible bilingual students to be spent within that program boundary (reduced for fiscal year 1976-77 to .3) and an add-on weight of .8 per full-time equivalent vocational student. The separate funding of vocational programs was maintained until the 1976 amendments, when it was absorbed into the value of the basic secondary student unit.

Beyond having established the total number of weighted students, two significant additional calculations are made which can substantially alter a district's basic earnings. The first is the staff educational training and experience (T&E) index. Basic earnings are multiplied by 25 factors of as low as .75 for teachers with less than a B.A. degree and fewer than 2 years of teaching experience to as high as 1.50 for teachers holding a post-M.A. degree and 15 years of experience. Thus, districts with

TABLE 1.3

NEW MEXICO SCHOOL FINANCE PROGRAM PUPIL WEIGHTS

<u>Program</u>	<u>1977</u>
Kindergarten	1.3
Grades 1-3	1.1
Grades 4-6	1.0
Grades 7-12	1.25
Full-Time Special Education	
C-Moderate	1.9
D-Severe	3.5
Part-Time Special Education	
A/B Resource room or itinerant teacher	20.0 or G 1-3 ADM x .12
Bilingual	.3

Note: While not funded as such, all special education students are diagnosed in one of the following nine areas and prescribed for service in A through D service patterns.

Behaviorally disordered  
 Communication disordered  
 Gifted  
 Hearing impaired  
 Learning disabled

Mentally handicapped  
 Multiple disabled  
 Physically impaired  
 Visually impaired

low or high T&E factors will receive less or more per child; however, no district will be computed with a factor less than 0.95.

The second adjustment is based on three sparsity measures. The student membership (ADM) in each elementary, junior high, and senior high school is reported along with the district total ADM. By formula, low population schools and districts can earn supplemental pupil units and commensurate funds, the value of which has amounted to up to a 65 percent add-on in certain situations. While currently applicable to only one district, a third factor, rural isolation, was added in 1976. It provides funds where geographically large districts necessarily operate remote, but large, high schools.

All of the above factors are used to determine the number of units for each district. For the 1976-77 year that number was multiplied by the base amount of \$800. From that amount a required local effort is determined by adding together essentially all nonstate revenue received by the district, including a local millage levy of about 9 mills and 95 percent of Federal Public Law 874 funds. That sum is subtracted from the state entitlement to determine the level of the state guarantee. No additional local levies for operating purposes

are allowed; thus, New Mexico is clearly the most equalized of the states except Hawaii.

### Summary

From these brief overviews it is clear that each of the states has developed its own unique pupil weighting system and that there are significant differences among the systems. One state weights elementary education higher, one weights secondary higher, and one weights them equally. One state has only 3 categories of exceptionality, while the other states have approximately 15. Vocational education is weighted according to 6 categories, 5 categories, and not at all. Teacher training and experience are important adjustments in two of the states and not utilized by the third, which is the only state to use cost of living adjustments. Two states include sparsity factors, one does not. A bilingual weight exists in one state but not in the other that also has a large Spanish-speaking population.

Thus, it should be recognized from the beginning that there is no single "right" pupil weighting system. "Rightness" is related to local educational and political factors and, most particularly, to that combination of concepts and facts which will gain at least 51 percent of the votes in the legislature.

## 2. THE RESEARCH APPROACH AND METHODOLOGY

This study of a weighted pupil distribution approach to school funding is research related to the making and implementation of policy. In conducting policy research it is important to clarify the purpose and usefulness of that research before developing the research design, for the purpose should direct the inquiry. We identified three primary objectives in studying pupil weighting systems, and they were used as criteria for formulating our research approach.

1. Policy research should generate information that is useful and of interest to people in policymaking positions. The research must attempt to answer questions policymakers might ask.

In the case of pupil weighting systems, many state policymakers have expressed interest in learning more about this system as they seek to refine their educational allocation formulas according to the differentiated needs of students. During the course of our year's research we received numerous requests from states seeking information about the weighted pupil approach. Three states, South Carolina, Tennessee, and South Dakota, have incorporated pupil weighting systems into their school finance reform legislation during the 1977 sessions. Many other states will be examining pupil weighting systems as a part of their Section 842 studies. In addition, policymakers in the three states studied have indicated their interest in receiving feedback and suggestions for improving their systems.

Policymakers want to know generally how well this new approach is working. They want to know if the legislative intent is being accomplished, and what new incentives are being created. Since all finance approaches have their associated "games," some policymakers are interested in learning the rules of this new game. Some are interested in the "nuts and bolts" of how the system works in the three states studied. Many want to know which weights are correct.

Special interest groups are interested in how various populations are faring, for example, exceptional children, cities, vocational education, isolated areas, and state departments of education. Obviously there are numerous questions that have been, and could be, raised by interested persons. We have tried to explore the most significant of those areas in order to generate information useful to those who shoulder the responsibility for delivering education resources equitably, and we hope this report will assist in that important job.

In addition to pursuing questions that policymakers would ask, it is important in policy research to generate knowledge regarding how policy decisions are made, for in some legislative climates the best decisions have no chance of passing. Therefore, we sought to explore the politics of enacting the weighted pupil reform in each of the three states. Such knowledge of the significant issues and dynamics should be of value to policymakers under-

taking a weighted pupil system in their state.

2. The research should contribute to the growing inquiry into educational finance equity issues and to research in the field of educational administration in the states.

All three states, Utah, New Mexico, and Florida, have been implementing their reforms during the past three years, allowing sufficient time for the study of their impacts. These states provide good examples of a major innovation in school finance--the extensive development of systems of funding districts according to differential student needs and costs. This has become a significant issue in the important sequence of school finance reforms and equalization efforts. Finally, the three states, while sharing the extensive use of weights, differ in several ways that contribute to the development of a significant comparative study of state decisionmaking styles, policy preferences, and administrative procedures.

3. The research should clarify the implementation options exercised by the states and build upon the growing field of study of policy implementation.

A number of scholars (most notably Pressman and Wildavsky,<sup>1</sup> Bardach,<sup>2</sup> Hargrove,<sup>3</sup> and Williams and Elmore<sup>4</sup>) have pointed out that the study of implementation is the "missing link" in policy analysis. By studying the three cases of the states that extensively use pupil weights, one should be able to learn from both their similar and their different experiences. Implementation challenges have been analyzed and related to the accounts of other governmental experience addressed

in the growing implementation literature. From this collective experience, practical recommendations regarding critical implementation issues are offered in a companion publication, A Policy Guide to Weighted Pupil Education Finance Systems.

The basic assumption here is that policy research should not merely focus on descriptions, relationships, or causative factors; but should seek to generate information useful to policymakers and implementers in making better judgments regarding future courses of action.

### The Research Methodology

The basic research methodology used to respond to the objectives described above was to develop comparative case studies of the establishment, implementation, and impact of the pupil weighting systems in Florida, Utah, and New Mexico.

Comparative case studies have often been used when investigating new territory or when limited cases exist. Such was our situation, since only Florida, Utah, and New Mexico have extensive pupil weighting systems that are innovative and of long enough duration to analyze. Bock, in presenting an argument for "achieving realism and significance" in government studies, asserts that case studies are "excellent instruments for the exploration of new and unfamiliar areas of government activity.... They can yield important scientific value by discovering knowledge which is as yet unappreciated, undifferentiated, unresearchable, unaccounted for, or unknown by existing theory and its more closely attached methodologies."<sup>5</sup>

In presenting the case for the significance of comparative case studies, Williams explains:

Given the limitations of other methodologies and the current state of knowledge, it would appear that comparative case studies of specific policy decisions, aimed at investigating the linkages among input, process and output variables might be extremely fruitful. Not only might exploratory studies of this nature generate hypotheses that could be subsequently tested in larger, more quantitatively oriented studies, but they might also help clarify our thinking about theoretical variables central to the study of policy making. Such case studies could be comparative in the sense of studying the same decision in a number of communities, different decisions in the same community, or both.<sup>6</sup>

Pincus, in grappling with the complex issue of "incentives for innovation in the public schools," concurs that we have little systematic, comparative documentation of the implementation of innovations. He explains:

...arguments based on unsystematic observation supplemented by a few case studies, need to be rejected or confirmed by more systematic case studies. Such studies can point the way to more effective strategies for development and implementation.<sup>7</sup>

The usual procedures of reviewing relevant documents and conducting extensive interviews have been employed in our re-

search, in keeping with Fesler's discussion in "The Case Method in Political Science":

The effective case study is a blend of fact and inference, of research and creative writing. The scholarly case writer starts with documents, moves on to interviews, and in the end brings his creative talents to bear on the recreation of the reality of a course of administrative events in which human beings as well as rational ideas were the moving parts.<sup>8</sup>

Inundated with data, the case writer "must sieve out a multitude of unessential details and look more deeply into some matters than others."<sup>9</sup>

Comparative case study research, however, differs from a single case study in that one must carefully structure research questions and data needs prior to interviewing so that comparable information can be gathered in the various interview situations. Therefore, two master interview instruments were developed, one for state-level respondents, and one for district-level respondents. Approximately 20 respondents were identified in each state who were involved at the state level in the formulation or implementation of the pupil weighting systems. They included legislators, legislative staff members, one governor, governors' staff members, the three chief state school officers and state education department staff members, chief educational finance officers, academicians, and representatives of school board associations, statewide teacher organizations, and superintendent organizations. (See the appendix for a list of respondents.)

In order to study the impact and implementation of the weighted pupil approach, it was essential to conduct extensive local district interviews. To decide where district interviews would be conducted, we sought to locate representative districts, considering district size and wealth as well as geographical distribution. Each of the three states has a relatively small number of districts (Florida, 67; New Mexico, 88; and Utah, 40); our sample districts represented approximately 50 percent of the student population in each state. We used categories shown on the following matrix in selecting districts:

basic data considered for the district selection.

The sample selection was additionally aimed at guaranteeing access to many of the state's most knowledgeable participants and observers of the reform process implementation and impact. Six district staff positions were identified as most important to gaining an informative and representative perspective: (1) the superintendent, or a top administrator; (2) the finance officer; (3) a school board member; (4) a principal; (5) a teacher; and (6) the director of special education.

	Wealthy	Poor
Large		
Medium		
Small		

In Florida we selected two districts from each cell, or 12 districts. However, Utah and New Mexico each had only one district that could be considered large; therefore, only nine districts were selected in each of those two states. Tables 2.1, 2.2, and 2.3 show the

A day was spent in each of the 30 selected districts, interviewing and gathering other necessary data. We were able to locate most of our intended respondents despite such scheduling conflicts as a state superintendents' meeting and a national school board conference.

TABLE 2.1  
SAMPLE FLORIDA SCHOOL DISTRICTS

<u>Florida County Districts</u>	<u>1974 Tax Rolls (in millions)</u>	<u>Unweighted 1975 FTE (in thousands)</u>	<u>Property Wealth per FTE (in thousands)</u>
Broward	\$10,878	143	\$ 76.07
Dade	16,463	269	61.20
Duval	3,887	111	35.02
Hillsborough	3,443	116	29.68
Palm Beach	5,201	74	70.96
Sarasota	2,361	25	94.44
Brevard	1,924	58	33.17
Alachua	749	23	32.57
Charlotte	663	6	110.51
Collier	1,578	13	121.38
Gadsden	143	10	14.30
Levy	<u>125</u>	<u>4</u>	<u>31.25</u>
Sample	\$47,415	852	\$ 55.65
State	\$81,275	1,601	\$ 50.77
Sample %	58.34	53.22	

Source: District School System--Pupil and Financial Data,  
State of Florida, 1974-75.

TABLE 2.2

## SAMPLE UTAH SCHOOL DISTRICTS

<u>Utah School Districts</u>	<u>1975 Tax Rolls (in millions)</u>	<u>Unweighted 1973 Membership</u>	<u>Property Wealth per Member (in thousands)</u>
Granite	\$ 388.9	61,266	\$ 6.35
Salt Lake	406.1	26,524	15.31
Jordan	367.9	34,603	10.63
Weber	126.3	19,331	6.53
Davis	225.3	35,025	6.43
Emery	49.2	2,001	24.59
Grand	23.9	1,794	13.32
Washington	40.7	4,851	8.39
Kane	7.4	920	8.04
Sample	\$1,635.7	186,315	\$ 8.78
State	\$2,823.0	308,263	\$ 9.16
Sample %	57.94	60.44	

Source: Annual Report of the State Superintendent,  
Utah Public School System, 1975-76.

TABLE 2.3

## SAMPLE NEW MEXICO SCHOOL DISTRICTS

<u>New Mexico School Districts</u>	<u>1975-76 Tax Rolls (in millions)</u>	<u>Unweighted 1975 Membership</u>	<u>Property Wealth per Membership (in thousands)</u>
Albuquerque	\$ 911.2	79,811	\$ 11.42
Hobbs	139.1	7,029	19.79
Carlsbad	150.3	6,363	23.63
Gallup	89.0	11,631	7.65
Alamogordo	53.6	8,044	6.66
Eunice	112.8	747	150.94
Artesia	188.9	3,265	57.86
Pojoaque	5.3	1,318	4.01
Espanola	14.3	5,704	2.51
Sample	\$1,575.6	123,912	\$ 12.72
State	\$3,745.7	265,374	\$ 14.11
Sample %	42.06	46.69	

Source: Public School Finance Statistics, New Mexico Department of Finance and Administration, Public School Finance Division, 1976.

Generally, the cooperation and interest of respondents in the study was high, and many of those we interviewed indicated considerable interest in reading the report. Table 2.4 shows the respondents by type.

11, etc.) were obtained for the same period.

The extensive data collection allowed us to analyze trends in dollars and program memberships.

TABLE 2.4  
PUPIL WEIGHTING STUDY RESPONDENTS  
BY TYPE

<u>State</u>	<u>Florida</u>	<u>Utah</u>	<u>New Mexico</u>	<u>Total</u>
Legislative	8	9	6	23
Administrative	11	8	6	25
Interest Group	4	3	4	11
<u>District</u>				
Chief Administrator	14	10	10	34
Finance Officer	13	9	6	28
School Board	8	6	6	20
Principal	10	8	10	28
Teacher	8	10	7	25
Special Education	10	7	6	23
Total	86	70	61	217

Data Analysis

In addition to the interviews, basic state and local finance data were collected over time, beginning prior to the reform. Additionally, unweighted and weighted student memberships were collected for the same years. Measures of local wealth (assessed valuation per member) were likewise collected. Figures indicating participation in the various programs (visually handicapped, vocational education

The analyses of such data are discussed in Chapter 6 and Chapter 8.

To analyze the multitude of data obtained through approximately 220 interviews, it was determined that an issue by issue analysis and presentation would be more appropriate and useful than an analysis of each state separately. Therefore, rather than developing singular state case studies, the report has been organized around a comparative approach to key issues.

### 3. THE ADOPTION OF A PUPIL WEIGHTING SYSTEM IN FLORIDA, UTAH, AND NEW MEXICO

The process of adopting a school finance reform law is a political process. It is an open, forceful exchange of ideas made up of facts and beliefs molded with widely varying constituent interests in mind. This study provides an opportunity to view that process from the beginning of the recognition of a need for passage of a law through the law's implementation. This chapter analyzes five stages of that process:

1. An examination of the more general political and social forces that set the climate for reform;

2. An exploration of the educational reform goals relating to the new distribution model and their evolution from existing dissatisfactions with present systems;

3. The process and rationale used in the establishment of the weights in the reform laws;

4. The adjustments and alterations made to the weighting structures since original passage; and

5. Continuing concerns of those seeking further changes of the weights.

Through this historical sweep, which will pass over many critical issues covered in more detail in later chapters, it is anticipated that the rationales and logic of the key state decisionmakers will be clarified

and serve as a perspective for evaluating the weighted pupil approach and relating it to current local, state, and national school finance concerns.

#### The Political Forces That Preceded the Reform

The determination of the distributional model called a weighted pupil approach was part of a wider education finance reform in all three states. Where possible we have tried to focus on the political forces and factors relating specifically to the weighting system, recognizing its relationship to the entire reform package. The six elements of the reforms can be grouped and presented under topical areas identified by previous researchers on the politics of school finance reform. Joel Berke, in Answers to Inequity,<sup>1</sup> presents five factors upon which we have built, and JoAnn Kruger, in her analysis of the New Mexico reform,<sup>2</sup> presents a sixth, which we found appropriate for all three states. Our research examines all six:

- A. An earlier internal needs study;
- B. Some external influences;
- C. A surplus of funds;
- D. Key political leadership;
- E. Assembling a package of measures; and
- F. The existence of expert and involved staff.

This discussion is not intended to be an exhaustive study of the politics of the reform, but is meant to provide some background knowledge of the development of the system.

### An Internal Study

Each of the three states had a study commission related to the reform, but the commissions had different impacts and inputs into the pupil weighting decisions. Florida's Governor's Citizens' Committee on Education, under the able leadership of Fred Schantz, was responsible for preparing the logic and rationale of Florida's far-reaching reform, but the impetus for adopting a pupil weighting system came from Senator Robert Graham, Chairman of the Senate Education Committee. Graham, familiar with the weighting concept as used by the state's community college system, informed the Citizens' Committee consultants of his preference, and the study, Improving Education in Florida,<sup>3</sup> presented the weighted pupil approach, thus endorsing the legislative initiative.

In 1972 the Education Committee of the legislative council in Utah directed the establishment of the Utah School Finance Study Committee, which was to study the existing formula and to recommend alternatives. The director of the study, Dr. Percy Burrup, a specialist in school finance at Brigham Young University, was assisted by individuals on loan from a school district, the state department of education, the Utah Education Association, and the Budget-Audit Committee of the legislature. Prompted by the then recent Serrano decision<sup>4</sup> and the results of the recently completed National

Educational Finance Project,<sup>5</sup> the Study Committee recommended the adoption of the weighted pupil concept. That recommendation was accepted by "the education family," as one legislator described all of the parties to the legislative process of reform. Influenced by the presence of the Mormon Church in Utah, the legislature strove for consensus and deemed that the weighted pupil approach was the most equitable allocation model. One less idealistic respondent commented, "We spent a lot of money on the study and had to come up with something."

The action in New Mexico began in the Governor's Advisory Committee for School Finance, which was composed of 32 members, including lay leaders, educators, and legislators from the Legislative School Study Committee, a permanent joint committee of the legislature. The group, which was headed by the challenging leadership of Harry Wugalter, Chief of Public School Finance in the Governor's office, served as a forum for discussing the alternative of using a weighted pupil approach. The weighted pupil approach was championed in the legislature by two participating members from the Legislative School Study Committee, Senator Robert Wood and Representative Bill Warren.

### External Influence

The influence of the National Educational Finance Project (NEFP) was cited in both Utah and New Mexico. As each of these states developed its own unique set of weights, the NEFP study served as a frame of reference. It is noteworthy that Florida legislators did not consider themselves to be influenced by the NEFP, which was

coordinated out of the University of Florida. One prominent legislator explained, "NEFP work was not too well accepted." This referred to a special Florida NEFP study that was based on a different concept of establishing student count, costs, and weights than legislators had intended. Each of the states worked independently on developing a weighted pupil system, with no communication between Florida and Utah in 1973 and with little inquiry from New Mexico in 1974.

Another external influence cited in Utah was the Serrano court decision rendered in neighboring California. In Florida, the influence of the Rodriguez case heightened concerns for all aspects of equalization. Although decided by the U.S. Supreme Court just before the legislative session, it failed to dampen the reform fervor evident there. One legislator explained, "A lot of states dropped out with the Rodriguez decision, but we stuck with it because it was morally correct. We showed a lot of people into doing what's right." While neither case dealt with pupil weighting systems, the Texas and California concerns for equalization were clearly perceived to have been moving factors in the general reform in Utah and Florida.

#### Fiscal Surplus

Each of the three states had a fiscal surplus at the time of the reform. In New Mexico, one observer estimated the surplus to be around \$65 million; in Utah, the available surplus was close to \$80 million; and in Florida, \$130 million. Since the adoption of a pupil weighting system served to redistribute proportional dollars received by districts, the infusion of new dollars

certainly contributed to the initial support of the reforms. Combined with "hold harmless" provisions, the surplus allowed most districts to be "winners."

#### Key Leadership

More than any other factor, the presence of committed and able leadership accounted for the adoption of a pupil weighting system and the other reforms as well. For example, one observer of the Florida reform stated that "between 1969 and 1974 was the 'Golden Age of the Florida Legislature.' There were bright, able people who would support things because they philosophically believed in them." In each state there were key individuals in strategic positions who championed a cause because they believed it to be morally right, and who also could orchestrate various interests into a coalition of support for reform. In New Mexico, supporters of bilingual education joined forces with those seeking increased aid for isolated schools in large, sparsely populated districts. In Florida, supporters of vocational education and special education united to achieve greater benefits and guaranteed state support. Utah's broad participatory model involved various interest groups in making the reform, and such key legislators as Senator Warren Pugh and Senator Omar Bunnell were strong supporters. The strategy in each of the states was similar: involve your potential opposition in designing the reform.

Rather conspicuously absent from the key reform leadership were state department of education (SDE) personnel. The most SDE support occurred in Utah where a department employee was loaned to the

study committee. In New Mexico, "the state board didn't take a position." In Florida, top state department personnel who opposed the change were told by a key legislator, "The train is leaving the station; you can either get on or be left behind!" Once the reform and the pupil weighting model were deemed inevitable, however, some state department of education personnel offered assistance in determining needs and relative weights.

#### A Package of Reform Measures

A number of our respondents commented on the importance of a total package of reform measures in order to gain broad-based support. One Florida legislator advised, "Better to go a total package than piecemeal." A prominent New Mexico legislator phrased it this way: "It takes a lot of gobbledegook to get something passed."

In all states there were a considerable number of trade-offs with pupil weighting and district weighting decisions. In Florida, high primary grade weights were balanced to provide a higher base value. (See Chapter 5 for details.) District supplements in the form of sparsity factors and teacher experience units were critical to reform passage in Utah and New Mexico. Beyond the weighting, there were accounting and auditing systems, advisory committees and school reports, local control issues, refinancing of transportation, capital outlay, and diverse categoricals which produced patterns of shifts of money and control that were only partially understood by all but a few expert observers. The patterns of "gobbledegook" produced a pattern of dollar figures on the bottom line of the printouts which everyone understood and which encouraged

substantial majorities of support for final passage.

#### An Expert and Involved Staff

In proposing a pupil weighting system in each of the three states, the existence of expert and involved resource staff was critical to successful resolution and passage of reform. The technical aspects as well as the policy alternatives associated with implementing a weighted pupil approach require the assistance of highly competent staff and/or consultants. Also, the age of computer simulations has greatly influenced legislative politics, and the battle of computer printouts was evident in each of the three states. In New Mexico, Professor Jim Hale at the University of New Mexico and his graduate student, Larry Huxel, served as staff to the Public School Finance Division and provided the needed expertise. Hale had been recently involved in the Rosmiller-NEFP study. In Utah, Heber Fuller from the legislative analyst's office and Gary Harmer, on loan from the Utah Education Association, served as technical staff to the study group. Providing such support for Florida legislators were the staff director of the Senate Education Committee, Jack Leppert; a budget analyst for the House Appropriations Committee, Dave Lycan; and Marshall Harris from the Governor's office.

#### Dissatisfactions With the Old System and Goals for a New Pupil Weighting System

The question that emerges when a new system is proposed relates to problems associated with the old system. Why is there a high level of interest in developing a new method of distributing dollars? A

number of goals were identified by the key state-level proponents for change who were interviewed.

1. To distribute funds according to different student and district needs.

All respondents agreed that this was a major motive for reform and recognized that under their old systems district earnings were not always related to specific student or district special needs. A fairly common sentiment in each state was well articulated by a Utah legislator, "We need to get an objective system for distributing dollars according to needs and remove the discretionary power from the State Department of Education." A New Mexico respondent explained that "staffing ratios just can't be adjusted to meet different needs." There was in all states a general acceptance of the premise that the educational burden varied from district to district, depending on the nature of the student population and geographical and other factors, and that it was the state's responsibility to compensate for these differences. Equal dollars per student were deemed inadequate and inequitable. The differences in district responsibility for educating exceptional children are demonstrated in Chapter 8, where service incidences are compared for the sample districts in each state (Tables 8.1-8.6). The perception of considerable variation of burden, due to this one clientele alone, is clearly substantiated by the data.

By establishing and funding ratios, or weights, based on different program costs, in many instances the states were consciously establishing district incentives to serve high-cost students and to

serve them more efficiently within reasonable program cost ranges. In Florida, for example, generous vocational weights were intended as an investment in economic development by encouraging districts to offer high-cost, technical, skill-related programs.

2. To focus directly on the student.

A number of legislators commented on their intent to focus attention on the individual needs of the students by their changes in the finance formula. One Florida legislator noted that the education committee, during and since the reform, had been "focusing on the needs of the children rather than the working conditions for employees." There was a general hope that this refocus would also occur at the district and school levels.

Nearly all of the respondents in both Florida and Utah agreed that there was political mileage to be gained from changing the unit to be funded from a teacher or classroom unit to an "innocent child" unit--these two states had both experienced forceful teacher strikes. Most importantly, there was an intent to relate educational finance discussions to the various program needs of children.

3. To guarantee the equalization across districts of the burden of funding the high-cost, special need programs.

The weighted pupil distribution approach in the three states was viewed as a legislative tool that enabled the state to share the cost of disparities in district educational burdens due to varying incidences of high-cost students. In these

highly equalized states, a fundamental question was where the responsibility rested for providing high-cost exceptional and vocational programs--at the state or the district level? It was deemed unfair that districts in these states, with their limited capacities to raise additional local dollars, should shoulder the responsibility of supporting high-cost programs that were mandated or encouraged by state law.

Legislators desired that as the special needs slice of the state revenue pie became more significant, those funds should be distributed in the same manner as the basic program dollars. The special need programs became viewed as entitlement rather than supplemental programs. The weighted pupil unit was to be jointly funded by state and district in accordance with the understood principles of a foundation program. It was an important and broadly held belief that districts were to meet student needs for exceptional child services and vocational programs without placing differential burdens on particular school systems.

4. To make the system of finance rational, logical, and more generally understandable.

One Florida legislator exclaimed, "You can't expect the public to have faith in a system they don't understand! We had an abiding distrust of the old formula. Under this system, allocation of units is aboveboard; dollars follow the students based on their need." Under the staffing ratio, teacher, or classroom unit approach it was difficult to relate dollars to specific educational needs or objectives. In New Mexico, the old formula was criticized as "non-data based, hav-

ing no validity." A Utah respondent explained that "the distributional unit didn't relate to the cost of anything."

When asked if a goal of the pupil weighting approach was to simplify the system, about half saw that as an initial objective. Eighteen respondents thought it did in fact simplify the state finance model, six disagreed, and one suggested, "It was the impossible dream." A Utah respondent added, "The general principle is easier to understand; not the details."

Several legislators commented that with a weighted pupil system for allocating the state's educational dollars, it is possible to see the total educational finance picture (and on one sheet of paper).

5. To give local education agencies more decisionmaking authority.

Along with state department prior approval of categorical grant funds for such programs as kindergarten, exceptional child, and vocational education, often went program stipulations that tied the hands of local administrators. Staffing patterns, room size, curriculum, and, in one case, even carpeting were regulated. In contrast, the pupil weighting system was based on student entitlement, and a lump sum was intended to be allocated to the local districts for local management within broader program guidelines.

Given that lump sum, districts were then theoretically free to make local decisions regarding space, staffing, curriculum, class loads, etc. How the funds were spent within programs became a local choice. In two states, however,

there were requirements that local expenditures be made on the programs that generated those dollars, i.e., there were regulations governing where the dollars could be spent. In New Mexico, there is no requirement that dollars be spent according to the categories in which they are earned, and, when interviewed, 12 of the 13 respondents thought local decisionmaking had been greatly increased. In Florida, where there is a requirement that 80 percent of dollars be spent according to the program earning areas, 8 of 10 respondents still felt LEA's had been given greater decisionmaking authority. Only in Utah, which requires 100 percent expenditure of special education dollars by the program that generated those funds, did most respondents (5 to 4) feel that local decisionmaking authority had diminished.

It should be noted, again, that there are two important issues here. One is where (on which program) the dollars may be spent. The second is how (within the programs) the dollars may be spent. Apparently the first issue often dominated the respondent's own sense of decisionmaking authority.

6. To involve the legislature in a greater educational leadership role.

Many legislators and most state department respondents thought that an original reform intent was to expand the educational policymaking role of state legislators. State-level respondents in both Florida and New Mexico, many of whom were legislators, thought that during recent years the legislature had become more involved in educational decisionmaking. In New Mexico, 7 of 10, and in Florida, all respondents believed this had happened. A

number of respondents pointed out that legislators are now more involved in making major educational policy decisions related to state priorities, whereas under the previous system they had focused only on special projects, rarely viewing the total picture.

In contrast, five of eight respondents in Utah did not think that a goal was to involve the legislature in a greater leadership role. That could be attributed to the fact that legislators in Utah have traditionally played an educational leadership role; in fact, many legislators are, themselves, educators. The President of the Senate is a school administrator. Also, Utah singularly has retained numerous relatively small special-purpose categorical programs, and in each session the legislature has reportedly focused more attention on those and on new programs than on the overall finance system.

7. To help clarify the system of accountability.

Only in Florida was this goal identified. There the pupil weighting system, as part of a reform package designed to make the educational system accountable even to the extent of linking expenditures to achievement, was associated with the overall goal of clarifying a system of accountability. The new money for education would not likely have been forthcoming in Florida except as a part of a general accountability-oriented reform. Schools, through their staffs, were expected to open up to the public. Additional money was intended to improve educational services, not to pay more for the same services. The President of the Senate, Mallory Horne, was adamant on the

accountability issue, and his critical support was insured only when new program cost accounting requirements and a reformed management information system at state and local levels were promised and then mandated in the finance reform legislation.

### The Process and Rationale Related to Establishing Weights

Given the multiple goals and agendas for enacting a pupil weighting system, the legislators' foremost task was to establish a set of weights appropriate to accomplish the purposes desired in their state.

Categories used for establishing weights included various combinations of the following:

- A. Age group/grade level;
- B. Specific programs (vocational variations);
- C. Student characteristics (compensatory, bilingual, and exceptional classifications);
- D. Geographic characteristics (sparsity, cost of living); and
- E. Staff characteristics.

It is noteworthy that no state has adopted the procedure of weighting the various basic academic subject areas differentially, a procedure that is common practice in higher education.

In establishing weights, legislators reported using three basic approaches. They either (1) attempted to base weights on current expenditures, or (2) sought expert advice in speculating what exemplary programs should cost. In some cases

they (3) used weights to encourage and support state priority programs, thus, in effect, increasing the "costs" (or, more accurately, expenditures) on particular programs.

Tables 3.1, 3.2, and 3.3 display for reference the weights established in Florida, Utah, and New Mexico, respectively, at the time of the reform and changes that have occurred subsequently. One should be cautioned not to compare the weights of the three states, for they represent different values in each state. There are numerous technical considerations, for instance, how students are counted, attributable expenditures, hours of service, that explain the futility of interstate comparisons (explained in Chapter 4).

#### Age Group/Grade Level

Both Florida and New Mexico supported the basic programs in the grades by weighting the early grades and high school. In Florida, the primary grades received the high weight because legislators--especially the Speaker of the House--believed strongly in the importance of early schooling. (In New Mexico, the high school program was originally weighted at 1.4 "because that's what the study team said it should be." The study team members simply cited the NEFP study as authority for their recommendation.) Utah set all the grade levels at the basic weight of 1.0, thus avoiding policy conflict over which age group of children should have a more expensive program.

#### Specific Programs--Vocational Weights

Vocational education weights were created as an incentive to

TABLE 3.1

FLORIDA EDUCATION FINANCE PROGRAM PUPIL WEIGHTS  
1973 AND CHANGES BY 1977

<u>Program</u>	<u>1973</u>	<u>Changes by 1977</u>
Grades K-3	1.20	1.234
Grades 4-10	1.00	1.00
Grades 4-9		1.00
Grades 11-12	1.10	
Grades 10-12		1.10
<b>Full-Time Exceptional Students</b>		
Educable mentally retarded	2.30	
Trainable mentally retarded	3.00	
Severely & profoundly retarded		4.95
Physically handicapped	3.50	
Deaf	4.00	
Visually handicapped	3.50	
Emotionally disturbed	3.70	
Socially maladjusted	2.30	
Specific learning disability	2.30	
<b>Part-Time Exceptional Students</b>		
Physical therapy	6.00	
Speech therapy	10.00	
Visually handicapped	10.00	
Emotionally disturbed	7.50	
Specific learning disability	7.50	
Hospitalized and homebound	15.00	
Gifted	3.00	
<b>Vocational-Technical</b>		
Voc Ed I (highest cost programs)	4.26	
Voc Ed II	2.64	
Voc Ed III	2.18	
Voc Ed IV	1.69	
Voc Ed V	1.40	
Voc Ed VI (lowest cost programs)	1.17	
<b>Adult Programs</b>		
Adult basic and high school	1.60	1.28
Community service	1.30	deleted

TABLE 3.2

UTAH MINIMUM SCHOOL PROGRAM PUPIL WEIGHTS  
1973 AND CHANGES BY 1977

<u>Program</u>	<u>1973</u>	<u>Changes by 1977</u>
Grades K-12	1.00	
<b>Full-Time Handicapped Programs</b>		
Educable mentally retarded	2.28	
Trainable mentally retarded	2.53	
Emotionally disturbed	3.09	
Deaf	2.50	
Motor handicapped	2.88	
Homebound & hospitalized	1.80	
Multiple handicapped	2.78	
<b>Part-Time Handicapped Programs (add on)</b>		
Educable mentally retarded	.70	1.00
Trainable mentally retarded	1.00	
Learning disabilities	.73	1.00
Emotionally disturbed	1.10	1.00
Hard of hearing	1.60	
Speech & hearing therapy	.30	.50
Motor handicapped	1.20	
Visually impaired	1.60	
<b>Vocational (add on)</b>		
Agriculture	1.20	
Business	.70	.80
Distributive	.50	.60
Home economics	.30	.40
Technical & industrial	1.40	1.50

TABLE 3.3

NEW MEXICO SCHOOL FINANCE PROGRAM PUPIL WEIGHTS  
1974 AND CHANGES BY 1977

<u>Program</u>	<u>1974</u>	<u>Changes by 1977</u>
Kindergarten	1.1	1.3
Grades 1-3	1.1	
Grades 4-6	1.0	
Grades 7-9	1.2	1.25 <sup>†</sup>
Grades 10-12	1.4	
Full-Time Special Education		
C-Moderate	1.9	
D-Severe	3.8	3.5
Part-Time Special Education		
A/B Resource room or itinerant teacher	20.0*	20.0 or G 1-3 ADM <sup>o</sup> x .12
Vocational	.8*	deleted
Bilingual	.5*	.3

Note: While not funded as such, all special education students are diagnosed in one of the following nine areas, and services for them are prescribed in A through D service patterns.

Behaviorally disordered  
Communication disordered  
Gifted  
Hearing impaired  
Learning disabled

Mentally handicapped  
Multiple disabled  
Physically impaired  
Visually impaired

Note: The A/B weight of 20.0 is not a pupil weight.

\* These are add-on weights.

† Grades 7-12.

districts to offer these higher cost classes. While chemistry, physics, art, and band are also quite costly per student, school boards have long been under considerable pressure from local power structures to support such offerings. Vocational programs, on the other hand, whether in trade school centers or as a part of comprehensive high schools, were socially unpopular for many years.

In Florida, partially in reaction to the dropout problem and partially in recognition that modern business and industrial growth is dependent on highly skilled human capital, some school boards in the last decade have attempted to provide the necessary training. From 1969 to 1973, special vocational education classroom units were legislatively financed in increasing numbers and were allocated to the districts by the Division of Vocational Education. The units were all of the same value, however, and districts often were not offering the kind of high-cost programs that would prepare sufficient students for well-paying jobs upon graduation. Clearly it was not reasonable to expect school boards to train welders or refrigeration equipment repairmen at \$3,000 per student when the program was receiving \$670 (an 18-student unit at \$12,000) and the schools could offer shorthand, book-keeping, or mechanical drawing at \$400 per student (and still get \$670).

To address this problem, legislators Graham and MacKay directed that a study of costs by course offering be conducted during 1972, and that the results be used to develop between 3 and 20 cost categories. By very early in 1973, six vocational cost categories had been

established. Both direct and indirect costs, supplies, and equipment replacement estimates were included. Once those dollar figures were compared to an estimated base student support figure, ratios or weights were easily derived. This effort was credited by a number of persons interviewed as sparking the commitment of the legislature to a weighted pupil system.

In Utah, the five vocational areas are weighted according to broad subject zones. While individual courses in agriculture or business have widely varying per student costs, the weights developed represent average costs by subject as determined by the 1972 study committee. A leading vocational administrator said, "I pushed for 10 cost categories," but in the end the 5 program categories, looking very much like those established by the U.S. Office of Education reporting categories, emerged in the proposed bill. A prominent Utah legislator reported to us that the issue "was so technical I didn't feel I should decide." Thus the system most easily understood was the most convenient to adopt.

The details of how the counts are made, and what goes into the costs from which the weights are generated, explain the range of differences in the vocational education weights when Utah and Florida are compared. Utah's weights are additions, which means that a child still earns a basic 1.0 weight even while in a vocational education area course. That is not so in the Florida FTE count system. Furthermore, weights in Utah were designed to cover direct costs only--primarily salaries--while all costs were counted in Florida. Third, in Florida a student's hours in courses count.

One enrolled for three hours would earn three times as much as one enrolled for one hour, while in Utah time in the course is not fiscally significant. Fourth is the issue of state policy expression. If a state seeks to provide specialized vocational training related to industrial development plans, it could encourage and financially support additional enrollment in selected high-cost special skills programs. This strategy was followed in Florida where weights were grouped according to costs rather than subject area.

New Mexico's vocational weight was determined by a third method and represented a third state policy. As the law was originally passed in 1974, all courses were lumped together and a single weight assigned as an add-on supplement. It was unclear where the value originated, but the .8 represented the 1.8 single weight less the 1.0 basic weight as reported in the NEFP study<sup>8</sup> findings and as used in the pre-study simulation computer runs. Likewise, the .8 appears, and was reported, as generating an amount equivalent to that in the prior categorical system. In any case, many interviewees reported considerable executive, legislative, and district dissatisfaction with the way the State Department of Education administered the vocational program, and considerable support in the executive branch for a system of post-secondary area vocational training centers. Those two forces, then, had considerable impact on the down-playing of vocational education in secondary schools and the subsequent folding of the vocational weight into a more extensive secondary weight of 1.25 for grades 7-12 (Table 3.3).

## Student Characteristics

Bilingual -- Bilingual education was created as a weighted program only in New Mexico. By most accounts it was created primarily for political reasons, to gain the support of the large Spanish-speaking population. The weight of .5 for primary grade students enrolled in any program locally defined as a bilingual program was casually arrived at. Likewise, in Florida a weight of .5 for compensatory education was passed in 1973, but due to Department of Education assertions that the program was unadministrable, the value appropriated to support the program was allocated as a part of the basic distribution. That weight had been established by backing into it from the rough estimates of the total sum that certain legislators thought could be justified on the floor.

Exceptional -- The process by which weights were established for exceptional child programs is the most complex. While weightings in special education programs direct the distribution of only about 10 percent of the program funds in a state, it is also the area that attracts the most attention and controversy.

In all three states the setting of weights for exceptional child education was conducted initially through reference to the educational delivery system and teacher case loads previously used. Still, many of the persons interviewed did not understand the process or the conditions associated with establishing the weights. Nearly a dozen persons

from all states cynically stated, "They guessed at them." At least five otherwise knowledgeable persons in Utah asserted that the weights came from the NEFP study, as did two persons in New Mexico where their delivery system model does not even closely resemble the NEFP report. One prominent Utah legislator suggested that the weights were only "an educated estimate."

In fact, however, key persons in both Florida and Utah explained to us how they made detailed efforts to replicate existing average program costs. While direct costs only were counted in Utah, and indirect costs as well were counted in Florida, initial weight recommendations were empirically determined. The best records of program expenditures in selected Utah districts were closely examined, and dollar averages per child per program were developed and then converted to ratio weights. In Florida, the student-teacher ratios used to qualify for classroom units under the prior system were arithmetically converted to per student values and then to weights.

The final full-time special education weights came into being as described above, with two exceptions. In New Mexico, the moderately handicapped or "C" classification weight of 1.9 was developed through program costing and conversion methods. However, according to a prominent specialist in special education in New Mexico, the severely handicapped weight ("D" category) of 3.8 developed "because it costs twice as much for D's and 3.8 is twice 1.9." In Florida, two part-time programs were set at 7.5, and three full-time programs were set at 2.3. These were "adjusted" to be the same to eliminate any

fiscal incentive in the diagnosis and placement of children. Previously calculated weights replicating existing costs in full-time programs for the educable mentally retarded (EMR), those with specific learning disabilities (SLD), and the socially maladjusted (SM) had not been identical, and the "adjustments" were clearly policy judgments seeking to neutralize any possible influence slightly different weights would have on placement, recognizing that delivery systems and teacher case loads were similar.

Part-time resource rooms in Utah and Florida are supported through individual student weights tied to the diagnosed condition or program need of the child. While the general descriptor classifications are somewhat similar, the weights are far different. This is because Florida counts only full-time equivalent (FTE) students while Utah counts enrollees. For example, in Florida the weight for speech therapy is 10.00 while in Utah it is now .50. In Utah the weight covers added costs only.

New Mexico's system is based on delivery methods rather than specific handicapping conditions. Resource rooms for students with needs for speech, sensory, or physical therapy, as well as for those with mild learning problems, are funded. Regulations provide that a teacher may have an enrollment load of 18 to 24 students, and 20 times the base value is allocated to that resource program. This is, in its effect, like a classroom unit system, and was established and weighted with that conceptual system in mind. The weight of 20.0 should be viewed as a teacher or classroom weight, not a student weight.

## Geographical Characteristics

While the direct weighting of pupils is a significant attempt at program cost equalization, inequalities due to variable costs among districts for delivering those programs were often found to exist. Thus, additional adjustments in the form of district weights were used. Utah and New Mexico are among 26 states which incorporate sparsity factors into their formulas. Florida is unique among the states with its District Cost Differential--the application of factors usually between .90 and 1.10--to adjust for the range of approximately 20 percent in purchasing power which was determined from the results of a complex economic survey. These district weights, while not the focus of this study, represent powerful political issues being considered at the same time pupil weights were being developed. The details of the operation of the district weights are examined in Chapter 5, where their relationship to the weighted pupil approach is discussed.

## Staff Characteristics

In Florida there was an abandonment of the concept of teacher/classroom units having varying values depending on the training and experience of the teacher filling the unit. There, funding students was deemed to be contrary to the use of teacher factors. In contrast, Utah and New Mexico established systems in which both student and teacher weights could be used together. They are among 17 states that currently utilize teacher training and experience (T&E) factors in computing district earnings. Recognizing teacher experience and the school district's expectation to pay staff on

a salary index or scale, and believing that the incidence of high-cost teachers varies by district within the state, made "teacher weights" a political necessity in those states. (Chapter 5 explores the details of their systems.)

## Alterations of Weights Since the Reform

Each state has made a few changes in its weighting structure during the years since original passage. There are stories behind each action representing legislative policy decisions related to the weighted pupil approach.

In 1975, Florida pumped more money into its early childhood education programs by adding .034 to its primary weight of 1.2. While that seems like a small amount, it added nearly \$10.3 million to the early grades. The .034 was arrived at, in fact, because it represented the weight necessary to spend the \$10.3 million that had been squeezed by the House from other budget areas. Florida also considered the pleas of the many principals of three-year high schools who had 10th and 11th graders in the same courses, and extended the 1.10 secondary weight to cover all three grade levels. At the same time, the Driver Education category was folded into the basic program, but there was still a net gain of over \$2 million to the high school programs. Also in that year, which was a recession year, concerns over spending at a per FTE rate of 1.6 and 1.3 in two adult programs prompted the legislature to cut in half and then delete the community service program and to cut the adult high school program student weight to 1.28--still more than the regular high school weight.

In 1977, the Florida legislature provided for a conversion to a weight of a previous grant application categorical amount used to underwrite the costs of educational services for the severely and profoundly retarded and brain-damaged. This was done after a determination that \$4,100 per child would be appropriated, and with the belief that fairly accurate estimates of children eligible were in hand. The derived weight of 4.95 was set, not in the substantive law but in a proviso in the appropriations bill late in the session.

The Florida State Department of Education, under a legislative mandate in 1977, prepared a sophisticated report of expenditures by district, by program, and pointed out an alternative weighting system that would replicate average district spending patterns. No legislative action, however, was taken. Apparently a number of issues were unresolved; they were related to the cost accounting system and district expenditures, and whether weights should be based on existing spending patterns.

In 1976, Utah made a few changes in the special education weightings. After hearing testimony that a few part-time resource room programs were "not paying their way," but wanting to avoid getting into lengthy studies and testimony, the Utah legislature changed three weights. They were "rounded off to simplify the math" and to remove any placement incentives. The programs were all weighted at 1.0, as shown in Table 3.2, and the issue was put to rest.

There have been periodic rounds of testimony and discussion in Utah regarding the basic grade

weight of 1.00. High school advocates point out that the equivalent of 1.25 is being spent there, while primary school people urge that more attention be given to the early grades. Since Utah has no program cost accounting system to collect expenditure data at the different grade levels and since such data, even if available, apparently would not impress those who would advocate a change in the status quo, the matter has been dropped each year. In addition, there is a strong feeling among key legislators that such an issue should be a local matter.

New Mexico, while only having 10 pupil weighted categories, changed 7 of them in 1976. Two cousins--graduate students at the University of New Mexico--completed cost analysis dissertations evaluating the New Mexico weights. Joseph Garcia studied the basic program weights and district weight adjustments, and Placido Garcia examined the relationship of expenditures to weights in special education and the bilingual and vocational areas. While those were thorough and competent academic products, there were allegations that the data submitted by districts were inaccurate. (In fact, some respondents in our sample districts reported they were very careless in the data they reported to the Garcia cousins, not thinking student studies would influence law.) Nevertheless, the legislature and the Chief of School Finance, Harry Wugalter, were anxious to review their actions of two years earlier. What emerged was a mixture of the Garcias' findings, Wugalter's recommendations, and legislators' "sense of what seemed right." Their policy decisions were (1) "kindergarten ought to cost more" and (2) "we should not spend that much on

high schools plus vocational education." Thus, the funds supporting vocational offerings, "which are local matters," were folded into a new grade 7-12 weight that raised the weight of grades 7-9 and reduced the weight of grades 10-12.

Further adjustments were made in special education. The A/B resource rooms were growing, yet local districts resented reporting them to the state. Therefore, an option was provided whereby districts could take the classroom unit weight of 20, if their program was approved, or merely add a weight of .12 onto their grade 1-3 count, making the primary weight 1.22. Since many more grade 1-3 students are in resource rooms, and since many districts could increase income and avoid state controls, many districts have adopted this option. Second, the D category of severely retarded was reduced from 3.8, amid considerable protests which are still heard. The Garcia report showed that Albuquerque was only spending 3.2 times the base weight, which brought the state average down to 3.5. Legislatures, while not always responsive to data, either did so respond in this case, or merely let the data support their basic beliefs. Likewise, the bilingual weight was reduced because of reports that the money was being wasted and that "there were bilingual chairs and file cabinets all over the place."

#### The Adequacy of the Present Weights

"When nobody is screaming too much, then it's fair, and the screaming has about stopped." This comment from a top legislative appropriations staff person seems to sum up the general feelings in all

three states. With the exception of perhaps a few state department personnel in each state, there generally was overall support for present weights as amended. With change, however, has come a new way of looking at issues, and an underlying desire for yet further improvement is always reappearing. A major incentive to consider change seems to be the desire to seek some empirical truth. Especially in Florida, in the Department of Education, there has been considerable interest in changing the weights to reflect the ratios that represent district expenditure patterns over recent years. In other words, there is a strong belief by some that the weights should be set to reflect the average spending choices made by local school boards. Others strongly disagree, saying that instead districts should be forced to spend 100 percent of their earnings by program on those programs (instead of the 80 percent current Florida requirement). That is the case in Utah, where all special education funds generated through the weights must be spent on those programs. New Mexico, where no expenditure records are kept, is not troubled with this issue, and the districts are free to spend all earned income as they please.

Several Florida respondents also spoke of the desire to raise the basic 1.0 weight for grades 4-9, citing a shortage of support dollars at those levels. When it was pointed out to them that some program has to be the base, they logically redirected their desires to increasing the dollar value of the base. One respondent persisted, however, and suggested that all the weights should be raised. In all three states, a small but significant number of those interviewed did not

seem to fully grasp the basic underlying concept of weighting. They did not understand that weights do not generate more money, but that they distribute a fixed sum among programs.

While specific exceptional education weight changes are discussed further in Chapter 8, in Florida there was concern over some part-time weights that "simply do not produce sufficient funds to support an itinerant teacher." Since part-time program teachers of the visually handicapped and some other resource teachers spend much time preparing materials and counseling with parents and other teachers, it was often suggested that the weight for those programs should be raised to compensate for time not spent with students and thus not earning funds.

In Utah, some persons suggested restructuring vocational funding along the Florida model by grouping by cost categories instead of subject areas. Several desired a gifted weight, as well as a compensatory education classification. There were some concerns that class loads in several resource rooms for the handicapped had to be too high for effective treatment and that many of those weights should be raised above the present 1.0, the problem being that service for one-half hour a day generates the same amount as three hours of service daily; that is, there are no funds generated for more intensive service as there are under an FTE system.

In New Mexico, there was considerable concern over bilingual education. Rather than adjust the weight further, several prominent policymakers suggested they would support its abolition as a category unless program standards were es-

tablished. Continued concerns over the A/B special education resource room weights also were voiced. Four persons suggested abolition of the A/B categories altogether, and two suggested the weight was too generous. A few vociferous concerns over vocational education were raised. Regarding the desire for some reinstatement of separate vocational funding, one person said in frustration, "I don't know what to do about it, but we need to do something."

### Conclusion--Establishing and Adjusting Weights

What can be learned from the experience of establishing weights in Florida, Utah, and New Mexico? Legislative goals should be addressed; what the legislature is seeking to accomplish in moving to a weighted pupil-system should be clearly interpreted through the incentives created by the weights.

The first task is to focus on determining what special needs, or programs, should be weighted. While vocational and exceptional child education are obvious choices, other possible weighting options (e.g., bilingual, compensatory, sparsity, cost of living) often involve political considerations related to winning over half the votes. Once programs have been identified, careful thought should be given to exactly what costs the weights would be intended to cover. Numerous technical considerations related to defining, approving, and counting the units, setting the value of the base, and establishing expenditure requirements and limits must be addressed (discussed in Chapter 4).

Three distinct approaches to establishing ratios, or setting

weights, have been used. The three can be used concurrently and in an overlapping way to make the outcome a reasoned consensus. Simply put, the methods are: (1) replicating existing expenditures, (2) using professional program specialists' judgment, and (3) establishing state priority spending (or investment) areas. No matter which approach is used, or how they are combined, the goal is to establish the dollar cost per student required to enable a school district to sup-

port that student in a quality program. Ratios of these costs to a base value become the weights.

The collective experience of the three states provides the opportunity to generalize about weighting processes that may be helpful to other states. Interested readers are urged to consider carefully the practical issues addressed in Chapter 4 and in our companion publication, A Policy Guide to Weighted Pupil Education Finance Systems.

#### 4. TECHNICAL CONSIDERATIONS IN ADOPTING AND ADMINISTERING A WEIGHTED PUPIL PROGRAM, OR WHY WEIGHTS DIFFER

As already discussed, weights have been derived differently to meet varying purposes. Beyond the most fundamental issues of establishing the program areas and delivery systems to be supported, there are basic computational alternatives that states may select for the administration of the fund allocating process. This chapter highlights the critical formula differences among three states and the issues that should be well understood by those involved in the adoption, administration, or evaluation of pupil weighting systems.

Due to varying state policy decisions, weights in the three states are set differently so that their application will generate appropriate funds and provide positive incentives compatible with the intended purpose of the general finance reform. Especially important are the definitions and conditions determined for the following six critical areas:

1. Defining the unit to be funded;
2. Approving the unit for funding;
3. Counting the units;
4. Establishing limits on the units approved;
5. Setting the dollar value of the base; and
6. Prescribing the purpose for which the dollars may or shall be spent.

The different approaches used by the states represent alternative policy judgments relating to the management of the fiscal system. These very fundamental and critical areas must be resolved separately in each state. The significance of their various impacts should be understood by persons involved in establishing or implementing pupil weighting formulas.

##### Defining the Unit

In Florida, full-time students are defined as persons on the membership rolls of one or more school programs for 25 net hours per 5-day week. Part-time students are active members of one or more school programs whose hours total less than 25 per week. A full-time equivalent student (FTE) is the name of the unit that provides the basis for funding. An FTE is a combination of full- or part-time students in one of the state-funded programs (Table 3.1), which is the equivalent of one full-time student. A fraction of an FTE is a student's hours in a program divided by 25. Several fractional FTE's thus make a whole FTE. Precise counting of FTE's takes place for one week each spring and fall. For example, if a student's school day is made up of five 60-minute periods, each daily class period would be counted as 1.00 hour. In each week, a student would count as  $5/25$  of an FTE in that program. If a student were in membership 5 program hours per day, then  $25/25$  or one FTE would

be earned. Since only 25 net hours per week may be counted for funding purposes, and since some hours earned may be in programs that have higher weights, the law allows districts to count a student's time in the highest weighted categories first.

Computerized class schedule records exist for nearly all the students in the state, and a file card known as the FTE #1 card is required for each student. This is the basis for the school report, and then the district report, and its accuracy is confirmed as a part of audits of FTE reports regularly conducted. The reports display two measures for each school, FTE's and weighted FTE's (WFTE's). For example, a WFTE count generated by one full-time 2nd grade student is 1.234, but a student who is in regular 2nd grade classes 20 hours a week, speech therapy 2 hours a week, and a part-time learning disabilities class 3 hours per week would generate as follows:

$20/25 \times 1.234 = .9872$	-2nd grade class
$2/25 \times 10.0 = .8000$	-speech therapy
$3/25 \times 7.5 = .9000$	-L.D. class
$25/25 = 2.6872$	Total

Thus the 25/25 or 1 FTE is converted to 2.6872 WFTE's. Typically the 67 Florida districts produce a WFTE to FTE ratio averaging 1.25, with recent ranges extending from 1.18 to 1.49. The WFTE is multiplied by the annual base dollar value of the unit to determine each district's unadjusted funding entitlement.

In Utah, a weighted pupil unit (WPU) is the basis for computing district entitlements. All students who are in school 30 gross hours per week for a full year will earn

one WPU. Half-day kindergarten students earn .55 WPU's. Full-time special education students may earn from 1.80 to 3.09 WPU's depending on which of the seven handicapped programs they are enrolled in. The weights for part-time handicapped pupil resource rooms and for vocational programs are "add-on weights," and WPU's are earned by a district in direct relationship to the weight of the supplemental program in which the student is enrolled. Daily records of both program membership and attendance are maintained by each district. Additionally, district supplements for sparsity factors and teacher training and experience are calculated in units before determining a district's total WPU's (see Chapter 5). That number is then multiplied by the annual base value to establish a district's formula earnings.

In New Mexico, the program unit (PU) is the basis for all entitlement computations. Units are defined in three different ways. Basic units are the product of the grade level average daily membership (ADM) times the appropriate weights, as are the full-time C&D categories for special education ADM. Early childhood and bilingual units are calculated on an FTE basis, as was vocational enrollment until it was folded into the secondary school weight last year. Thirty hours per week per year equals one unweighted FTE. A third measure, similar to a classroom unit, is used to generate the units for part-time A/B special education resource rooms. Twenty PU's are generated for every approved program with a case load of 18 to 24 students, except in speech therapy where by regulation 45 to 90 students must be served per teacher to earn 20 PU's. All basic ADM's and the special

program FTE/ADM's are multiplied by the statutory weight to achieve a total program unit count. Additional program units allotted to the districts are based on three different sparsity formulas and a teacher training and experience index (see Chapter 5). As in Utah, all the part-time A/B special education units and the bilingual units are "add-ons," as were the vocational units. Even though calculated by FTE and a modified classroom unit method, no deductions or offsets to the basic program earnings are computed as children leave programs for supplemental services. Thus, students may be counted and funded more than once.

### Approving the Units

Approval in Florida is given by local school boards in accordance with certain state board policy guidelines covering age for school entrance, grade level eligibility for certain vocational classes, and detailed criteria for the screening and placement of children in special education programs. Although districts may place children in such classes as vocational or gifted programs without meeting state criteria, they may not report those children on their FTE reports for funding.

Utah, likewise, has a system of program approval operating primarily in the area of handicapped programs. District prevalence rates by category are set by the state board, and state department approval must be received before WPU's in excess of prescribed prevalences will be funded. Unit approval in Utah, as elsewhere, is done to ensure that children are properly diagnosed and served in accordance with their special needs and to see that the lim-

ited state resources are spent on the most needy.

Presently only three (A/B, C, and D) special education service delivery categories are funded in New Mexico. Program approval for the A/B resource rooms can be bypassed in those districts that have elected to add a .12 weight to the primary membership weight in lieu of state A/B program unit approval. With that exception, program guidelines and regulations are established through the state department of education, and children are diagnosed as needing services due to one or more of the nine exceptionalities listed in Table 3.3.

Uniquely, in New Mexico, diagnosed pupils are further prescribed into delivery modes A/B, C, or D, representing declining case loads of 90 down to 6, depending on the severity of the handicapping condition and extent of service time. The processes used by the districts are prescribed by the state department, but actual classifications are done locally.

The other weighted program in New Mexico is bilingual education. Essentially no program or unit approval is required, and wide variations of district offerings of bilingual education exist. The use of this weighted program is apparently unrelated to the district concentrations of Spanish surnamed population and demonstrates what can happen in the absence of program unit approval.

Thus all three states, to varying degrees, have established a set of objective criteria, relating to age, program participation, and diagnosed condition, that students must meet before they may be counted as fundable units. Such criteria are in-

tended to provide auditable participation conditions and ensure that all districts in a state equally share in the state's resources according to student program need.

### Counting the Units

Counting the students to be funded can be either a complex or a simple issue. One preliminary policy issue confronted in Florida (and resolved differently in the other states) was whether attendance or membership should be a factor in generating funds. The Florida legislature, in an early policy decision in committee, voted to switch from attendance to a membership count. The issue of whether to take that count each hour of each day, i.e., 900 hours per year, or to sample periodically was a lengthy conflict resulting in the present method of sampling for one week each in the autumn and in the spring for most programs. Children enrolled are counted as members if they are in attendance at least one day during the count period.

Student counts in Utah are measured in three ways. Unlike Florida, where a student has only to be present during the two main "count weeks," a student must be both a member and in attendance all 180 school days per year to earn a full WPU. While there was strong local support for a simple average daily membership (ADM), the legislature sought to maintain a fiscal incentive for districts to push attendance; therefore, average daily attendance (ADA) is a continued part of the new count system. The counted base is now (ADA + ADM) divided by 2. This quantity, divided by 180 school days, produces the WPU's when multiplied by the appropriate weight.

The third way is to make membership counts in part-time handicapped and vocational programs, based on the days students are scheduled to be served. Service must be planned for at least one-half hour on those days. Students enrolled three hours per day are counted the same as those in one-hour periods. A student enrolled for one hour each on three days, however, would earn three times the ADM as one served three hours during one day. The use of an FTE count method has been considered to alleviate this possible inequity.

Of special interest is Utah's phase-in method of counting vocational units. Until 1977-78, one WPU was computed for each (ADA + ADM) divided by 2 in grades 9 through 12. This was added to the WPU's that were generated by the five program weights, then divided by 2. Thus, districts that had no or few vocational programs could earn vocational dollars to build up a program if they desired. This interim provision was removed during the 1977 legislative session, so that now earnings are related to the five weighted areas alone. A similar start-up formula was also used from 1973 to 1975 in distributing handicapped program funds.

New Mexico switched totally from an ADA count to an ADM count of students. A membership count is taken on the 20th, 40th, 60th, and 80th days. Districts' funded units are based on the highest average membership on the 20th and 40th days or the 60th and 80th days of the school year. An FTE count system is applied only to membership in early childhood (primarily half-day kindergartens) and bilingual education (usually a few hours weekly) programs. Attendance records are

not a part of the finance computations.

### Limits on the Units Funded (Caps)

Limits on the number of units to be funded by a state are established for several reasons. With spring meetings of legislatures appropriating for a future fiscal year, some budgetary certainty is desirable and, in fact, almost necessary to both states and school districts. School administrators reported their support of the assertion that "it is important to know ahead of time how much money you're going to have." State legislatures have minimized the shifting of district entitlements, yet encouraged districts to offer high-cost programs, by guaranteeing support for weighted programs to a limit. These annually set limits, or "caps" as they are commonly called, keep districts from expanding too quickly in certain program areas and, when applied on a per district basis, keep one district from taking units that another district needs. Also, caps allow for the setting of a per unit value each year without concern over whether that value will be depreciated because additional units are generated. Caps have been set either in the substantive education law or as provisos in the appropriations bill.

In Florida, caps have annually been set by law both for special education programs and for all vocational programs. They are based on estimated enrollments. The department of education administers the dollar caps by establishing district student unit caps. The department is authorized to reallocate unused units to other districts. While the overall caps in special education have been estimated high and gen-

erally not met, the vocational caps have been met annually. Service extended beyond the caps by districts, while not counted for higher weighting, is funded at the weight of 1.0.

In special education, an hours-of-service cap for part-time programs has been set in Florida. For the first two years of the program, a limit of 7/25 of a week and, in the two years following, a limit of 12/25 of a week could have been earned by any one student in the high weighted part-time resource room programs. As a matter of policy, the legislature wanted to encourage districts to bring students out of regular classes into small tutorial groups for intensive help, but some controls were thought desirable. (Some enterprising budget officer could easily discover that it would be better financially to earn a weight of 7.5 times, say, 20 hours per week for a student in a specific learning disability part-time program, than to earn 2.3 times 25 hours for that same student in a full-time special program.) Rather than impose program or class size constraints that would interfere with local management prerogatives, this prevention of a fiscal incentive abuse was selected, and individual student hour caps were set. When the cap was raised from 7 to 12 hours per week much of the value of the constraint was lost.

Caps have been strictly used in Utah to provide substantial stability in district estimates of receipts. Instead of student caps, dollar caps are used. The law now reads, "...the total amount provided...shall not exceed (\$\_\_\_\_\_)...the funds provided shall be for the following purposes and in the following amount." A fixed amount

for each major program and category is listed. Under other provisions of the same section of law, increases in enrollments are still funded, but the value per WPU for just that program is accordingly reduced. Such a provision prevents increases in enrollments in one program from depreciating the value per WPU in other special programs or depreciating the base value. However, within program areas, through the reduced value option, one district's overenrollment can deprive another district of its full value program earnings. Utah switched to using prior year counts in exceptional education and vocational education. This provided certainty of district income, but could serve to inhibit necessary growth.

There are currently no caps in New Mexico. Full funding of all program membership has been the case since 1976. Additionally, this energy-rich state has provided supplemental funds annually (about \$10 million) to the Secretary of Educational Finance and Cultural Affairs in the Governor's cabinet. These funds are available if needed to assure that unit requests will be fully funded. This is in part accomplished without legislative dollar or unit caps because the Secretary also has prior budget approval authority over local school boards.

### Setting the Value of the Base

Setting the dollar value of the base of 1.0 is the most crucial action a legislature takes year after year. While there are many factors that influence this action, the total amount of money available for education that year is the most obvious. Two other major factors help to explain the differences in a state over time or between states. The

first is what is included in the value of the base. If considerable local management control and responsibility are desired, most programs previously funded as categoricals would be included. Many special purpose, relatively small categoricals have been abolished in Florida and New Mexico, while they still exist and are growing in Utah. Also, in Utah all social security and retirement--representing about \$125 per weighted pupil unit--are funded from separate appropriations, while the school boards in the other two states pay those expenses from their base student earnings.

In addition to inflation factors, annual adjustments of the value of the base may reflect the ratio of unweighted units to weighted units. If weighted units increase as more children move into high-cost programs, more new money may be necessary to support the new weighted units. While more money may be going into education, that growth may not be reflected in adjustments to the value of the base unit. The inverse, of course, would be true during a decline in enrollment in the high weighted programs.

Consequently, an examination of the state base figures alone does not adequately reflect comparative levels of support. While Florida and New Mexico had base values of \$764 and \$800 respectively, and Utah's base value was \$683, no direct conclusions of funding appropriateness should be drawn. This is especially true if comparisons are made with states in which considerable income is derived beyond the formula--if, for instance, additional local or state dollars are depended upon for local district operating funds.

## Prescribing Expenditures

For a great many years most states have required school districts to report their expenditures of categorical grant funds. In some states, this has been done after receipt of the funds to determine whether a refund is due. In other states, it is done after the district has expended its own funds to determine eligibility for reimbursement by the state. Many states, including the three states of this study prior to their reforms, have required that funds received for certain functions (e.g., salaries, supplies, equipment) or for types of personnel (teachers, supervisors, aides, counselors, custodians) be spent in direct relationship to the categories for which the formula funds were earned. By consolidating the funding systems to provide a total entitlement per child many of the old controls were lost. While more local decisionmaking regarding how funds were spent was intended by the new laws, both Florida and Utah lawmakers were not willing to allow complete freedom on the question of whether the funds earned by child or school or program could be freely used by the districts.

Both Florida and Utah began in 1973 the development of new program cost accounting and reporting systems. While Florida's system is more detailed than Utah's (it provides for the attribution of both school and district indirect costs by teacher, by child, or by space utilized), both allow for the enforcement of expenditure requirements set in law.

In Florida, 80 percent of the total dollars earned by each program category should be spent on that program, district-wide. In

Utah, 100 percent of the special education and vocational education earnings must be spent within each of the two subject areas: exceptional and vocational education. Florida's law provides that all indirect expenditures be charged to every program, while in Utah only certain direct costs are charged to the part-time programs.

Prescribing expenditures involves defining which costs, full or add-on, the dollars generated by the weights are intended to cover. All of Florida's weights are "full-service," as are those given the full-time special education programs in Utah. The part-time students in special education and vocational programs are "double-counted" in Utah, so that a student earns the regular base weight plus the weight of any special or vocational program that applies. That additional sum, which is intended to cover the excess costs of certain programs, must be accounted for in the part-time Utah programs. A clear understanding of these differences is essential to any evaluation of the appropriateness of the weights from state to state.

The enforcement of these requirements has just begun with the 1976-77 fiscal year. Partly for political, economic, and technical reasons, no district in Florida has actually lost any funds, although a few have failed to meet all the expenditure requirements. The department of education has secured compliance agreements from the few erring districts. In Utah, on the other hand, strict enforcement has begun, and several districts have had funds withdrawn by the state department for failure to comply with the expenditure requirements.

In both states there is a high degree of awareness of the expenditure requirements, and policymakers believe such mandates are an important section of their laws for two reasons: (1) legislative intent regarding fair differential support ratios should be followed, and (2) such requirements substantially eliminate any "profit" incentive to a district to oversubscribe a program or to carelessly enroll or place children in high income yielding programs.

In New Mexico, no district spending requirements exist. The accuracy of their weights overall is important only so far as total income to a district is concerned. The weights are only intended to generate dollars, not direct spending in any way. Indirect influences were commonly reported however. Such words as "moral obligation" and "internal pressures" were reported by many to describe the reasons for their perceived adherence to spending patterns in accordance with earning patterns. No program cost accounting system exists, and no records are kept to test the districts' presumptions.

### Summary and Conclusions

The six technical areas covered in this chapter are particularly important in any examination of the concept of pupil weighting. Any state amending or adopting a distribution formula or associated regulations should review the impacts of the choices made by these three states.

One can understand why the weights are so different from state to state by computing alternative program earnings. For example, take the case of a speech therapy

student in Utah where the weight is .50 and one in Florida where the weight is 10.00. Presume that both students receive intensive articulation training for 1/2 hour daily or 2-1/2 hours weekly. Their earnings are computed as follows, presuming a fictitious value of \$700 for the base to simplify the variables:

$$\text{Utah} - 2\text{-}1/2 \text{ hr.} = 1.0 \text{ PU} \times .50 = \\ .50 \text{ WPU} \times \$700 = \$350$$

$$\text{Florida} - 2\text{-}1/2 \text{ hr.} = .1 \text{ FTE} \times 10. = \\ 1.0 \text{ WFTE} \times \$700 = \$700$$

The results show that, given the same service, the Florida student earns double the amount earned by the Utah student although the Florida weight is 20 times greater than the Utah weight. The first and fifth sections of this chapter help explain the difference. Of greatest significance is the fact that pupil counting is not on an FTE basis in Utah as it is in Florida. The difference in final earnings can be explained because the Utah dollars cover only direct add-on costs, while the Florida dollars must cover all school and district direct and indirect costs. Also, the Florida student is not earning the base value in the regular program, while the Utah student is. Speech therapy teachers in both states operate quality programs, and they are perceived to be well funded.

In addition to alerting policymakers to be especially cognizant of the working of the variables in use in these six technical areas, this example also illustrates why weights cannot be compared at face value from state to state. One of the first questions often asked by persons examining weighting is, "What are the weights in other states?" Actually, this should be asked last, if at all.

## 5. SCHOOL DISTRICT AND SCHOOL WEIGHTS AS ADJUSTMENTS TO PUPIL WEIGHTING ENTITLEMENTS

Reformers in Florida, Utah, and New Mexico realized that adjustments beyond pupil weights were required because "it costs different amounts to deliver the same services to the same types of students in various parts of the state."

These states have incorporated into their formulas cost-of-living differentials, small-school weightings, sparsity units, staff training and experience adjustments, or staff weights. In the national literature, these and other similar adjustments are discussed under the terms "cost of education indices" or "geographic adjustments." "District and school weights" is the all-encompassing term used here, as opposed to pupil weights, even though Utah and New Mexico actually use pupil units to compute these adjustments. This chapter presents the different ways the states have used district and school weights or adjustment ratios as a part of their effort to equalize their funding systems.

### Cost-of-Living Adjustments

Florida is the only state in the nation that attempts to equalize the purchasing power of its school finance fund distribution through the direct application of a set of economically derived "cost factors." Each year since 1972 the legislature has supported a market basket survey of the costs of housing, services, and goods presumably needed by a middle class wage earner to maintain a comparable standard of

living in different regions of the state. The results of the survey are annually quantified by setting new ratios for each school district ranging usually from about .91 to 1.09. Each year the legislature has adopted the ratios, usually with only slight modification, and each district's foundation formula fund is adjusted upward or downward by multiplying 80 percent of this amount by the adopted ratio. The full amount is not factored because it is presumed that basic costs for utilities, equipment, and some supplies do not vary regionally. A fundamental purpose of the adjustment is to allow school boards to be equally competitive in their salary schedules based on a salary's local purchasing power.

The effect of the application of these cost ratios has been rather constant over the years since 1973. The three very large districts of Dade, Broward, and Palm Beach have regularly earned 5 to 7 percent supplements, and a very few small districts, primarily in the resort areas of the Gulf coast, have likewise benefited. The other large systems generally have broken even, with ratios of about 1.0, and the remainder of the state's districts have a deduction from their preliminary entitlement. On the average each year about \$25 to \$30 million is added on to the high-cost districts' earnings, and a like or somewhat larger sum is deducted from others. Some state analysts' assert that the application of these ratios thus "costs nothing."

It has, however, cost plenty in debate, court actions, and ill will. Opponents to the process argue that it is inaccurate and inappropriate. Strong economic, educational, and political arguments continue to be waged in Florida on both sides of the issue; with the possible exceptions of property tax and reappraisal issues, this is the most controversial part of the massive package of educational finance and management reforms enacted in recent years. While general agreement exists on the desire to recognize differences in the cost of living and in a district's purchasing power, dissatisfaction with the current technique is expressed freely in the losing districts. Continued ill will toward individual legislators and reformers persists, and occasionally overall concerns with the adjustments carry over to the entire finance formula. Furthermore, it has directly cost 42 school boards needed funds to wage a four-year legal battle unsuccessfully seeking the elimination of this element of the law.

When examined in the political context, however, the cost-of-living differentials can be viewed quite positively. A political reality was that the property-rich districts of the southeast, particularly massive Dade County, would not otherwise have benefited from the some 150 million new dollars available for education in 1973. That region had most soundly supported the state referendum for the corporate income tax, which was funding the increase for education. The area had used local property wealth to fund its traditionally higher salaries, and that source was now being largely tapped by the state in its equalization efforts. Three of the five key legislative leaders for state reform

were from Dade County, in control of key committees, and simply couldn't support a costly reform without some local increases. In addition, there are, in fact, generally recognized regional differences in the cost of living, and while opponents of the use of the cost-of-living factor argue that it produced imprecise ratios, it is generally recognized that it comes far closer to equalizing school district, and thus school staff, purchasing power than any other available objective measure.

A third supportive view is that using a range of factors from about .91 to 1.09, as opposed to a limited add-on factor only, provides the available funds (from adjustments to negative factor districts) to increase the base value of one unweighted student substantially. In fact, the issue of whether to use a negative and additive adjustment, or singularly an additive adjustment, which would have been easier for the lower cost districts to accept, was one of the few critical issues between the Senate and the House at the final conference table in 1973. Since the total amount of money for public education was fixed, based on available funds, the issue boiled down to whether the value of one FTE should be \$573 or a higher \$587 funded from low-cost district deductions. The prevailing logic and votes held that it was better to give presumed future percentage increases on \$587 than \$573, and that the many districts with factors in the range of .975 to 1.00 would understand that it made no difference whether they started with \$573 and stayed there, or started with \$587 and had it reduced. The prevailing logic erred or at least was uncommunicated.

The negative view regarding cost-of-living differentials was fueled by those persons in school districts who were incensed at having a deduction made from their "rightful entitlement." "We earned that money and then they took it away" was the prevailing sentiment. Legislators, legislative staff, and some Department of Education personnel attempted to explain what and why the adjustment operated as it did, but to little avail.

A second concern of the opponents was the study itself. Although some 200 items were costed and weighted in proportion to their utilization by consumers, the study has never been conducted in every district of the state. Statistically sound projection techniques were used to estimate the appropriate factors for most of the very small districts, but what is statistically sound has little impact on commonly held beliefs. Many defenders of the methodology conceded to the most effective criticism. In many small districts, services and goods priced elsewhere were not available at home. When people in a small district given a factor of .91 have to drive to a large city in a district with a factor of 1.0 or higher to shop, they come to dislike the factor system. The emotional saying coined by Dr. R. L. Johns in support of the low-cost districts--"It supports the cost of high living, not the high cost of living"--was a rallying cry for the losers. Furthermore, the long promised, but never funded, sparsity factor has dampened belief in a sincere legislative desire to fully equalize purchasing power.

Even the educators in some of the large districts with additive factors have expressed concern over

another problem--fluctuating factors from year to year. When a large district such as Dade, with a \$250 million budget, sees its factor drop from about 1.075 to 1.055 because of local price reductions in a period of unemployment, the system "loses" \$5 million from the preceding year's supplement level committed to recurring expenditures.

In summary, the attempt to equalize purchasing power through cost-of-living adjustments has been an exceedingly controversial process. It is not surprising that other states have not sought to replicate this Florida experience, even though other aspects of the Florida law may be admired nationally. The fact remains, however, that without it, there would probably have been no reform in Florida in 1973. The political experience of that state should be recognized by any state seeking similar adjustments.

#### Sparsity and Small School Weights

In both Utah and New Mexico, a supplement of pupil units is earned by school districts having small and necessary schools in remote areas. Each state utilizes a different formula approach with different impacts. Tables 5.1 and 5.2 present the formulas. In both states, extra or "phantom pupil units" are generated and added on to the previously computed weighted pupil units. While about one-half of the states nationally provide some sparsity supplement, these two states are among the most generous. There is strong political support for this system of creating extra pupil units even in the large districts. One often stated reason is that any district, however large, having a small remote school is eligible and

TABLE 5.1

UTAH SCHOOL DISTRICT WEIGHTS FORMULA  
BASED ON SCHOOL SIZE

Elementary Small School Formula:

Multiply the number of kindergarten pupils in average daily attendance, by .55, add the number of pupils in average daily attendance in grades 1 through 6, and apply the sum to the appropriate school category below:

Average Daily Attendance By School Size	Number of Weighted Pupil Units
5 to 13	27
13 to 21	40
21 to 31	53
31 to 51	53 + (1.4) (ADA minus 30)
51 to 91	81 + (1.2) (ADA minus 50)
91 to 111	129 + (1.0) (ADA minus 90)
111 to 165	149 + (0.3) (ADA minus 110)

Junior High and Middle School Small School Formula:

Average Daily Attendance By School Size	Number of Weighted Pupil Units
0 to 41	Number of pupils multiplied by 2.0
41 to 81	80 + (1.5) (ADA minus 40)
81 to 151	140 + (1.4) (ADA minus 80)
151 to 251	238 + (1.0) (ADA minus 150)
251 to 350	338 + (0.12) (ADA minus 250)

Senior High Small School Formula:

Average Daily Attendance By School Size	Number of Weighted Pupil Units
0 to 76	Number of pupils multiplied by 2.0
76 to 126	150 + (1.6) (ADA minus 75)
126 to 186	230 + (1.1) (ADA minus 125)
186 to 251	296 + (1.0) (ADA minus 185)
251 to 375	361 + (0.112) (ADA minus 250)

Six-Year Small School Formula (Grades 7-12):

Average Daily Attendance By School Size	Number of Weighted Pupil Units
0 to 81	Number of pupils multiplied by 2.0 (minimum total weighting of 27)
81 to 161	160 + (1.4) (ADA minus 80)
161 to 251	272 + (1.0) (ADA minus 160)
251 to 650	362 + (0.72) (ADA minus 250)

TABLE 5.2

NEW MEXICO DISTRICT WEIGHTS FORMULAS  
BASED ON SCHOOL SIZE AND DISTRICT SIZE

School size adjustment program units are calculated according to one or both of the following equations:

Elementary and junior high schools with fewer than 200 students in ADM

$$\frac{(200-ADM)}{200} \times 1.0 \times ADM = \text{program units}$$

Senior high schools with fewer than 200 students in ADM

$$\frac{(200-ADM)}{200} \times 2.0 \times ADM = \text{program units}$$

School district size adjustment program units are calculated according to the following equation if the school district has fewer than 4,000 students in ADM:

$$\frac{(4,000-ADM)}{4,000} \times 0.15 \times ADM = \text{program units}$$

Rural isolation program units are calculated according to the following equation if the school district has 10,000 or more students in ADM and if the senior high schools in the district do not qualify for additional program units under the school size adjustment formula:

$$4,000 - \frac{(\text{district ADM})}{(\text{number of high schools})} \times 0.2 = \text{program units}$$

so politically it seems quite fair. Table 5.3 illustrates how operation of the formulas affects pupil units.

ing a few large schools, but fewer than 4,000 students, earn a supplement on a sliding scale in the form

TABLE 5.3

DEMONSTRATION OF THE APPLICATION OF SCHOOL SPARSITY FACTORS IN UTAH AND NEW MEXICO

School Type	School Size*	Added Pupil Units Earned			
		Utah		New Mexico	
			%		%
Elementary	50	+31.0	(62)	37.5	(75)
Elementary	100	39.0	(39)	50.0	(50)
Elementary	150	11.0	(7.3)	37.5	(25)
Senior High	100	90.0	(90)	100.0	(100)
Senior High	150	107.5	(72)	75.0	(50)
Senior High	190	111.0	(58)	15.0	(7.9)
Senior High	200	111.0	(56)	-0-	-0-
Senior High	300	66.6	(22)	-0-	-0-

\* Note: Utah uses ADA, New Mexico ADM.

It is readily noted that, while the formulas appear quite complex, they result in a percentage supplement that represents a constant trend inversely related to the increase in school size. It is disconcerting, however, to note that in New Mexico a high school with 150 members receives a total of 225 unweighted units, but a school of 200 members receives no sparsity supplement and earns only 200 unweighted units. Changes to correct this inequity are planned.

District Sparsity Weights

New Mexico has two additional sparsity factors, as identified in Table 5.2. The first is called a district size adjustment. Districts hav-

of extra student program units. Applying the formula, three hypothetical districts' supplements would work out as follows:

<u>District Membership</u>	<u>Units Earned</u>	<u>Percentage Supplement</u>
3,000	112.5	3.75
2,000	150.0	7.50
1,000	112.5	11.25

The value of the pupil program unit is simply multiplied each year by the supplemental pupil units to determine the amount of the supplement. The earnings are intended to help small districts pay for basic central overhead costs in the superintendent's office. Some districts

gain income through this district factor, but not through the school size factor, and some, including a few large districts, earn dollars for small schools. Many districts generate funds both ways.

A second New Mexico district supplement, called a rural isolation factor, was adopted for use beginning with the 1976-77 fiscal year. It benefits only the Gallup School District, an exceptionally large district encompassing much of the Zuni Reservation and much of that portion of the Navaho Nation located in New Mexico. The formula adopted,  $4,000 - (\text{district ADM} \div \text{number of high schools}) \times .2 = \text{program units}$ , applies only where the high schools have more than 200 students, thus earning no school sparsity supplement, and where the district ADM exceeds 10,000.

Such a tightly drawn provision assisting a unique area's costs due to geography, passing two years after the basic formula was adopted, is politically surprising. The ability of one freshman legislator to gain a supplement of about \$250,000 for his district alone, without any apparent trade-offs, speaks well not only of him, but of the entire New Mexico legislature. The adoption of this single district rural isolation factor was a display of a continuing non-provincial attitude and concern for the children of the entire state, which has enabled New Mexico to

take a lead position nationally in equalizing support for public schools.

Another part of Utah's formula acts as a district sparsity factor. It provides each district in the state with 45 additional program or weighted pupil units (WPU's). The value of a WPU in 1976-77 was \$683; thus, each district regardless of size received \$30,735 to help cover basic central administrative costs. This adjustment provided 45 of the 426 total WPU's and accounted for 10.6 percent of the formula income to little Daggett School District. It provided more than 5 percent of the formula income to six other small districts. Since all districts receive an equal number of WPU's, this factor receives uniform political support throughout the state.

Utah also provided extra funds to two districts, Garfield and Millard, which recently consolidated schools within their boundaries. A bonus grant of 57 and 280 weighted pupil units was given them, respectively.

While both states' sparsity adjustments provide liberal assistance to districts and small schools, such programs are not particularly costly. About 3.5 percent of the formula funds in New Mexico and 1.4 percent of those in Utah support programs, as can be seen in the chart below, based on the 1976-77 fiscal year:

	<u>Total Program Dollars</u>	<u>District and School Sparsity Dollars</u>	<u>Program Percentage</u>
Utah	\$320,217,967	\$ 4,507,117	1.41
New Mexico	\$295,085,097	\$10,412,597	3.53

Florida has a large number of rural schools and districts with low populations. Provisions for sparsity factors based on an exceptionally detailed and well-done cost analysis<sup>1</sup> have been studied, discussed, and even put in legislation, but the votes have never been there to appropriate funds for such a program. Too many, but not all, urban legislators don't see themselves as helped by it, and some rural legislators either don't understand the issue or are basically against providing additional funds to education. "A sparsity adjustment could have been made a part of the reform package in 1973, but with recent legislative attitudes it may be too late," concluded one rural sympathizer.

#### Professional Staff Training and Experience Factors

When Florida reformed its school finance system in 1973, it shifted from a classroom unit to a pupil unit system. In the minds of most legislators it was no longer funding teachers but students. Until 1970, a significant part of the value of the classroom unit had been based on the training and experience (T&E) of the teacher filling the slot. Antiteacher sentiment in Florida, which was due to the 1968 statewide teachers "walkout" or strike, plus the unending single-purpose drive of organized teachers to achieve a state public-sector collective bargaining law, set the stage for the final abolition of the T&E factor. Unlike Utah and New Mexico, the teacher organization played virtually no part in the 1973 reform. Additionally, the comments of consultant Mike Kirst, relating to the T&E factor concept went basically uncontested:

All the studies I have seen on education finance do not show that college credits per se are in any way related directly to performance...it in effect distorts the state's priorities for the development of higher education....It is one of the most complex parts of a complex formula....I don't see why it should be kept around.<sup>2</sup>

Consequently, any small remaining feeling that a T&E factor was necessary was dispelled by a national expert on school finance. The few legislators who continued to consider the issue felt that it would be unfair to distribute funds to the traditionally rich districts that had, through local supplements, paid more for teachers with more experience and extra college degrees when those funds could not go to other districts whose children deserved quality teachers also.\*

In Utah and New Mexico, the picture was altogether different. Neither state had a T&E factor in its previous formula. Teachers' groups were active participants in the pre-reform studies. They were concerned about the disincentives for some districts, particularly the poor ones, to employ teachers with above-average training and experience who would be expecting higher than average salaries. There was

\*Some reform legislators had hoped that districts would find more imaginative ways to set a teacher's compensation than on an index based on or influenced by a state T&E index, but by 1977 all 67 districts paid teachers on the basis of an adopted index based on training, degrees, and experience.

also a general belief that the teaching force either was or should be stable in most communities. It appears to have been universally accepted in these two states that it was a proper state role, when equalizing district resources, to adjust for the unequal salary costs some districts were bearing because teachers simply stayed on longer than elsewhere. There was also a recognition that in the districts with declining enrollment, new and less experienced teachers were laid off first, thus abnormally escalating the average salary level of faculty already being paid on an index.

Utah and New Mexico became the only states in recent years to adopt a T&E index as part of their funding formula and the first pupil weighting states to do so. Now 17 states incorporate this element into their finance systems.

Utah law established the index shown in Table 5.4. Each member of the professional staff of each district is placed in the appropriate training level row and then in an experience column. Each cell in the matrix is called a category. The law then reads as follows:

Multiply the number of full-time or equivalent professional personnel in each applicable category...by the applicable weighting factor.

Divide the total (weighting factors) by the number of professional personnel included (above) and reduce the quo-

tient by 1.00 (producing an add-on factor).

Multiply the result by one-fourth of the weighted pupil units (based on all previous and otherwise total computations).

The use of "one-fourth of the weighted pupil units" is a simple device to keep the program supplements affordable. Even so, 24,186 weighted pupil units valued at \$683 each were added on to the various district entitlements throughout Utah in 1976-77.

In New Mexico, a similar index is used (see Table 5.4). It starts at .75 and goes up to only 1.50 at a pace and level greater than Utah's. It also groups or holds persons in a several year span, which tends to centralize staff near the 1.0 cells in the matrix. A clause in the law provides that no district's T&E factor shall be computed at less than 95 percent, thus further normalizing impact of the formula. Therefore, it is not necessary, as in Utah, to multiply the average weight or factor by one-fourth to keep the supplement affordable. The New Mexico computation is quite straightforward--one merely multiplies all previously computed pupil program units by the derived average factor from the training and experience index. In 1976-77 some 13,467 extra pupil program units valued at \$800 each were used to supplement district earnings.

The chart below compares the dollar impacts of the T&E factors in Utah and New Mexico:

	<u>Total Program Dollars</u>	<u>T&amp;E Dollars</u>	<u>Program Percentage</u>
Utah	\$320,217,967	\$16,519,038	6.62
New Mexico	\$295,085,097	\$10,773,282	3.65

TABLE 5.4

STAFF TRAINING AND EXPERIENCE INDEX CHARTS  
FOR 1976-1977  
IN UTAH AND NEW MEXICO

Utah Professional Staff Cost Formula Index

<u>Years of Experience</u>	<u>Bachelor's Degree</u>	<u>Bachelor's Degree + 30 Hours</u>	<u>Master's Degree</u>	<u>Master's Degree + 45 Hours</u>	<u>Doctorate</u>
1	1.00	1.05	1.10	1.15	1.20
2	1.05	1.10	1.15	1.20	1.25
3	1.10	1.15	1.20	1.25	1.30
4	1.15	1.20	1.25	1.30	1.35
5	1.20	1.25	1.30	1.35	1.40
6	1.25	1.30	1.35	1.40	1.45
7	1.30	1.35	1.40	1.45	1.50
8	1.35	1.40	1.45	1.50	1.55
9			1.50	1.55	1.60
10				1.60	1.65
11					1.70

New Mexico Training and Experience Index

<u>Years of Experience</u>	<u>Bachelor's Degree</u>	<u>Bachelor's Degree +15 Hours</u>	<u>Master's Degree or Bachelor's Degree +45 Hours</u>	<u>Master's Degree +15 Hours</u>	<u>Post-Master's Degree or Master's Degree +45 Hours</u>
0-2	.75	.80	.85	.90	1.00
3-5	.90	.95	1.00	1.05	1.15
6-8	1.00	1.00	1.05	1.15	1.30
9-15	1.05	1.10	1.15	1.30	1.40
Over 15	1.05	1.15	1.20	1.35	1.50

## Conclusion

All three pupil weighting states have made entitlement adjustments to the pupil weights to meet unique district costs. Issues relating to the need for, or equity produced by, these adjustments are beyond the scope of this research, but the description has been presented to indicate how such regional adjustments are handled in pupil weighting formulas. It is politically important to recognize the existence of considerable discord in Florida over its system, however sound the political and economic logic. In contrast, in Utah and New Mexico, the many individuals interviewed in connection with this study expressed virtually no concern with their sparsity or staff training and experience adjustments. In these two

states, the adjustments are directly computed according to pupil units; thus all formula entitlements are computed from this simple, understandable single unit base.

The sparsity adjustments and the T&E adjustments made the way they are in Utah and New Mexico are not particularly expensive; they represent about 8 and 7 percent of the total formula allocation in those states, respectively. In Florida, because deductions offset supplements, no clear percentage of cost is reflected.

It is important that all three states inserted adjustments of these types into their laws as they took significant steps toward providing equal support to all children of the state in relation to the costs of meeting their educational needs.

## 6. SHIFTS IN THE DISTRIBUTION OF FORMULA FUNDS

In the three states studied, a primary rationale for adopting a weighted pupil approach was to enable the state to assume responsibility for adjusting district revenues to match the different student needs of the districts. Specifically, the weighted pupil approach (1) placed the wealth of the state as a whole behind the financing of special needs, and (2) moved the determination of state financial responsibilities from a grant application approach to an entitlement system. As a result of these equalizing measures, we would anticipate more extensive service of high-cost student needs under the weighted pupil system than under the prior methods of financing. Therefore, it seemed important to analyze the growth of participation in the high-cost areas of exceptional, vocational, and, in the case of New Mexico, bilingual programs. Since, in some cases, a considerable number of new state dollars were added during the first years after reform, it is important first to review the growth of formula revenues over time, from pre- to postreform years. In this context the growth of separate weighted programs can be analyzed and compared with the overall revenue picture. Such growth can then be seen in relationship to district variables of size and assessed valuation per pupil, in order to relate district types to program growth patterns.

### State Revenue Growth

#### Florida

Table 6.1 depicts the growth of the Minimum Foundation Program/Florida Education Finance Program

(MFP/FEFP), including required local effort from 1971 to 1977, with the major reform occurring in the spring of 1973. For three years, 1972-75, the growth of revenues was fairly stable and generous in relation to inflationary increases. However, the 1975-76 and 1976-77 school years suffered from funding increases below those needed to keep pace with inflation. This was due to the revenue declines related to the recession and the energy crisis which hit Florida's major industry of tourism especially hard. Additionally, a major change in Florida's legislative leadership placed priorities for state dollars elsewhere than in education. The low level of support for education just following the reform probably had a greater impact on district behavior and acceptance of the reform than any other phenomenon (see Chapter 7).

Tables 6.2, 6.3, and 6.4 show the growth of formula revenues for basic, exceptional, and vocational education. Chart 6.1 illustrates graphically the relative annual growth of dollars for basic, exceptional, and vocational education. Clearly, the growth in the special needs programs exceeded basic growth as the weighted pupil system facilitated this intended expansion. It is of interest that vocational education grew 69 percent immediately following the reform, while exceptional education's large growth did not occur until the following year. This was due to the "readiness" of vocational education for the reform. The state department's vocational education division had been asked by the legislature in 1972-73 to

TABLE 6.1

FLORIDA--GROWTH IN DOLLARS  
OF TOTAL MINIMUM FOUNDATION/FLORIDA EDUCATION  
FINANCE FUNDS  
1971-1977

	<u>State MFP/FEFP Appropriations</u>	<u>Required Local Effort</u>	<u>MFP/FEFP Total</u>	<u>% Change</u>
1971-72	\$ 587,701,308	\$180,417,997	\$ 768,119,305	
1972-73	697,345,900	227,896,418	925,242,318	20.4
1973-74	830,000,000	324,000,000	1,154,000,000	20.5
1974-75	976,051,559	487,682,520	1,463,734,079	26.8
1975-76	1,024,030,651	546,078,096	1,570,108,749	7.37
1976-77	1,070,047,698	585,646,112	1,655,693,810	5.45

Source: Calculated from Commissioner of Education Pupil and Financial Data, 1971-75; Statistical Report: Florida Education Finance Program, 1975-76; and Bureau of School Finance, Division of Public Schools, 1976-77.

TABLE 6.2

FLORIDA--GROWTH IN DOLLARS OF BASIC PROGRAM FUNDS  
(TOTAL MFP/FEFP LESS EXCEPTIONAL AND VOCATIONAL)  
1971-1977

	<u>Total Basic Dollars</u>	<u>% Change</u>
1971-72	\$ 670,923,296	
1972-73	783,961,216	16.8
1973-74	937,791,363	19.6
1974-75	1,122,538,912	19.7
1975-76	1,204,461,829	7.3
1976-77	1,257,159,512	4.4

Source: Calculated from Commissioner of Education Pupil and Financial Data, 1971-75; Statistical Report: Florida Education Finance Program, 1975-76; and Bureau of School Finance, Division of Public Schools, 1976-77.

TABLE 6.3

FLORIDA--GROWTH IN DOLLARS  
FOR EXCEPTIONAL CHILD EDUCATION  
1971-1977

	<u>MFP Unit Or WFTE</u>	<u>Value of Base Unit</u>	<u>Total Dollars</u>	<u>% Growth Over Previous Year</u>
1971-72	3,785	\$10,818.79	\$ 40,949,120	
1972-73	4,395	13,063.44	57,413,818	40.2
1973-74	130,762	569.03	74,407,500	29.6
1974-75	178,476	723.36	129,102,399	73.5
1975-76	194,512	729.84	141,962,638	10.0
1976-77	205,175	763.66	156,683,940	10.4

Source: Commissioner of Education Pupil and Financial Data, 1971-75;  
Profiles of Florida School Districts, 1975-76; and Bureau of  
School Finance, Division of Public Schools, 1976-77.

TABLE 6.4

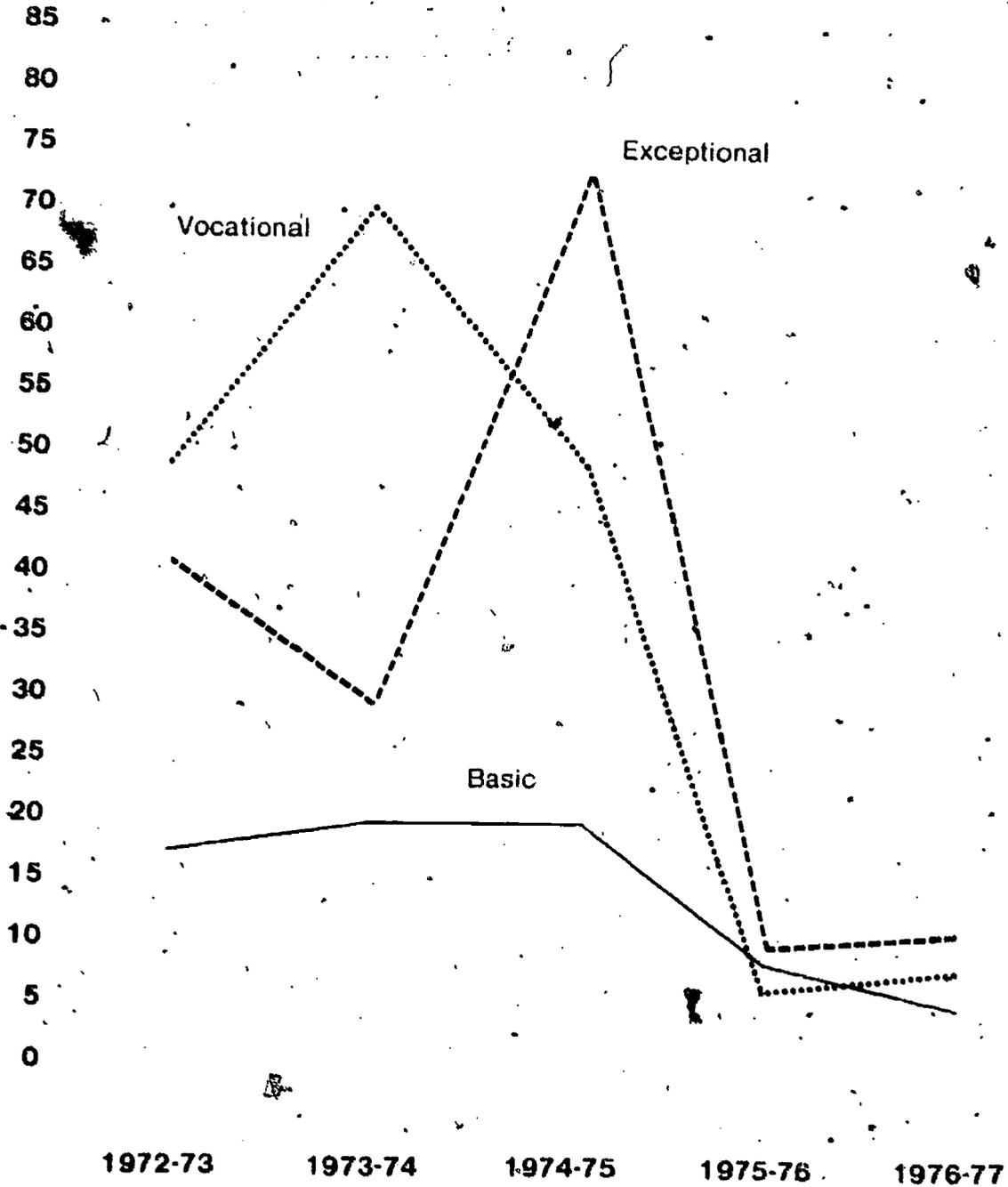
FLORIDA--GROWTH IN DOLLARS  
FOR VOCATIONAL EDUCATION  
1971-1977

	<u>MFP Unit Or WFTE</u>	<u>Value of Base Unit</u>	<u>Total Dollars</u>	<u>% Growth Over Previous Year</u>
1971-72	5,199	\$10,818.79	\$ 56,246,889	
1972-73	6,420	13,063.44	83,867,284	49.1
1973-74	249,198	569.03	141,801,137	69.1
1974-75	293,205	723.36	212,092,768	49.6
1975-76	306,484	729.84	223,684,282	5.5
1976-77	316,699	763.66	241,850,358	8.1

Source: Calculated from Commissioner of Education Pupil and Financial Data, 1971-75; Profiles of Florida School Districts, 1975-76; and Bureau of School Finance, Division of Public Schools, 1976-77.

**CHART 6.1  
FLORIDA — COMPARATIVE GROWTH PATTERNS  
OF EXPENDITURES FOR  
BASIC, EXCEPTIONAL, AND VOCATIONAL EDUCATION  
1972-1977**

**% Growth  
Over Previous Year's  
Dollars**



Source: Calculated from Tables 6.2, 6.3, and 6.4. "Basic" represents the total foundation program dollars less exceptional and vocational dollars.

place all vocational courses into cost categories in preparation for the weighted pupil system. Additionally, many state leaders supported the immediate expansion of vocational education, and districts were gearing up for the reform and expanded offerings.

It takes longer to expand an exceptional education program. Children have to be diagnosed, parental permission must be sought, and placement takes time. Exceptional child educators spent the first year of the reform finding unserved students, recognizing that with the pupil weighting system the state would underwrite the burden of funding these high-cost programs--that exceptional education was finally an entitlement program. The location of unserved needs and a concomitant state assumption of responsibility for funding forced a raising of the caps for exceptional education, resulting in expansion of the program by 73.5 percent in 1974-75.

Tables 6.5 and 6.6, and Chart 6.2 display the increasing percentages of formula dollars going to exceptional and vocational education. Special education has grown from 6.2 percent of the total formula fund the year before the reform to 9.5 percent in 1976-77. This increase corresponds to a national trend, with the state average nationally going from 4.6 percent to 7.5 percent during the same years. Florida's growth in vocational education appears to be considerably ahead of the nation's, increasing from 9 percent before the reform to almost 15 percent in 1976-77.

The fact that these two programs currently constitute 25 percent of Florida's formula revenues means that an equalized distribution

system, such as the pupil weighted system, is important.

### Utah

The growth of formula revenue in Utah depicted in Table 6.7 shows a controlled overall trend with slight increases generally. There was no greater than usual growth in the year of the reform. Tables 6.8 and 6.9 reveal a similar growth pattern for basic and exceptional education. Vocational education, however, as depicted in Table 6.10 and Chart 6.3, grew dramatically immediately following the reform, realizing a 61 percent increase. The following year, however, the caps were tightened, and the convergence of the growth of all programs by 1974-75 is illustrated in Chart 6.3.

Utah's more controlled approach to a pupil weighting system can be seen by examining the percentage of total revenues given to the special programs. Table 6.11 shows a basically stable, or no growth, picture for exceptional education. Each year the legislature specified the limits on exceptional education, for Utah at the time of the reform was already serving a relatively high percentage of students in exceptional education programs (see Chapter 8).

Although Utah's vocational education nearly doubled (see Table 6.12), as did Florida's, it still constitutes only 2.6 percent (for direct costs) of formula revenues compared to 15.3 percent (including indirect costs) in Florida. Chart 6.4 illustrates the conscious policy of Utah legislators, which was to implement a pupil weighting system with rigorous controls. The results contrast markedly with those of Florida's growth policies, illustrated in Chart 6.2.

TABLE 6.5

FLORIDA--PERCENTAGE OF MFP/FEFP  
FOR EXCEPTIONAL CHILD EDUCATION  
1971-1977

	<u>Exceptional Child Education Dollars</u>	<u>MFP/FEFP Dollars*</u>	<u>% of Total</u>
1971-72	\$ 40,949,120	\$ 768,119,305	5.3
1972-73	57,413,818	925,242,318	6.2
1973-74	74,407,500	1,154,000,000	6.4
1974-75	129,102,399	1,463,734,079	8.8
1975-76	141,962,683	1,570,108,749	9.0
1976-77	156,683,940	1,655,693,810	9.5

Source: Calculated from Tables 6.1 and 6.3.

\* Includes all categorical program funds.

**TABLE 6.6**  
**FLORIDA--PERCENTAGE OF MFP/FEFP**  
**FOR VOCATIONAL EDUCATION**  
**1971-1977**

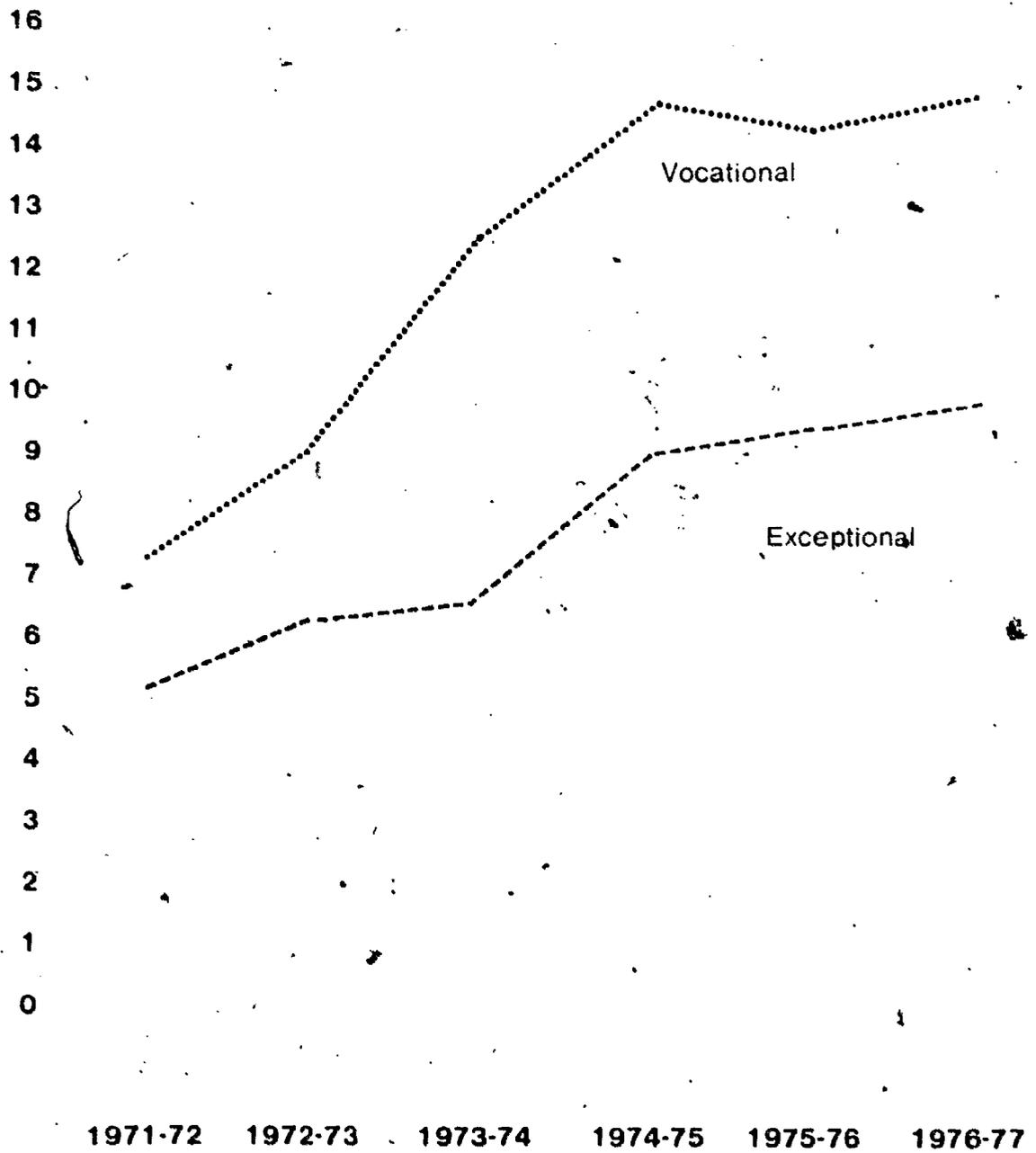
	<u>Vocational Education Dollars</u>	<u>MFP/FEFP Dollars*</u>	<u>% of Total</u>
1971-72	\$ 56,246,889	\$ 768,119,305	7.3
1972-73	83,867,284	925,242,318	9.1
1973-74	141,801,137	1,154,000,000	12.3
1974-75	212,092,768	1,463,734,079	14.5
1975-76	223,684,282	1,570,108,749	14.2
1976-77	241,850,358	1,655,693,810	14.6

Source: Calculated from Tables 6.1 and 6.4.

\* Includes all categorical program funds.

**CHART 6.2**  
**FLORIDA — EXCEPTIONAL AND VOCATIONAL EDUCATION**  
**REVENUES AS A PERCENTAGE OF TOTAL MFP/FEFP**  
**1971-1977**

% of Total  
MFP/FEFP



Source: Calculated from Tables 6.5 and 6.6.

TABLE 6.7

UTAH--GROWTH IN DOLLARS OF TOTAL  
SCHOOL PROGRAM FUNDS  
1971-1977

	<u>Local</u>	<u>State*</u>	<u>Total</u>	<u>% Change</u>
1971-72	\$58,517,248	\$113,947,555	\$172,464,804	
1972-73	61,403,360	125,277,326	186,680,686	8.2
1973-74	63,847,146	140,785,367	204,632,513	9.6
1974-75	70,437,801	164,089,771	234,527,572	14.6
1975-76	81,526,795	184,950,232	266,477,027	13.6
1976-77 †	88,387,979	216,408,013	304,795,992	14.4

\* State revenues include social security and retirement reimbursements, the minimum school program, and funds for 1971-72 and 1972-73 vocational and technical education. Transportation funds are not shown in this column.

† For 1976-77, estimates based on House Bill 89 are used.

Source: Annual Reports of the State Superintendent of Public Instruction, Utah State Department of Education, 1971-76.

TABLE 6.8

UTAH--GROWTH IN DOLLARS OF BASIC SCHOOL PROGRAM FUNDS  
 (TOTAL LESS EXCEPTIONAL AND VOCATIONAL)  
 1971-1977

	<u>Total Basic Dollars</u>	<u>% Change</u>
1971-72	\$159,346,420	
1972-73	171,567,671	7.7
1973-74	185,911,705	8.4
1974-75	213,106,325	14.6
1975-76	242,496,044	13.8
1976-77	277,443,208	14.4

Source: Annual Reports of the State Superintendent of Public Instruction, Utah State Department of Education, 1971-76.

TABLE 6.9

UTAH--GROWTH IN DOLLARS  
FOR EXCEPTIONAL CHILDREN\*  
1971-1977

	<u>Distribution Unit or Weighted Pupil Unit</u>	<u>Value of Base Unit</u>	<u>Dollars Allocated</u>	<u>% Growth</u>
1971-72	1,092	\$11,664	\$10,635,468 <sup>†</sup>	
1972-73	1,177	11,910	11,705,088 <sup>†</sup>	10.1
1973-74	26,045	508	13,230,588	13.0
1974-75	27,453	560	15,373,684	16.2
1975-76	27,559	621	17,114,139	11.3
1976-77	28,248	683	19,293,384	12.7

Source: Office of the Legislative Fiscal Analyst, Utah Legislature.

\* Excludes units to state institutions and training centers.

† Adjusted downward by 16.5% to account for indirect costs that were funded by the DU system but not by the WPU.

TABLE 6.10

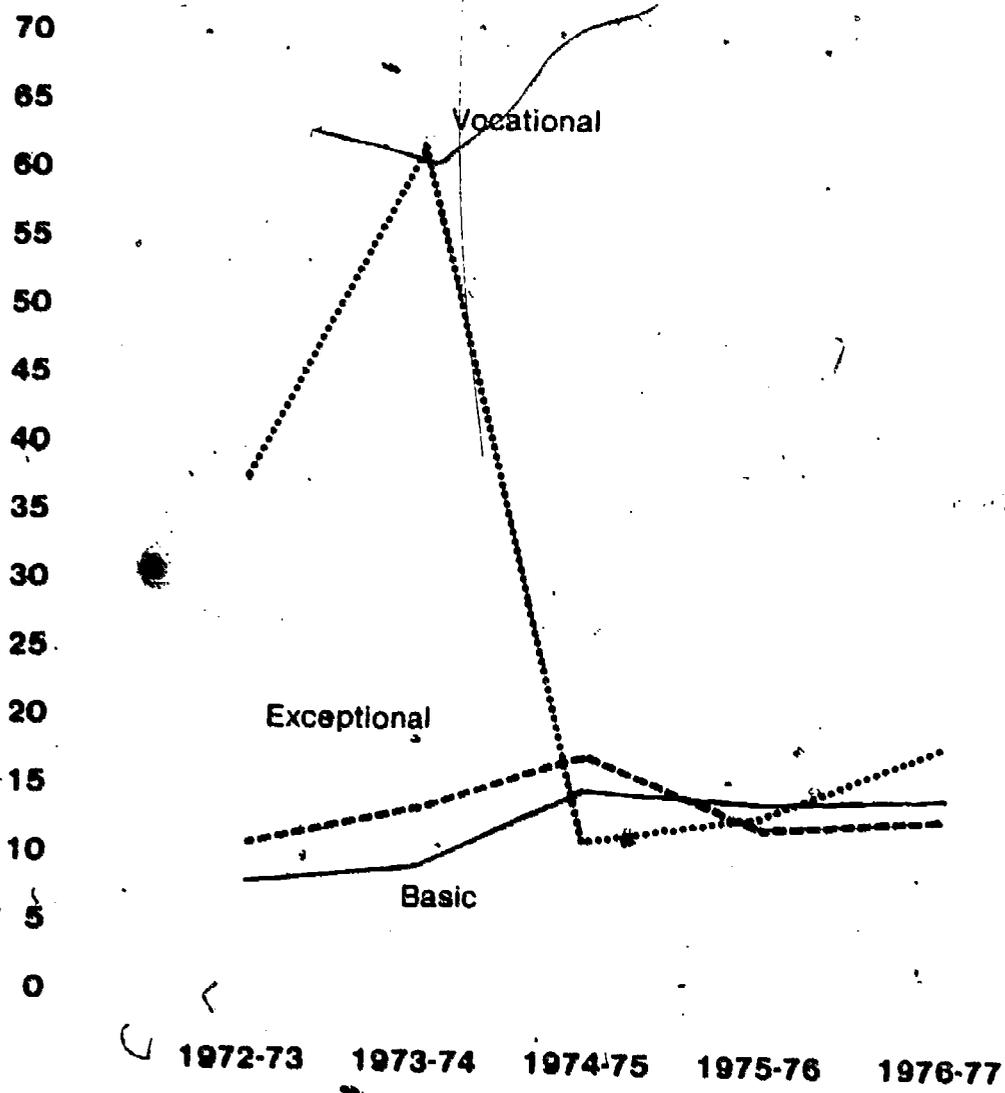
UTAH--GROWTH IN DOLLARS  
FOR VOCATIONAL EDUCATION  
1971-1977

	<u>Distribution Unit or Weighted Pupil Unit</u>	<u>Value of Base Unit</u>	<u>Dollars Allocated</u>	<u>% Growth</u>
1971-72	212.87	\$11,664	\$2,482,916	
1972-73	286.14	11,910	3,407,927	37.3
1973-74	10,807.52	508	5,490,220	61.1
1974-75	10,799.22	560	6,047,563	10.2
1975-76	11,057.72	621	6,866,844	13.5
1976-77	11,800.00	683	8,059,400	17.4

Source: Annual Reports of the State Superintendent of Public  
Instruction, 1971-76.

**CHART 6.3**  
**UTAH -- COMPARATIVE GROWTH PATTERNS**  
**OF EXPENDITURES FOR**  
**BASIC, EXCEPTIONAL, AND VOCATIONAL EDUCATION**  
**1972-1977**

**% Growth  
Over Previous Year's  
Dollars**



Source: Calculated from Tables 6.8, 6.9, and 6.10. Basic represents total less exceptional and vocational dollars.

TABLE 6.11

UTAH--PERCENTAGE OF BASIC SCHOOL PROGRAM FUNDS  
FOR EXCEPTIONAL CHILDREN PROGRAMS  
1971-1977

	<u>Handicapped Education Dollars</u>	<u>Total School Program Funds</u>	<u>% of Total*</u>
1971-72	\$10,635,468	\$172,464,804	6.2
1972-73	11,705,088	186,680,686	6.3
1973-74	13,230,588	204,632,513	6.5
1974-75	15,373,684	234,527,572	6.6
1975-76	17,114,139	266,477,027	6.4
1976-77	19,293,384	304,795,992	6.3

Source: Calculated from Tables 6.7 and 6.9.

\* This represents direct costs only, in contrast to Florida's figures, which include indirect costs.

- TABLE 6.12

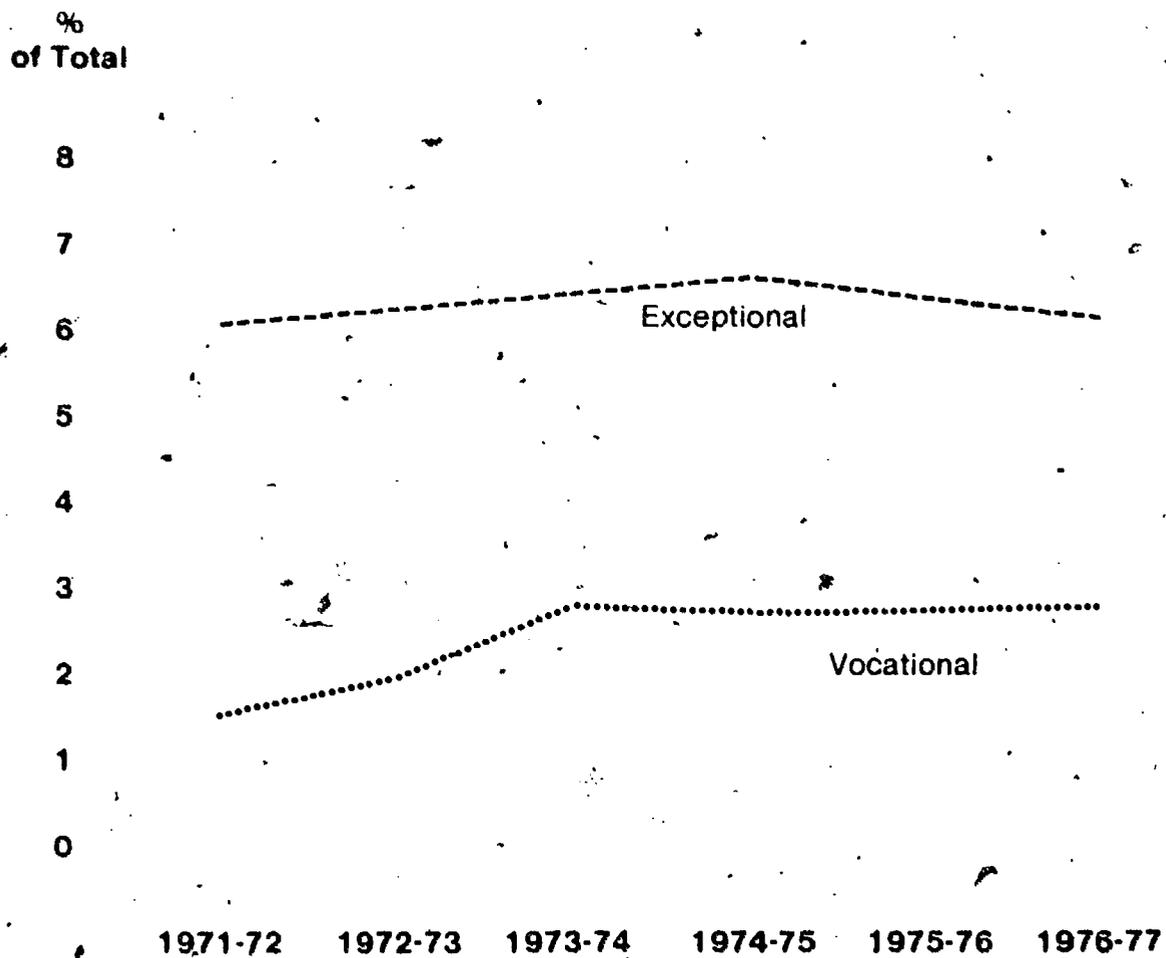
UTAH--PERCENTAGE OF BASIC SCHOOL PROGRAM FUNDS  
FOR VOCATIONAL EDUCATION PROGRAMS  
1971-1977

	<u>Vocational Education Dollars</u>	<u>Total School Program Funds</u>	<u>% of Total*</u>
1971-72	\$2,482,916	\$172,464,804	1.4
1972-73	3,407,927	186,680,686	1.8
1973-74	5,490,220	204,632,513	2.7
1974-75	6,047,563	234,527,572	2.6
1975-76	6,866,844	266,477,027	2.6
1976-77	8,059,400	304,795,992	2.6

Source: Calculated from Tables 6.7 and 6.10.

\* This represents direct costs only, in contrast to Florida's figures, which include indirect costs.

**CHART 6.4**  
**UTAH—EXCEPTIONAL AND VOCATIONAL EDUCATION**  
**REVENUES AS A PERCENTAGE OF TOTAL SCHOOL PROGRAM FUNDS**  
**1971-1977**



Source: Calculated from Tables 6.11 and 6.12.

## New Mexico

Along with New Mexico's reform came a 14 percent increase in revenues (Tables 6.13 and 6.14) and, despite the national recession, the state ever since has been able to keep considerably ahead of inflation, due primarily to mineral and oil wealth. Table 6.15 indicates that exceptional education programs grew tremendously during 1976-77. The growth was due to the legislature removing the caps and the adoption of Option II, which was formula-based (.12 x Grades 1-3 ADM). This is discussed further in Chapter 8.

Bilingual education (Table 6.16) experienced its greatest growth one year following the reform, even though there was a reduction in the weight from .5 to .3 per FTE. New Mexico's bilingual program has experienced considerable difficulty due to lack of a common definition and philosophy of goals statewide. Some see its purpose as achieving English competency, others as expanding Spanish or Native American language skills, while still others see its purpose as creating a bilingual society including teaching Spanish to Anglos. Therefore, the program's growth is difficult to analyze or relate to other variables. This problem is recognized internally, and new regulations are being developed to identify and clarify the state's intent.

Chart 6.5 illustrates the comparative growth of the special programs. As Tables 6.17 and 6.18 show, both exceptional and bilingual education (though still small) have doubled in their percentages of the total school finance program since the implementation of the pupil weighting system.

## State Shifts in Revenue Distribution

Several important research questions about internal redistribution emerged following the examination of the overall pictures of growth and revenue shifts. Are there discernible patterns of inter-district revenue redistribution related to the implementation of a pupil weighting system? Do certain types of districts (i.e., large, small, with high or low per pupil assessed valuation) appear to benefit more than others?

Related data have been presented and analyzed for our sample districts in each state, thus gaining a representative view which includes over one-half of each state's school population. Where certain hypotheses or redistributive patterns have emerged from this perspective, further analysis using statewide data was conducted. Initial attempts to correlate district earnings under the old categorical system and under the pupil weighting system with selected district variables such as property valuation, size, and income would not provide statistically significant correlations due to the limited number of districts of each type in the sample.

Principal differences in fund distribution appeared to be due to the prominence of service or policy preferences of district personnel (which intervene between available dollars and student need). In some districts, for example, it is the policy preference of the leadership not to provide much exceptional child education, or to place educable mentally retarded children in learning disabilities programs to avoid charges of racial discrimination.

TABLE 6.13

NEW MEXICO--GROWTH OF THE  
SCHOOL FINANCE PROGRAM\*  
1972-1977

	<u>Local Share</u>	<u>State Revenue</u>	<u>Total</u>	<u>% Growth</u>
1972-73	\$ 49,711,654	\$144,084,805	\$193,786,459	
1973-74	47,293,808	156,467,731	203,761,539	5.1
1974-75	51,301,047	181,867,716	233,168,763	14.4
1975-76	52,108,653	205,355,419	257,464,072	10.4
1976-77	55,827,973	238,113,597	293,941,570	14.2

\* In order to calculate growth over time, pre- and postreform sources of local "charge back" revenue were calculated for all years at 95%. Those sources included as "local share" are:

1. local tax levy (both district and county);
2. motor vehicle license fees;
3. P.L. 874;
4. forest reserve income; and
5. regular vocational programs.

Additionally, for 1972-73 and 1973-74, state sources included the later consolidated categoricals of:

1. special education; and
2. supplemental distributions.

Source: Statistics: Public School Finance, Department of Finance and Administration, Governor's Office, 1972-77.

TABLE 6.14

NEW MEXICO--GROWTH IN DOLLARS OF BASIC PROGRAM  
 (TOTAL SCHOOL FINANCE PROGRAM, DOLLARS  
 LESS EXCEPTIONAL AND VOCATIONAL)  
 1972-1977

	<u>Total Basic Dollars</u>	<u>% Change</u>
1972-73	\$187,897,421	
1973-74	195,953,745	4.3
1974-75	224,229,407	14.4
1975-76	246,567,291	10.0
1976-77	274,718,130	11.4

Source: Statistics: Public School Finance, Department of Finance and Administration, Governor's Office, 1972-77.

TABLE 6.15

NEW MEXICO--GROWTH IN DOLLARS  
GENERATED BY FORMULA FOR  
EXCEPTIONAL CHILD EDUCATION  
1972-1976

	<u>Number of Weighted Units</u>	<u>Value of Base Unit</u>	<u>Dollars Generated</u>	<u>% Growth Over Previous Year</u>
1972-73	*	*	\$ 5,889,038	
1973-74	*	*	7,807,794	32.6
1974-75	8,169	\$ 602.50†	8,939,356	14.5
1975-76	8,895	703.00	10,896,781	21.9
1976-77	15,856	800.00	19,223,440	76.4

Source: Public School Finance Division, Department of Finance and Administration, Governor's Office.

\* Because of New Mexico's numerous staff categories prior to the reform, these data were not computable as in the other states.

† The value of the base unit for basic education was \$616.50 during 1974-75. This amount reflects a special proration of the exceptional child unit value.

Note: A/B units were multiplied by 20 to compute unweighted unit count.

TABLE 6.16

NEW MEXICO--GROWTH IN DOLLARS  
GENERATED BY FORMULA FOR  
BILINGUAL EDUCATION  
1973-1977

	<u>Number of Weighted Units</u>	<u>Value of Base Unit</u>	<u>Dollars Generated</u>	<u>% Growth Over Previous Year</u>
1973-74			\$ 699,082	
1974-75	1,399.65	\$ 616.50	862,884	23.4
1975-76*			1,606,355	86.2
1976-77	2,428.95	800.00	1,943,165	21.0

Source: Public School Finance Division, Department of Finance and Administration, Governor's Office.

\* Data unavailable because of redistribution of appropriated dollars due to district projections and service shifts.

TABLE 6.17

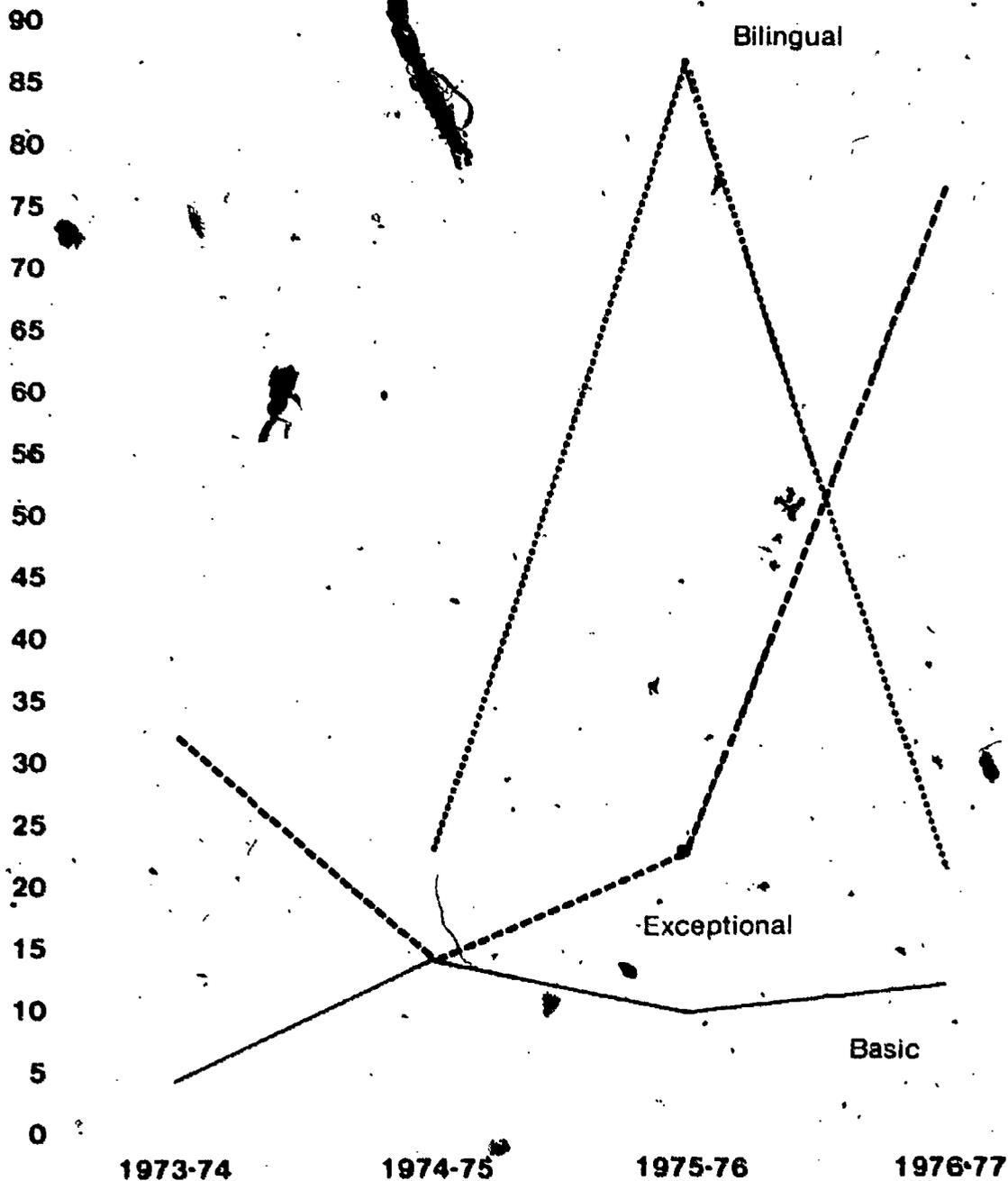
NEW MEXICO--PERCENTAGE OF TOTAL SCHOOL FINANCE PROGRAM  
GENERATED BY EXCEPTIONAL CHILD UNITS  
1972-1977

	<u>Exceptional Child Dollars Generated</u>	<u>Total School Finance Program</u>	<u>% of Total</u>
1972-73	\$ 5,889,038	\$193,786,459	3.04
1973-74	7,807,794	203,761,539	3.83
1974-75	8,939,356	233,168,763	3.83
1975-76	10,896,781	257,464,072	4.23
1976-77	19,223,440	293,941,570	6.54

Source: Calculated from Tables 6.13 and 6.15.

**CHART 6.5  
NEW MEXICO — COMPARATIVE GROWTH PATTERNS  
OF EXPENDITURES FOR  
BASIC, EXCEPTIONAL, AND BILINGUAL EDUCATION  
1973-1977**

% Growth  
Over Previous Year's  
Dollars



Source: Calculated from Tables 6.14, 6.15, and 6.16.

TABLE 6.18

NEW MEXICO--PERCENTAGE OF TOTAL SCHOOL FINANCE PROGRAM  
GENERATED BY BILINGUAL EDUCATION UNITS  
1973-1977

	<u>Bilingual Dollars Generated</u>	<u>Total School Finance Program</u>	<u>% of Total</u>
1973-74	\$ 699,082	\$203,761,539	.34
1974-75	862,884	233,168,763	.37
1975-76	1,606,355	257,464,072	.62
1976-77	1,943,165	293,941,570	.66

Source: Calculated from Tables 6.13 and 6.16.

Furthermore, many small districts "tuition-out" or contract for exceptional child education services, thus distorting aggregate district service data.

Therefore, a more informal yet more revealing alternate picture of the impact of the pupil weighting system on district earnings has been presented. The percentages of total formula dollars that the special weighted programs represent have been calculated for the year before the reform and three years following the reform. Sample district earnings, representing large, medium, and small districts, and high and low per-pupil assessed valuations, have been compared using bar graphs which illustrate where the greatest gains have been made. Where it appeared that certain types of districts benefited more than others, those types were compared with the rest of the state.

#### Exceptional Child Education

The first part of this chapter showed that considerable growth has occurred in exceptional child education in both Florida and New Mexico, with Utah having a stable situation. Chart 6.6 illustrates the growth in Florida in exceptional education as a percentage of the district's total formula earnings for 1972-73 and 1975-76. This use of "percent of total" was selected for the comparative basis in order to adjust for size differences of districts and possible student enrollment shifts. From this part it appears that there is little relationship between low assessed valuation and district earnings for exceptional education. One exception--Alachua County, the site of the University of Florida--provides exceptional education services for numerous surrounding, primarily agricultural districts; earnings are high here because the service district earns the dollars.

**CHART 6.6**  
**FLORIDA SAMPLE DISTRICTS, 1972-1973 AND 1975-1976**  
**PROPORTIONAL GROWTH OF EXCEPTIONAL EDUCATION**  
**AS A PERCENTAGE OF DISTRICT MFP/FEFP REVENUES**

**Districts by  
Size and Wealth**

**Large**

Broward (H)\*



Dade (H)



Duval (L)



Hillsborough (L)



**Medium**

Palm Beach (H)



Sarasota (H)



Alachua (L)



Brevard (L)



**Small**

Charlotte (H)



Collier (H)



Gadsden (L)



Lewis (L)



Percent of  
Total MFP/FEFP

0      2      4      6      8      10      12      14      16

1972-73      Growth by 1975-76

Source: Calculated from *Commissioner of Education Pupil and Financial Data, 1972-73* and *Profiles of Florida School Districts, 1975-76*.

\* (H) — High Per Pupil Assessed Valuation.  
 (L) — Low Per Pupil Assessed Valuation.

90

There does, however, appear to be a relationship between size and district earnings. Chart 6.7 explores this relationship, using statewide data, and shows that the state's nine districts with over 50,000 students (unweighted FTE) earn 10 percent of their formula dollars from exceptional education units. This contrasts with those districts having fewer than 50,000 students, which earn only 8.6 percent of their dollars from exceptional education units. It also is of significance that this 1.4 percent difference occurred with the implementation of the pupil weighting system, since both were at 6 percent the year before the reform.

This shift indicates a predictable redistribution given the premise that with a pupil weighting system, dollars follow need. Our interviews confirmed that in most urban areas studied there is greater need than in rural areas for exceptional child education, for four reasons:

1. A greater density of handicapped children exists due to concentrations of people living in poverty.

2. People with handicapped children tend to move to urban areas where there are more special education services and related social services.

3. Large school districts that pioneered in offering exceptional child services generally provide greater program options, and their reputation has attracted more students.

4. Organized parental or professional pressure to expand certain

programs, such as speech therapy and learning disabilities, can drive incidences up.

An additional explanation substantiated by our interviews related this growth to the "entrepreneurship" of staff in large districts. Large districts usually have more diagnosticians in order to place more children and highly skilled finance officers who develop considerable expertise in manipulating the system. This skill is especially exercised when there is a statewide shortfall of money; as was the situation in Florida in 1975-76 and 1976-77.

It is difficult to determine the relative influence of the factors associated with large district earnings for exceptional education. Several checks, however, on the entrepreneurship factor are being enforced; they include auditing placements and program expenditure requirements. These actions are reducing considerably this influence, so that the pupil weighting system can more clearly function to place dollars where the greatest need is.

In contrast to Florida, Utah has controlled growth, as shown clearly in Chart 6.8. The statewide increase was so small that there are no significant growth patterns for exceptional education. This would be anticipated because of Utah's capping, hold harmless, and generally equal prorating practices. Note that Salt Lake City, Utah's only real central city, received more units before and continues to do so after the reform. With this regulation, the pupil weighting system has not caused any significant redistribution among districts.

**CHART 6.7  
 FLORIDA — DISTRICT SIZE COMPARISON  
 PROPORTIONAL GROWTH OF EXCEPTIONAL EDUCATION  
 AS A PERCENTAGE OF DISTRICT MFP/FEFP REVENUES  
 1972-1973 AND 1975-1976**

**Large Districts\*  
 over 50,000  
 unweighted FTE**



**Districts  
 under 50,000  
 unweighted FTE**



**State**



**% of Total**

0      2      4      6      8      10      12



**1972-73**



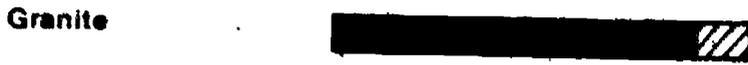
**Growth by 1975-76**

Source: Based on calculations from *Commissioner of Education Pupil and Financial Data, 1972-73* and *Profiles of Florida School Districts, 1975-76*.

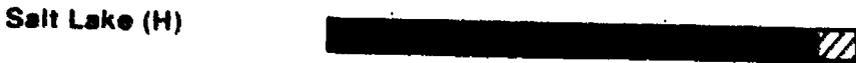
\*Includes in order of size: Dade, Broward, Duval, Hillsborough, Pinellas, Orange, Palm Beach, Polk, and Brevard.

**CHART 6.8**  
**UTAH SAMPLE DISTRICTS, 1972-1973 AND 1975-1976**  
**PROPORTIONAL GROWTH OF EXCEPTIONAL EDUCATION**  
**AS A PERCENTAGE OF DISTRICT SCHOOL PROGRAM FUNDS**

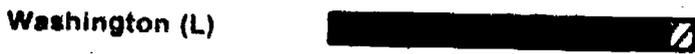
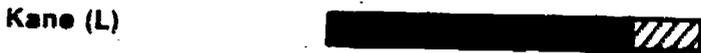
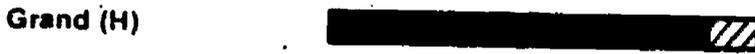
**Large**



**Medium**



**Small**



% of Total                    0        2        4        6        8        10      12      14

                      
 1972-73                    Growth by 1975-76

Source: Calculated from *Annual Report of the State Superintendent of Public Instruction, 1972-73 and 1975-76*, and data from the Office of the Legislative Fiscal Analyst.  
 \*(H) — High Per Pupil Assessed Valuation.  
 (L) — Low Per Pupil Assessed Valuation.

New Mexico's growth more closely resembles Florida's. Chart 6.9 shows considerable growth in Albuquerque, New Mexico's only large city, and Gallup, which is New Mexico's third largest district, the center of Navaho lands and "geographically the largest school district in the country," according to local prevailing belief.

The apparent gain by large districts is further analyzed by Chart 6.10, which shows a large district percentage of total formula revenues to be 8.1 percent compared to that of smaller districts at 6.1. This is a growth of almost 4 percent, compared to 2.5 percent for smaller districts.

As was pointed out in the first part of this chapter, New Mexico's major growth in exceptional education occurred following the 1976 legislative session, when the legislature removed the caps and established Option II. Those actions precipitated a large outflow of dollars "for exceptional education" by allowing districts to earn an amount equal to .12 of their grade 1-3 units, and required no state department approval of exceptional education programs. In other words, districts would receive so-called exceptional education dollars, but would not have to operate programs, since in New Mexico there is no state requirement that formula dollars be spent on the children that earn them. Alternatively, even if the money earned were spent on exceptional child programs, no reporting or program controls or auditing from the state would track such expenditures. This option then, which was selected by 39 of 88 districts, relates growth of dollars directly to student population in grades 1-3. Of the four large districts analyzed

in Chart 6.10, however, only Las Cruces chose Option II. The others could earn more under Option I because they had staff to deal with state requirements. This growth in dollars in the large districts, therefore, represents more actual expansion of programs than might be occurring throughout the rest of the state.

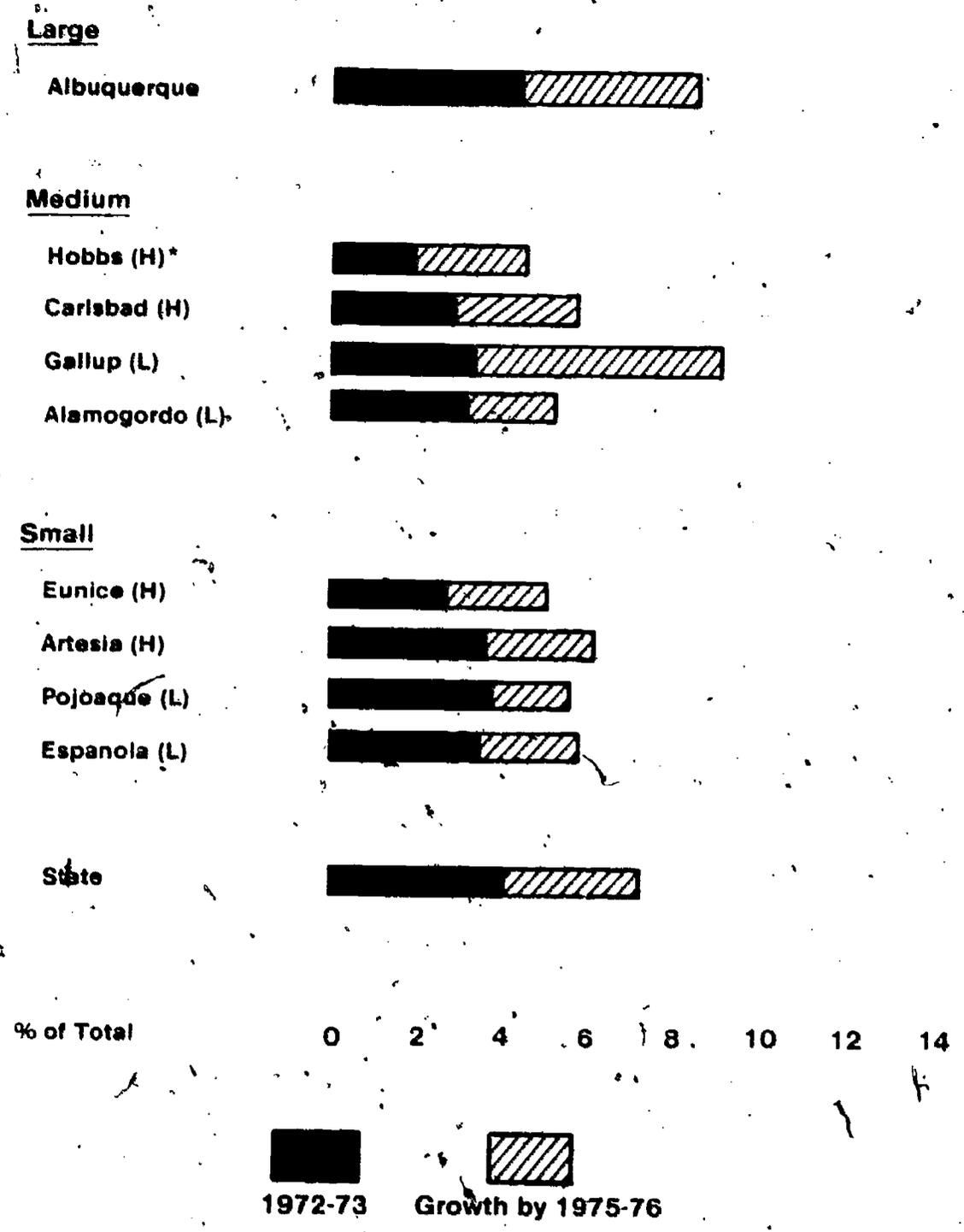
Interviews in New Mexico substantiated the higher incidence of need for exceptional education in the large districts due to a greater density of poverty, a greater social acceptance of programs for handicapped children, and additional community and school services.

#### Vocational Education

Florida and Utah have developed different systems of weights for funding vocational education; Florida's system is related to cost categories and Utah's to program categories. In the Florida sample districts, as shown by Chart 6.11, considerable growth in vocational education has occurred between 1972-73 and 1975-76. Statewide, vocational education accounts for 15 percent of district formula earnings in contrast to 9 percent before implementation of the pupil weighting system. It appeared at first that districts with high per pupil assessed valuation have tended to gain slightly more vocational dollars. However, when further statewide analysis was conducted, using several levels of high assessed valuation related to vocational dollars earned, no significant difference could be determined.

Another means of analyzing vocational education distribution is by cost categories. Table 6.19 shows for the sample Florida districts the

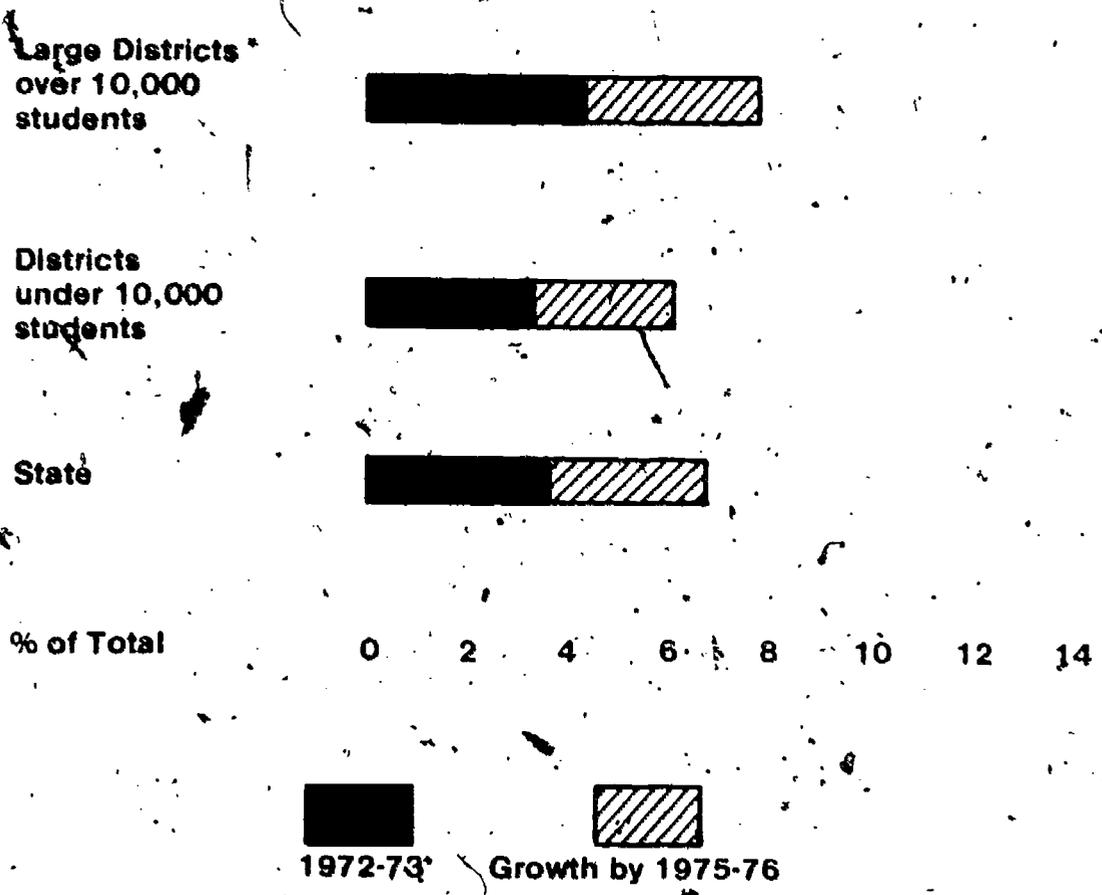
**CHART 6.9  
NEW MEXICO SAMPLE DISTRICTS, 1973-1974 AND 1976-1977  
PROPORTIONAL GROWTH OF EXCEPTIONAL EDUCATION  
AS A PERCENTAGE OF TOTAL DISTRICT FINANCE PROGRAM REVENUES**



Source: *Statistics, Public School Finance Division, Department of Finance and Administration, 1973-74, and 1976-77 Actual 40/80 Day Final Funding Printouts, Office of the State Secretary of Educational Finance and Cultural Affairs.*

\*(H) — High Per Pupil Assessed Valuation.  
(L) — Low Per Pupil Assessed Valuation.

**CHART 6.10  
NEW MEXICO DISTRICT SIZE COMPARISON  
PROPORTIONAL GROWTH OF EXCEPTIONAL EDUCATION  
AS A PERCENTAGE OF TOTAL DISTRICT SCHOOL REVENUES  
1973-1974 AND 1976-1977**



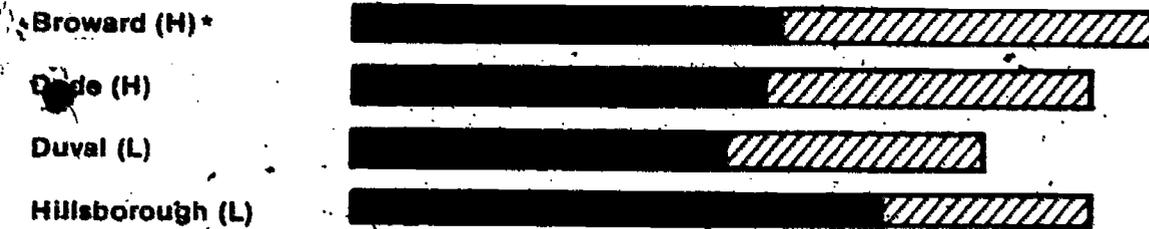
Source: *Statistics, Public School Finance Division, Department of Finance and Administration, 1973-74, and 1976-77 Actual 40/80 Day Final Funding Printouts, Office of the State Secretary of Educational Finance and Cultural Affairs.*

\* Includes in order of size: Albuquerque, Las Cruces, Gallup, Santa Fe.

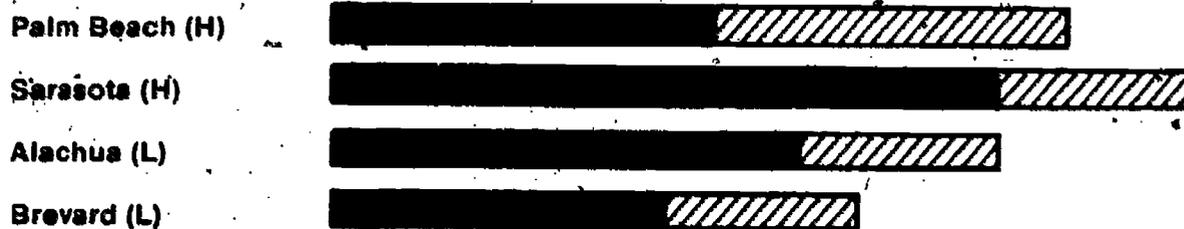
CHART 6.11

**FLORIDA SAMPLE DISTRICTS, 1972-1973 AND 1975-1976  
PROPORTIONAL GROWTH OF VOCATIONAL EDUCATION  
AS A PERCENTAGE OF DISTRICT MFP/FEFP REVENUES**

Large



Medium



Small



State



% of Total      0      2      4      6      8      10      12      14      16      18



1972-73



Growth by 1975-76

Source: Calculated from *Commissioner of Education Pupil and Financial Data, 1972-73* and *Profiles of Florida School Districts, 1975-76*.

\* (H) — High Per Pupil Assessed Valuation.

(L) — Low Per Pupil Assessed Valuation.

TABLE 6.19

FLORIDA--PERCENTAGE OF TOTAL UNWEIGHTED-FTE STUDENTS IN  
VARIOUS COST VOCATIONAL PROGRAMS  
1975-1976

<u>Weight</u>	<u>Voc I</u> (4.26)	<u>Voc II</u> (2.64)	<u>Voc III</u> (2.18)	<u>Voc IV</u> (1.69)	<u>Voc V</u> (1.40)	<u>Voc VI</u> (1.17)	<u>Total</u>
<u>Large</u>							
Broward (H)*	.41	1.72	2.97	3.14	1.05	.58	9.87
Dade (H)	.73	1.33	2.53	2.04	.84	1.04	8.51
Duval (L)	.25	.89	1.96	3.34	.38	.83	7.66
Hillsborough (L)	.54	1.15	2.53	2.76	.74	1.22	8.95
<u>Medium</u>							
Palm Beach (H)	.29	1.38	2.54	2.84	.73	1.33	9.10
Sarasota (H)	.24	1.97	3.64	1.76	1.24	1.92	10.76
Alachua (L)	.12	1.09	2.26	3.44	4.22	1.63	8.96
Brevard (L)	.01	1.27	2.11	1.52	.25	1.35	6.52
<u>Small</u>							
Charlotte (H)	.41	.74	3.14	4.23	1.29	.94	10.75
Collier (H)	.14	2.47	2.82	2.41	.47	.70	9.01
Gadsden (L)	.15	1.50	1.82	3.38	.27	-	7.13
Levy (L)	.04	2.13	1.79	3.33	.32	1.27	8.88
State Avg.	.49	1.56	2.62	2.78	.72	1.06	9.23

\* (H) - High per pupil assessed valuation.

(L) - Low per pupil assessed valuation.

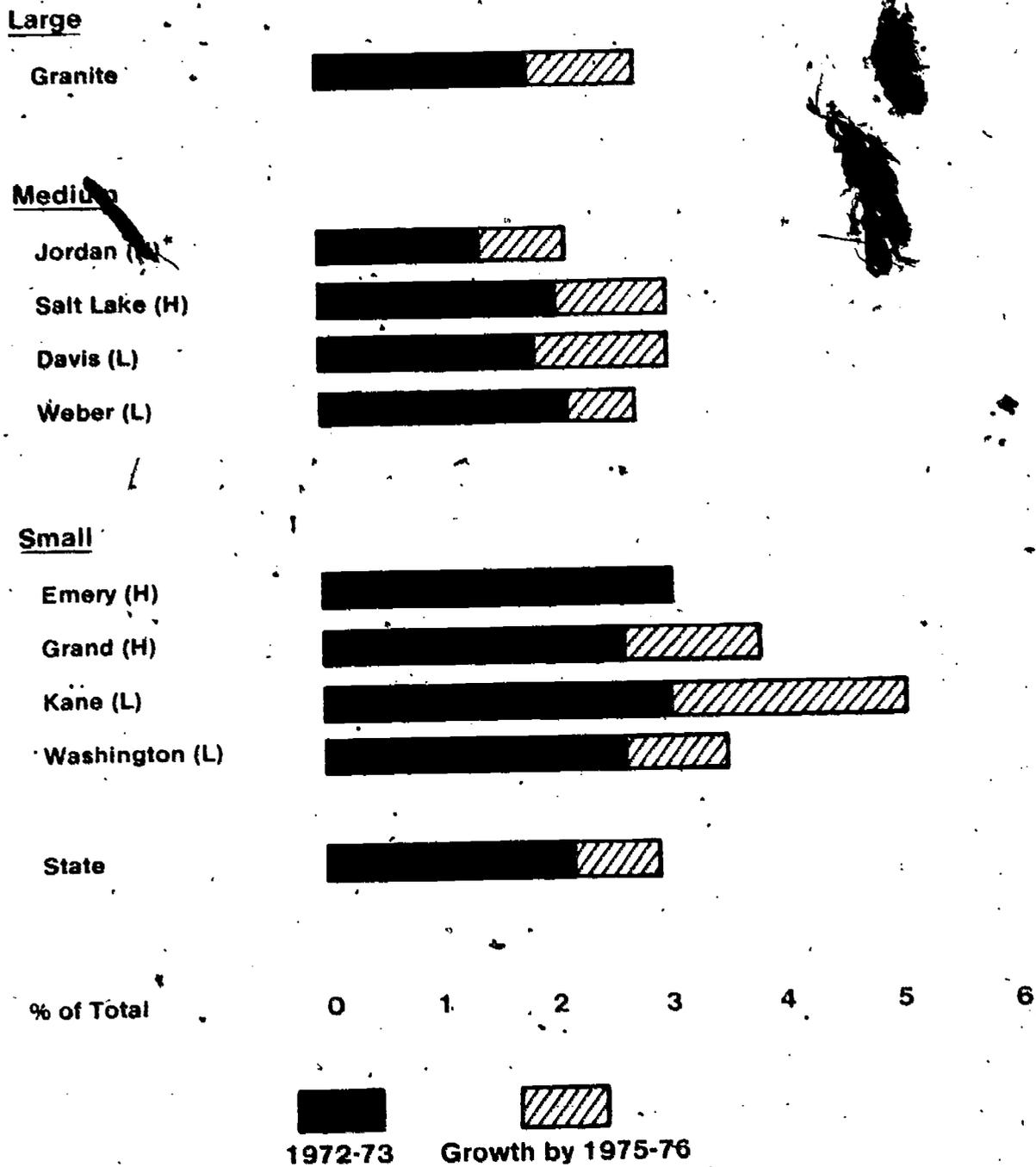
percentages of total unweighted FTE's in the various vocational programs. This table indicates that among the sample districts those with low assessed valuation have somewhat lower percentages of students participating in vocational education than the state average. Even with substantial equalization it appears that the wealth differences are sufficient to impede some high-cost program growth.

This table also indicates that among the sample districts the extremely high-cost programs, such as Voc. I, are considerably more prevalent in the large districts. The additional burden of providing these high-cost, job related programs

(i.e., aluminum welding, refrigeration equipment repair, and technical electronics) was a major impetus behind the pupil weighting approach to funding vocational education. Table 6.19 also illustrates the wide diversity of vocational programs and associated cost burdens that exist throughout the state and have made the need for something like a pupil weighting distribution system apparent.

The growth of vocational education in Utah is illustrated by Chart 6.12. In contrast to Florida, it appears that districts with low assessed valuation have gained more from vocational education, but further statewide research did not bear this out.

**CHART 6.12**  
**UTAH SAMPLE DISTRICTS, 1972-1973 AND 1975-1976**  
**PROPORTIONAL GROWTH OF VOCATIONAL EDUCATION**  
**AS A PERCENTAGE OF DISTRICT SCHOOL PROGRAM FUNDS**



Source: Calculated from *Annual Report of the State Superintendent of Public Instruction, 1972-73 and 1975-76*, and data from the Office of the Legislative Fiscal Analyst.

\*(H) — High Per Pupil Assessed Valuation.  
 (L) — Low Per Pupil Assessed Valuation.

## 7. THE IMPACT OF THE PUPIL WEIGHTING SYSTEM ON EDUCATIONAL DECISIONMAKING: STATE AND LOCAL PERSPECTIVES

In comparing the experiences of Florida, Utah, and New Mexico in implementing a weighted pupil approach, our interviews with state and district actors and observers of the reform yielded numerous insights into decisionmaking processes. Many issues briefly addressed in this chapter could be discussed in much greater detail and are worthy of further research. However, our intent here is to expose some of the numerous issues that concern state and local policymakers so that one may be alerted to some of the intricacies, interrelationships, and ripple effects of the finance reforms in Florida, Utah, and New Mexico. Issues that emerged from interviews at the state level are presented first, followed by district respondent perceptions. Chapter 8 expands on district perceptions of new incentives established and other issues related more specifically to exceptional education funding and programs.

### State Perspectives

A significant portion of our state level interview instrument focused on perceived shifts in the roles and behaviors of primary state actors in educational decisionmaking. Our interviews involved approximately 20 key people in each state who shared their perceptions regarding changes in (1) legislative, (2) interest group, and (3) state department roles and behavior.

### Legislative Behavior

Two states, Florida and Utah, reported that major policy decisions are now being made by the Appropriations Committee rather than the standing Education Committee. It is probable that this has been a function of committee leadership as well as the new type of formula, but what is of recognized significance is that a more understandable pupil weighting formula allowed this shift to occur.

A number of respondents commented that "the computerization of the political process" had been achieved. One Florida lobbyist explained, "You put dollars in; you back out your program." A New Mexico legislator stated, "There's not as much opportunity to tinker with the formula," and a Utah legislator replied, "The pupil weighting system doesn't need much legislative maintenance time." A legislative staff member commented, "There is greater understanding now; with only one bill, the committee works more smoothly."

A greater focus on the needs of children and education in general was identified as part of the process of developing the pupil weighting system. A Florida legislator recalled that "we are focusing on the needs of children rather than the working conditions of employees," referring to the earlier classroom

approach. A New Mexico legislator added, "With the development of this formula we have a more clear-cut view of the needs in public education; we can see the total picture." Another respondent in that state agreed that with the allocation process working itself out, "The quality of programs is an issue now."

Legislative oversight of the implementation of a pupil weighting system was given new prominence by a few respondents, although not clearly defined or broadly understood in any state. One prominent Florida ex-legislator responded most articulately:

If there is a governmental overhaul by the legislature, then the legislature must monitor the program and assume responsibility for its implementation. This is the key to success. This (pws) is the finest tool for legislative policy making, but it needs monitoring. The problem is that there aren't enough who put the whole puzzle together, still there (in the legislature, or on the right committees). Back then (at the time of the reform) it was a life and death issue; now, no one is too excited about assuring its success.

The use of the words "governmental overhaul" by the legislator indicates a perception and awareness of the breadth of the reform in Florida that should not be overlooked.

#### Lobbying Efforts

Respondents in all states indicated that lobbyists are now work-

ing together with the common goal of increasing total revenues for education. A New Mexico legislator reflected, "Everyone is pushing together for more money rather than special interests fighting each other." A lobbyist for a teacher's union stated, "We look at the total dollars, and try to get that increased."

Lobbyists must now understand the school finance formula. A Utah lobbyist explained, "It has placed a greater knowledge requirement on the lobbyist; you must know school finance to be able to lobby." A New Mexico analyst related that "discussions are more sophisticated; it has made the guys who are expert more influential." Evidently more people are learning the logic at least of the pupil weighting system approach. A Utah staff member explained, "Most people know how the formula works; we have had more housewives come in and present adjustments. This never happened before."

"People who have lost out at the local level are now lobbying at the state level for categorical funding." For example, in Florida before the reform, supervisory positions were funded directly by formula. With the implementation of a weighted-pupil system, these positions were no longer protected by the state, and many districts abolished the positions. Partially in response to this, there were unsuccessful efforts to establish new categoricals in the areas of music and art out of concern by those interested that these programs were not going to be looked after at local levels by other administrators.

In contrast, in New Mexico, where there is no requirement that

dollars be spent in accordance with the earning category, it was evident that lobbying has increased at the local level. Since the district receives a lump sum, the special interests compete for resources at the local level, yet work together to get that lump sum increased at the state level.

#### State Department of Education Role

The implementation of a pupil weighting system impacts greatly on the role of state departments of education. A Florida legislator stated a very important issue succinctly, "The state department of education staff need to become program auditors instead of program consultants." He added, "We didn't recognize how difficult this would be to accomplish." Many respondents recognized this fundamental shift. One lobbyist said, "We've never looked at the state department as auditors; they've had a leadership and consultant role." Making this considerable transition takes time. One state superintendent commented, "It just takes time to get it (auditing) together, 2 to 3 years." A legislative staff member in one state recalled, "The first year there was a poor response to the auditing role; there has been a lot of foot-dragging." Even in New Mexico, where there is no tracking of funds to earning categories, the state department reported that their "monitoring has increased." Apparently there was little forethought given to the magnitude of changing so many job descriptions and basic role orientations of personnel within large bureaucratic organizations, and state departments were generally slow to respond. However, once past the initial shock, they are making progress slowly and consistently.

In all three states, it was reported that some personnel in the department of education "had" lost considerable power." Actually, their authority had changed from discretionary power to regulatory responsibility. One legislator noted, "The pupil weighting system has taken away the state department of education's discretion." Another stated, "The Director of Handicapped has never gotten over losing program approvals." Since the pupil weighting system of funding is an entitlement system rather than a grant application approach, the dollars follow need without prior approvals of specific program proposals or "collegialism" among state and district leaders.

In New Mexico, the state department of education lost its pupil accounting function, which became centralized in the Public School Finance Division of the Governor's office. That office administers the financing of public education. The shift occurred primarily because a pupil weighting system necessitated linking student counting with finance.

An important authority remaining with the state department of education, and gaining prominence as other roles are altered, is the setting of standards for program quality or accreditation. Such standards were reported to exert considerable influence over districts, and to be valuable tools for focusing on program quality and improvement, even if not directly associated with funding.

#### District Perspectives

As well as gaining state perceptions of the impacts of the implementation of the pupil weighting

system, we discussed the reform with over 150 district respondents including superintendents, finance officers, principals, teachers, special education directors, and school board members. Given the differences in implementation of the weighted pupil approach, it is difficult to generalize findings from the three states; however, some impacts could be determined for one or two states. The following discussion focuses on representative district perceptions of state/local issues, internal management changes, and district program and personnel consequences of the reform.

District respondents, engaged in the day to day activities of running schools, were generally not too analytical in relating current practice and decisionmaking processes to specific aspects of the reform. However, we were able to provide some linkages as we learned a great deal from their perceptions about the concerns of district educators. We have expanded this discussion somewhat beyond pupil weighting impacts in order to briefly cover some additional, but interrelated, issues such as school-based management and collective bargaining, realizing that the pupil weighting system did not occur in a vacuum. Direct quotes of respondents have been used often in an effort to reflect accurately their perceptions.

#### State Versus Local Control

It was the intention of legislators in both Florida and New Mexico to give greater control to local districts by funding special and vocational education through a pupil weighting system rather than the previous grant application system. There was considerable confusion regarding this control issue in Flor-

ida. Many respondents recognized what one superintendent expressed, "The pupil weighting system took exceptional and vocational out of the hands of the state department of education; the dollars came directly from the legislature to the school districts." While districts were generally relieved not to have state intervention in how programs should operate, many felt the state's enforcement of program expenditure requirements would exert undue constraints on district management options.

New Mexico district respondents were generally fiercely independent and favored strong local control. One superintendent articulated a frequently held posture:

We don't worry about SDE control; we had staffing patterns before and we didn't pay any attention to them. We don't pay any attention to the SDE now either. We're not going to make any changes because of a funding formula.

Since New Mexico has no program expenditure requirements, local school boards and superintendents have only to face local pressure groups and general accreditation standards in making expenditure decisions.

#### Categorical Versus Noncategorical Funding

Whether a state should earmark state funds for certain purposes or provide lump-sum or consolidated funding is a continually debated issue. A number of pros and cons were discussed by district respondents. Unlike Florida and New Mexico, Utah still operates a number of grant application categorical pro-

grams in addition to the pupil weighting system. This practice was generally well received in the districts as was explained, "Categorical funding is good; it separates out what is up for bargaining; even teacher unions support categoricals to keep things off the negotiating table." Utah recently consolidated five small categorical programs, which gave local administrators more leeway in offering special programs. While this move was encouraged and supported by the districts, there was still support for the state's protecting earmarked programs.

Florida "folded in" numerous relatively small categoricals in establishing a weighted pupil system, believing that local districts should make more decisions regarding special offerings. Unforeseen was the impact of a statewide collective bargaining movement and law which would alter the balance of power in districts. However, vocational and special education program dollars continued to be earmarked by establishing expenditure requirements.

#### District Perceptions of Legislature Changes

In Florida, a number of close observers and critics of the legislature were found among district respondents. A shared sentiment was that the Florida legislature as a body was inconsistent:

The legislative pattern is to move forward, then fall back. Some districts get caught out front. Districts have learned to survive by not moving forward too quickly.

Needless to say, most district respondents were extremely unhappy

about the state revenue shortfalls following the reform. The lack of state revenue and changes in the legislative leadership caused many district respondents to feel abandoned just when many changes were being required of them. Consequently, parts of a well-intentioned multifaceted reform were never implemented in some districts.

#### Pressures To Operate More Efficiently

In Florida, where program cost accounting and a management information system were established to accompany the weighted pupil system, numerous district administrators commented on how accounting procedures and data processing had changed. There was a much greater awareness of and focus on how much programs cost. "The weighting system is forcing people to make careful analysis and judgments." Prior to the reform, program costs had not been available, and district administrators' decision-making relied on line item budgets with no or little consideration for operating an efficient system. Now, exceedingly high-cost or inefficient programs are glaringly apparent and demand attention. A decision may be made to maintain a program for educational reasons, but these new program expenditure data assist in making more cost-effective decisions. Said one finance officer, "With this new system a district could operate like a private corporation; with a program budget dollars can be managed."

In all three states, pressures to eliminate extremely inefficient programs were realized by district respondents. However, the other side of the efficiency issue emerges when addressing the difficult issue

of providing high-cost services in rural areas. In a rural and isolated fishing village in Florida, the principal related that:

We've had more pressure to close our school, and children would have to be bussed thirty miles to the closest school. Many children would rather drop out since they wouldn't be able to go to the docks and help unload when the fishing boats come in.

Florida has no sparsity adjustment for necessarily existent small schools as do the other states. However, difficulties in offering particularly low-prevalence programs in rural areas were also addressed in Utah. A superintendent of a rural district explained:

Small districts just can't operate on state averages. You don't have the flexibility to average out costs per class.

On the one hand, the weighted pupil system was viewed as encouraging interdistrict cooperation, and thus savings. Districts can host high-cost programs recognizing that the state guarantees high-cost tuitions. On the other hand, where this is not practical, a district is faced with supporting an extremely high-cost program or deriving some alternative to a classroom unit to provide service. For example, some districts have resorted to using aides, rather than teachers, and closed circuit television for hospital and homebound students, both being adopted as cost-saving measures.

### Interdependency of Districts

Not only was each local administrator more aware of his or her own district's inefficiencies, but in numerous cases he or she was scrutinizing other districts, since the distribution of weighted pupil units is a relative distribution. Stated one Utah superintendent, "This system makes districts so interdependent; a superintendent in one is interested in the inefficiencies in another."

A contributing factor to this dynamic in both Utah and New Mexico can be related to their substantial reliance on mineral wealth to finance education. Property values can fluctuate dramatically as oil is pumped out and ores are mined. Explained one New Mexico respondent on the Texas border:

If we kept all our resources, it would be downright embarrassing how much we would have. But then those poor districts in the northern part of the state might be sitting on uranium, and they would be rich when our oil and gas run out.

This recognition by many of the transient nature of property values has aided in the exemplary equalization of educational finance in New Mexico and Utah. The same perception is not, however, commonly held in Florida.

### Internal Management Issues

When the legislatures in Florida and New Mexico determined to bring about greater local control, they may have intended a decentralization to the school level; but in most cases our sample districts did not decentralize decisionmaking.

In three of our sample districts in Florida--those that moved to school-based management--there was evidence of decentralization of decisionmaking within districts. Most districts continued to allocate teacher units according to either the old system or a district formula. Some districts exercised even greater discretion, according to one respondent, using a "by gosh, by golly" system of allocating district resources.

### Superintendents

There were a few perceived alterations in the role of superintendents. In Florida, it was reported that the superintendent had increased responsibilities for determining and administering their programs. As one explained, "We realize we are more visible regarding where the dollars are going." Unless the superintendent delegated authority to the principals (as occurred in the three school-based management districts), the superintendent's office was the focus of demands for dollars and accountability. Additionally, the Florida legislature passed a statewide collective bargaining law the year following the finance reform--an act that had a significant impact on local decisionmaking by fueling the power of local teacher unions. With the shortfalls of state revenues, the increased pressures of collective bargaining, and the demands for accountability, district superintendents have not fared well in Florida. Over one-half of the 67 superintendents have been removed from office since 1973. In one district it was reported that "collective bargaining got so rough, that the superintendent's windows got shot out."

### School Board Members

School board members, likewise, were confronted with increased demands. It was the intention of some Florida legislators to relieve some school board pressures by diminishing their "tax collector" function. Through the establishment of high state-required local effort, it was thought that district school board members could focus more readily on programs and expenditures. While the availability of new data was perceived to have improved the quality and nature of school board decisionmaking in Florida, the advent of strong teacher political power was circumscribing the extent of local decisionmaking prerogatives. One administrator expressed a commonly held frustration: "Who's running the schools? The teachers union supported all four winners of this year's school board election." In New Mexico, where there is no local option regarding revenue collections, it was reported that "a different breed is running for office"--those less dependent on a business and property owner constituency.

### Principals

Generally in New Mexico and Utah the role and responsibilities of school principals remained unchanged. Characteristic was one Utah principal's explanation, "I don't know much about the formula; I just trust people to treat us right." However, in Florida there was considerable debate about the role of principals since some districts had moved to school-based management, in which the principal had assumed major decisionmaking responsibility. Superintendents who had decentralized viewed the pupil weighting system as facilitating that

move. As one said, "Decentralization is easier under a pupil weighting system because the dollars can flow through to the schools more easily; I tried decentralization under the old system, but couldn't do it." In the three school-based management sample districts, dollars followed students to the school, and the principal was the manager and held accountable. There were several interesting, and perhaps unpre-  
dicted, byproducts of this reform: Relayed one school board advocate, "When principals are held accountable for their expenditures, they cannot pass the buck up the line; therefore, you can get rid of incompetent principals." This district strategy complemented the belief held by a number of state leaders in the reform who asserted that it was the quality and capability of the principal which made the controlling difference in the quality of a child's education.

Another result of decentralized management related to the advent of collective bargaining, and was explained this way by a superintendent:

With localized budgeting and dollars at the individual schools, unions can't touch it because it's for that school. Teachers are more conservative of dollars, utilities, etc., if they know that they can use the money they saved elsewhere. Teachers worked like crazy to set and hold on to their school carryover. For the first time this year, we were able to fend off the unions.

At the core of school-based management, however, is the fundamental alteration of the role of the

principal. The best way to communicate this change is to let principals who have experienced the change speak for themselves:

Principals now see management dependent on the number and types of kids. Before you had to go in on your knees for another teacher unit. However, now you look at a child with special needs coming in with resources to back him up, not as a liability.

We're philosophically supportive of decentralized management. We're accountable and we have the chance to make decisions.

My time spent in the business manager role, however, is increasingly higher, and I still have parents, public relations, and the school leader role. What suffers is curriculum leadership, classroom observations, and midyear evaluations.

Although there was philosophical support, principals had difficulty making the transition to the assumption of greatly increased responsibilities. In one of the three decentralized districts, principals faced an additional challenge when the district was hurt considerably by the state's shortfall of dollars. A school board member warned, "The district has to be able to protect the individual school's budget for decentralization to work. It's just too much for 150 principals in their first year of school-based management to manage economic decline." All three districts, in spite of their implementation challenges, however, were continuing with decentralized management. It seems that once principals had been given

the additional freedom and responsibilities, they did not want to revert to the old system, which they viewed as paternalistic.

Obviously not all districts shared this positive view of school-based management since over three-fourths of Florida districts did not move to decentralize management. Representative reasons offered were:

Principals are basically teachers with a supplement. They have not been trained as managers.

A principal can't bear the burden of responsibility with his community. The district must bear and average out burdens.

It will cost a lot to make managers of principals; there is no value to decentralizing management. It is more economical not to.

Assistant superintendents oppose school-based management. They will lose a lot of power and authority.

#### Parents

A final internal management subject relates to how parents have been affected by the reforms. It was reported that parents were better able to understand the finance formula since it directly related different student needs with dollars. Increased lobbying by parents was mentioned in particular in Utah, where a housewife had recently made a presentation related to finances before the Senate Education Committee. On the other hand, the general disinterest of parents was also discussed: "People generally

don't know about finances; if your child is helped, then the school system is well run."

It was the intention of the Florida legislature to give new prominence and authority to parents when they mandated Parent Advisory Councils and Annual Reports of School Progress for each school in the state--a reform that accompanied the establishment of the weighted pupil system. It was generally agreed, however, that the success of this effort was a function of the desire of the district superintendent or principals to encourage parental involvement. Most did not.

#### District Program and Personnel Changes

Data-based descriptions of the expansions of special, vocational, and, in New Mexico, bilingual programs have been addressed in Chapter 6. District perceptions tended to coincide with the data, but there were a few supplementary remarks worth mentioning. Program expenditure requirements in Florida and Utah had strongly influenced program growth. It was communicated that "programs grew as a response to the requirement to spend the dollars where earned." However, program growth in New Mexico was attributed to other pressures: "We're expanding special education enthusiastically now because there are too many rifles aimed at us." Program expansion in New Mexico was a function of the success of competing local pressure groups, rather than state regulation.

In New Mexico, there was little evidence of the pupil weighting system affecting program and personnel decisions, but then it was not intended to. In Utah, there was

some evidence of a reduction of administration units. A superintendent of a major school system reported, "We have reduced administrative costs by 40 percent in the last four years. The old system kept administrative costs far too high."

Florida district staff also discussed reductions in administrative personnel. Curriculum supervisors, who had been allotted on a basis of one per 100 teacher units prior to the reform, had become an extinct species in most of the districts we visited. School-based management districts reported further reductions in central administrative staff, with one superintendent reporting, "We cut our central staff back drastically; the dollar flow through to schools here is about 90 percent." Also, it was reported in those districts that "the maintenance of previous categoricals depends on the principal, and how it's working in the school; there is no generalizable conclusion."

That perception could be expanded to describe maintenance of previous categoricals in the other districts; there was no discernible pattern. In some districts, music and art had been expanded; in others, cut back, which led to the perception, "We are becoming weak in fine arts, strong in vocational education. I would like to see weights in drama, band, etc., as well as vocational education."

In Florida, over one-half of the sample districts reported an expansion of resources in the primary grades; one described it as "a redistribution from secondary to primary." Although this legislative intent has not been fully accomplished, there was an awareness among district administrators that it

was a worthwhile goal, and conscious efforts were being made to redirect resources to the primary grades. Complementing that effort was the expansion of the use of teacher aides in over one-half of the sample districts, one reporting, "We went from 0 to 1,300 aides in three years." In that district, which had moved to school-based management, principals had staffing options and had caused the growth by their requests..

### Conclusion

The ripple effect of adopting a weighted pupil system in the three states is still being felt by individuals with various responsibilities for managing education. Where grant application categorical funding had allowed for state discretion, the new weighted pupil system was based on district counts of high-need students. Numerous state department personnel, in contrast to being friendly consultants, were charged with the less-than-welcome responsibility of auditing program placements.

The role and responsibilities of local superintendents and local boards of education often became more prominent. Demands for program dollars and accountability became more focused at the district level. There were reports of a more efficient use of resources as administrators in Florida and Utah became aware of program costs, a traditionally foreign concept in education.

Decentralization of decision-making, not a legislative goal in Utah, was accomplished differently in Florida and New Mexico in accordance with their distinct intents. In New Mexico, the pupil weighting

system was used to allocate dollars to districts in accordance with different student needs since school districts had almost no leeway for raising local revenues. However, once those dollars reached the districts, the principal legislative leadership desired that the use of funds should be determined locally. There was no intent to influence the methods or practices of local decisionmaking. New Mexico is an excellent example of a state where state provision of dollars works in harmony with strong local control of decisionmaking.

In Florida, key legislators during the reform movement envisioned monumental management alterations, with the school principal ending up as the center of both decisionmaking and accountability. The weighted pupil system was viewed as a means of facilitating and complementing other reforms such as school-based management, parent advisory coun-

cils, annual reports of school progress, program cost accounting, and a state management information system--all designed to strengthen local decisionmaking. Decentralization to the school site, or school-based management, was facilitated by the weighted pupil system in some districts, though not a majority.

One should recognize that not all impacts of a reform on management behaviors can be predicted, and that no two states will respond the same way. However, it should be understood that finance reforms do more than simply redistribute dollars; they affect roles and responsibilities of state and district administrators in significant ways. This chapter has related some of the changes that occurred in the three states studied, so that policymakers and analysts could become more aware of the potential impacts of adopting a distributional reform.

## 8. THE PUPIL WEIGHTING SYSTEM AS A MEANS OF DISTRIBUTING EXCEPTIONAL EDUCATION FUNDS

A major assumption when implementing a pupil weighting system is that, to equalize educational opportunity, a state should consider the differential burden and costs of school districts due to different incidences of high-need students from district to district. Although percentages of children based on age or on academic or vocational course program demands vary, it is particularly important to recognize the special case of differing costs of serving handicapped children. A multitude of court cases and Federal laws force state educational finance policymakers to address these needs. The three states studied represent different approaches to using a pupil weighting system to finance exceptional education programs.

### Pupil Needs

When considering a pupil weighting system, it is fundamental to determine the variation of student needs in the state. Calculations for Florida, Utah, and New Mexico show a considerable difference in need across the sample districts.

### Florida

Tables 8.1 and 8.2 display the percentage of total student membership receiving full- and part-time exceptional education services. Clearly the incidence of students served varies considerably. For example, the percentage of the student body in poor and rural Gadsden County that is served in programs for the educable mentally

retarded is four times as great as in Brevard County, where the Kennedy Space Center is located and which has the state's highest median income. Alachua County, where the University of Florida is located, appears to be providing special education services for a high proportion of its student population; this is due in part to the availability of personnel but also because it is serving students from surrounding rural counties. With the exception of Collier, the small districts are serving a small proportion of students. A number of programs are not sponsored by small districts, due to the higher cost per student in a low prevalence situation and the resultant practice of tuitioning-out such students. No other apparent pattern emerges which relates incidence to size or to the assessed per pupil valuation of a district.

Another means of analyzing Florida districts' differences in educational burden is shown in Tables 8.3 and 8.4. By determining district service based on percentage of unweighted FTE's, the amount of time or intensity of service is determined. For example, while the TMR percentages are approximately the same, due to a commonly utilized self-contained full-time delivery model, the percentages for EMR vary because of district preferences for appropriate delivery of service. Consider the comparison between Duval and Alachua. Where Alachua is serving a higher percentage of its students, Duval is using a higher percentage of its time on special

TABLE 8.1

FLORIDA--PERCENTAGE OF STUDENT MEMBERSHIP  
RECEIVING EXCEPTIONAL CHILD FULL-TIME SERVICES  
IN SAMPLE DISTRICTS  
1975-1976

	<u>EMR</u>	<u>TMR</u>	<u>Phy. Hand.</u>	<u>Deaf</u>	<u>Vision</u>	<u>Emot. Dis.</u>	<u>Soc. Mal.</u>	<u>SLD</u>
<u>Large</u>								
Broward (H)	1.97	.22	.15	.06	.001	.38	.32	.35
Dade (H)	1.02	.26	.20	.09	.02	.12	.38	.22
Duval (L)	1.92	.36	.11	.14	.02	.47	.17	.39
Hillsborough (L)	1.66	.35	.18	.09	--	.14	.08	.007
<u>Medium</u>								
Palm Beach (H)	2.38	.37	.22	.09	.008	.07	.36	.10
Sarasota (H)	1.27	.27	.12	.11	--	.33	.06	.18
Alachua (L)	2.89	.52	.02	.14	--	.37	.25	.10
Brevard (L)	.91	.20	.16	.06	--	.19	.07	.31
<u>Small</u>								
Charlotte (H)	1.11	.07	--	--	--	--	--	--
Collier (H)	1.91	.22	--	--	--	.04	--	--
Gadsden (L)	3.69	.23	--	--	.01	--	--	.02
Levy (L)	2.45	.24	--	--	--	--	--	.41
State Avg.	1.73	.30	.12	.07	.007	.19	.19	.17

Source: Calculated from base information provided in Profiles of Florida School Districts 1975-76, Vol. II, and Programs for Exceptional Students, 1975-76, M.I.S. Statistical Report 77-01, Division of Public Schools.

Note: The (H) and (L) designations identify high and low property valuation.

Note: -- means no program existed.

TABLE 8.2

FLORIDA--PERCENTAGE OF STUDENT MEMBERSHIP  
RECEIVING EXCEPTIONAL CHILD PART-TIME SERVICES  
IN SAMPLE DISTRICTS  
1975-1976

	Phy. Ther.	Speech	Vision	Emot. Dis.	SLD	Gifted	H&H	Full- and Part-Time TOTAL
<u>Large</u>								
Broward (H)	.03	3.72	.04	.28	1.68	2.11	.12	11.45
Dade (H)	.04	2.31	.04	.19	1.93	.93	.09	7.80
Duval (L)	.10	3.07	.06	.37	1.36	1.02	.15	9.72
Hillsborough (L)	.07	3.29	.06	.98	1.05	1.26	.08	9.29
<u>Medium</u>								
Palm Beach (H)	.06	3.03	.06	.03	1.52	1.89	.17	10.37
Sarasota (H)	.16	3.93	.04	.14	2.08	1.83	.10	10.63
Alachua (L)	--	4.14	.04	1.79	2.88	4.89	.24	17.93
Brevard (L)	.23	2.65	.04	.15	2.02	4.52	.04	11.56
<u>Small</u>								
Charlotte (H)	--	2.82	--	.89	1.69	--	.24	6.82
Collier (H)	--	3.44	.08	.09	2.56	4.72	--	13.07
Gadsden (L)	--	3.61	.08	.05	1.12	.66	.14	9.60
Levy (L)	--	3.89	--	--	1.30	--	--	8.29
State Avg.	.05	3.10	.05	.37	1.65	1.57	.11	9.68

Source: Calculated from base information provided in Profiles of Florida School Districts 1975-76, Vol. II, and Programs for Exceptional Students, 1975-76, M.I.S. Statistical Report 77-01, Division of Public Schools.

Note: The (H) and (L) designations identify high and low property valuation.

Note: -- means no program existed.

TABLE 8.3

FLORIDA--PERCENTAGE OF TOTAL UNWEIGHTED FTE STUDENTS IN  
FULL-TIME EXCEPTIONAL CHILD PROGRAMS IN SAMPLE DISTRICTS  
1975-1976

	<u>EMR</u>	<u>TMR</u>	<u>Phy. Hand.</u>	<u>Deaf</u>	<u>Vision</u>	<u>Emot. Dis.</u>	<u>Soc. Mal.</u>	<u>SLD</u>
<u>Large</u>								
Broward (H)	1.55	.23	.14	.06	.001	.33	.27	.34
Dade (H)	.68	.27	.15	.10	.022	.12	.29	.21
Duval (L)	1.75	.31	.08	.13	.063	.44	.17	.31
Hillsborough (L)	1.37	.35	.12	.09	--	.17	.07	.01
<u>Medium</u>								
Palm Beach (H)	1.47	.34	.20	.05	.007	.07	.24	.01
Sarasota (H)	.97	.25	.10	.10	--	.31	.06	.14
Alachua (L)	.34	.47	.02	.14	--	.32	.18	.03
Brevard (L)	.75	.21	.15	.05	--	.16	.05	.23
<u>Small</u>								
Charlotte (H)	1.04	.06	--	--	--	--	--	--
Collier (H)	1.69	.21	--	--	--	.03	--	.01
Gadsden (L)	1.85	.15	--	--	.004	--	--	.01
Levy (L)	1.99	.23	--	--	--	--	--	.05
State Avg.	1.28	.28	.09	.07	.006	.17	.16	.14

Source: Calculated from base information provided in Profiles of Florida School Districts 1975-76, Vol. II, Division of Public Schools.

Note: The (H) and (L) designations identify high and low property valuation.

Note: -- means no program existed.

TABLE 8.4

FLORIDA--PERCENTAGE OF TOTAL UNWEIGHTED FTE'S  
IN PART-TIME EXCEPTIONAL CHILD EDUCATION PROGRAMS  
1975-1976

	<u>Phy. Ther.</u>	<u>Speech</u>	<u>Vision</u>	<u>Emot. Dis.</u>	<u>SLD</u>	<u>Gifted</u>	<u>H&amp;H</u>	<u>Full- and Part-Time Total</u>
<u>Large</u>								
Broward (H)	.003	.21	.018	.09	.47	.53	.022	4.25
Dade (H)	.004	.10	.006	.07	.70	.31	.012	3.04
Duval (L)	.009	.17	.010	.07	.31	.19	.027	4.00
Hillsborough (L)	.007	.13	.008	.15	.18	.18	.009	2.78
<u>Medium</u>								
Palm Beach (H)	.004	.10	.010	.01	.46	.51	.017	3.59
Sarasota (H)	.028	.19	.005	.05	.32	.87	.016	3.42
Alachua (L)	--	.20	.004	.43	.56	.78	.027	3.51
Brevard (L)	.033	.12	.005	.04	.43	.80	.006	3.03
<u>Small</u>								
Charlotte (H)	--	.10	--	.27	.38	--	.017	1.87
Collier (H)	--	.10	.037	.02	.57	.52	.039	3.23
Gadsden (L)	--	.16	.011	.01	.25	.07	.010	2.53
Levy (L)	--	.09	--	--	.19	--	--	2.55
State Avg.	.007	.14	.008	.08	.39	.31	.017	3.15

Source: Calculated from base information provided in Profiles of Florida School Districts 1975-76, Vol. II, Division of Public Schools.

Note: The (H) and (L) designations identify high and low property valuation.

Note: -- means no program existed.

programs for educable mentally retarded children; Alachua is "mainstreaming" most EMR students, thus reducing their FTE time (and earnings). These tables show a different method of calculating incidence based on counts that reflect local service pattern options.

### Utah

Table 8.5 presents the percentages of the total ADM in the sample districts in the state who are receiving the various exceptional education program services. Utah's service incidence is considerably higher than Florida's even though "gifted" is not included. This is due primarily to high service for learning disabilities and emotionally handicapped. Even in those areas, there is district variation of service, most notably observed by comparing the emotionally handicapped service in Salt Lake City (6.94) and its suburb, Jordan (1.94). Again, it is difficult to differentiate service philosophy differences from true incidence differences. The "hard" areas (those most subject to objective identification, EMR, TMR, SMH, D/H of H, VI, and PH), however, also reflect considerable difference of service incidence. Salt Lake City, Utah's only central city, is serving a considerably higher percentage of its population in EMR programs than its suburbs where more affluent populations live. Granite, the largest district, has an unmistakably higher incidence of deaf and hard of hearing children, as parents of such children have moved into the school system to participate in its quality program. For numerous reasons then, it is clear that districts in Utah have differential burdens associated with educating their exceptional children.

### New Mexico

Similar calculations have been made for New Mexico, based upon dollars allocated for exceptional education. However, New Mexico does not require that district dollars earned for exceptional education be spent on those programs, believing that local expenditures should be determined locally. The pupil weighting system is viewed as a means of distributing dollars according to the different needs of the districts. Therefore, the percentages presented in Table 8.6 represent unauditable district reports of exceptional students. Furthermore, Option I represents actual programs approved by the state department, but Option II, enacted in 1976, represents a formula calculation: 12 percent of the ADM in grades 1-3. In 1976-77, 50 districts were still operating under Option I, and 38 had moved to Option II, reportedly to get away from state department approval and for formula gains.

Given these data limitations, Table 8.6 shows that overall New Mexico provides special education services for a considerably lower percentage of its students than either Florida or Utah, but it has been making tremendous gains recently. It seems clear from the sample districts that those with a higher than average incidence of children in resource rooms have remained with Option I. The larger districts, Albuquerque and Gallup (the center of the Navaho lands), have markedly higher incidences of both mildly and moderately handicapped children. Albuquerque alone has a distinctively high incidence of severely handicapped children, as many of their parents reportedly have moved to New Mexico's major

TABLE 8.5

UTAH--PERCENTAGE OF ADM  
RECEIVING EXCEPTIONAL CHILD SERVICES  
IN SAMPLE DISTRICTS  
1975-1976

	<u>EMR</u>	<u>TMR</u>	<u>Severe MR</u>	<u>LD</u>	<u>Emot. Hand.</u>	<u>Deaf/ H of H</u>	<u>Speech &amp; Hearing</u>	<u>Phy. Hand.</u>	<u>Vision</u>	<u>H&amp;H</u>	<u>Total</u>
<u>Large</u>											
Granite	1.49	.01	.47	3.88	2.29	.18	5.12	.07	.08	.70	16.30
<u>Medium</u>											
Jordan (H)	.72	---	.30	5.05	2.9	.09	1.79	.09	.02	1.08	11.18
Salt Lake (H)	2.00	---	.80	5.89	6.94	.11	3.59	.09	.09	.98	20.50
Davis (L)	.98	.18	.05	5.24	3.83	.13	2.77	.13	.06	3.46	16.84
Weber (L)	1.18	.04	.33	6.21	5.60	.11	2.43	.40	.08	.60	16.97
<u>Small</u>											
Emery (H)	1.20	---	.55	4.80	4.75	--	2.25	.05	--	--	13.59
Grand (H)	1.84	---	1.12	4.90	5.46	--	--	--	--	.06	13.37
Kane (L)	.44	---	--	6.86	7.18	.11	3.05	.22	--	.22	18.06
Washington (L)	.87	.14	--	6.10	.68	.06	2.12	.02	--	--	10.00
State Avg.	1.26	.15	.30	5.19	3.72	.13	3.02	.10	.04	.30	14.77

Source: Calculated from head count data from Form 5-3 supplied by the Office of Education of the Handicapped, State Department of Public Instruction (head count per program divided by total district ADM).

Note: The (H) and (L) designations identify high and low property valuation.

Note: -- means no program existed.

TABLE 8.6

NEW MEXICO--EXCEPTIONAL EDUCATION  
AS A PERCENTAGE OF TOTAL ADM  
IN SAMPLE DISTRICTS  
1976-1977

	A/B Resource Rooms		C	D*	Total
	<u>Option I</u>	<u>Option II</u>	<u>Moderate</u>	<u>Severe</u>	
<u>Large</u>					
Albuquerque	4.32		1.72	.92	6.95
<u>Medium</u>					
Hobbs		2.94	.89	.28	4.11
Carlsbad		2.72	.98	.64	4.31
Gallup	4.83		2.38	.49	7.71
Alamogordo		2.78	1.68	.15	4.62
<u>Small</u>					
Eunice (H)	3.57		1.21	--	4.78
Arlesia (H)		2.76	1.15	.59	4.53
Pojoaque (L)	3.14		1.88	--	5.02
Espanola (L)		2.55	1.36	.50	4.42
State Avg.	2.39	1.28	1.61	.60	5.88

Source: Calculated from 40/80 ADM, 1976-1977, Department of Finance and Administration, Office of State Secretary of Education. Total ADM is Grades 1-12 ADM, plus C and D, less children in institutions.

Note: The (H) and (L) designations identify high and low property valuation.

Note: -- means no program existed.

\* Excludes children in institutions.

city because more services were available. As in Florida and Utah, it is clear from the figures that districts in New Mexico confront significantly different burdens in educating exceptional children.

### Program Growth Patterns

Since pupil weights attach different dollar amounts to different programs and delivery systems, it is important to determine the comparative growth of the various programs since the implementation of a pupil weighting system.

#### Florida

Table 8.7 compares the unweighted FTE (measure of service hours) for 1973-74, which was the first year of the reform (and before the major growth), with the unweighted FTE of 1975-76. Clearly the programs showing the greatest growth are all part-time programs: emotionally disturbed (126%), specific learning disabilities (164%), and gifted (127%). There are a number of reasons for these significant increases, the first being that these were new programs on a statewide basis. Although some districts had offered pilot programs in these areas, with the implementation of the pupil weighting system came the statewide funding of programs in these classifications. The need was obviously there, according to testimony on their behalf in the legislature, and the programs expanded rapidly. Additionally, a rapid growth in SLD with concomitant declines in EMR is evident. This has been reported by Wilken and Porter to be the national trend:

Nationally, and especially in the West, there has been a marked decrease in the percentage of

special education pupils served in classes for the retarded and a corresponding increase in the percentage served in classes for the specific learning disabilities.

The lack of growth in services for the educable mentally retarded can be explained on several bases. First, the classification procedure was changed, reducing the IQ maximum from 75 to 68 and adding other criteria. Second, many more districts are mainstreaming EMR's (as is evident by comparing Tables 8.1 and 8.2 with 8.3 and 8.4), thus reducing the hours of service or FTE number. Third, the Office of Civil Rights has been investigating the alleged "over-placement" of black children in EMR programs, and consequently a number of districts, in particular mammoth Dade County, have reduced their placements in EMR programs. Finally, with hard to define or classify cases, parents would much prefer having their children "labelled" SLD rather than EMR. Because SLD has no stigma attached to it, it has become an immensely popular program and facilitates easy, noncontroversial placement. Also, in Florida part-time SLD carries a high weight of 7.5 per hour for up to 12 hours per week.

What influence do the weights have on child placement and program growth? This is a complicated subject, and the precise relationships among any set of variables are difficult to determine. One means of relating program growth and the weights that exist in Florida is displayed in Table 8.8. Florida's unique cost accounting and management information system made it possible to determine the percentage of all FEFP revenue that was

TABLE 8.7

FLORIDA--CHANGE IN EXCEPTIONAL EDUCATION  
UNWEIGHTED FTE BY PROGRAM  
1973-1974 AND 1975-1976

	1973-74	1975-76	% change
EMR	20,417	20,800	1.88
TMR	4,127	4,561	10.52
Phy. Hand.	1,290	1,526	18.39
Phy. Therapy	66	111	68.18
Speech Therapy	1,645	2,304	40.06
Deaf	1,015	1,121	10.44
Vision (PT)	71	134	88.73
Vision	92	99	6.45
Emot. Dis. (PT)	476	1,316	176.47
Emot. Dis.	1,399	2,769	97.93
Soc. Mal.	1,493	2,588	73.34
SLD (PT)	2,376	6,274	164.13
SLD	2,034	2,264	11.30
Gifted	2,222	5,076	127.01
H&H	239	270	12.97
Total	38,976	51,212	31.89

Source: Calculated from Commissioner of Education Pupil and Financial Data, 1973-74, and Profiles of Florida School Districts, 1975-76.

TABLE 8.8

FLORIDA--PERCENTAGE GROWTH, 1975-1976 OVER 1973-1974,  
 COMPARED WITH TOTAL SCHOOL COST AS A PERCENTAGE  
 OF FEFP REVENUE IN 1975-1976  
 FOR EXCEPTIONAL EDUCATION PROGRAMS

	<u>Weight</u>	<u>% Growth 1973-74 to 1975-76</u>	<u>% of Formula Dollars Generated Spent on Program</u>
EMR	2.3	1.88	105.2
TMR	3.0	10.52	104.9
Phy. Hand.	3.5	18.39	103.2
P&O Therapy	6.0	68.18	121.2
Speech Therapy	10.0	40.06	68.5
Deaf	4.0	10.44	104.7
Vision (PT)	10.0	88.73	116.0
Vision	3.5	6.45	129.0
Emot. Dis. (PT)	7.5	176.47	72.2
Emot. Dis.	3.7	97.93	104.3
Soc. Mal.	2.3	73.34	111.2
SLD (PT)	7.5	164.13	69.8
SLD	2.3	11.30	123.6
Gifted	3.0	127.01	82.4
H&H	15.0	12.97	97.0

Source: Calculated from Table 8.7, and Profiles of Florida School Districts, 1975-76, Division of Public Schools, pp. 193-206.

Note: This information was generated to test adherence to a law requiring that 80 percent of dollars generated by special education and other program areas be spent on these programs.

being spent on each program. In the vernacular of the state, percentages greater than 100 represent programs which were "costing" districts, for they had to be supplemented with local funds. Percentages less than 100 indicate that districts were "making money," which really meant they could use excess funds in basic or on other exceptional education programs, since, of course, no public school system is a money-making proposition. Table 8.8 indicates that the three part-time programs, ED, SLD, and gifted, which have grown so rapidly, were also "money-making" programs. Speech therapy, which grew 40 percent, was also a "money-making" program. On the other hand, a number of programs that were "costing" the districts also grew considerably, most notably those for the socially maladjusted (which were also new statewide), visually handicapped, and physical and occupational therapy. What direct influence the weighting system as a separate variable, then, has had on placement is difficult to determine. In Florida, a number of checks on the system of student classification should deter the "profit motive." These are discussed later in this chapter.

### Utah

The change in program service since 1973 in Utah is unique compared with the other two states and with the rest of the nation. In 1975-76, Utah was serving approximately 15 percent of its students in exceptional education classes; therefore, it is not surprising that five programs declined since the implementation of a pupil weighting system. Utah's rigorous expenditure controls or caps, set by the legis-

lature each year, permitted only redistribution within exceptional education, meaning some programs gained while others lost. The figures in Table 8.9 could be somewhat misleading, since a new program for severely handicapped and deaf/blind children was instituted during this period. It drew upon the populations in some of the other programs, most notably TMR, deaf, and physically handicapped. As a result, apparent declines in those programs actually represent reassignments of students.

Utah, like Florida, increased service in both speech therapy and emotionally handicapped, the latter a program that was characterized in district interviews as a "catch all." Contrary to national trends, however, Utah actually declined in the identification of learning disabled students (but still serves in excess of 5 percent of its ADM, see Table 8.5).

### New Mexico

New Mexico's growth in resource or A/B rooms for exceptional children was dramatic between 1974-75, the first year of the reform, and 1976-77 (Table 8.10). This was due to the removal of caps by the legislature and the implementation of Option II described earlier. However, even with this increase, New Mexico still serves directly less than 6 percent of its student population in exceptional classes. High-cost programs for severely handicapped children have been expanded as state funds became available. In contrast, programs for moderately handicapped children have declined, most probably due to an increased mainstreaming practice supported by A/B program expansion.

TABLE 8.9

UTAH--CHANGE IN EXCEPTIONAL EDUCATION ADM  
BY PROGRAM  
1973-1974 AND 1975-1976

	<u>1973-74</u>	<u>1975-76</u>	<u>% Change</u>
EMR	1,637.15	1,659.31	1.35
TMR	220.17	115.44	-47.73
LD	16,736.41	12,468.62	-25.50
Emot. Hand.	5,004.98	7,620.34	52.25
Deaf/H of H	736.51	347.90	-52.76
Speech & Hearing	5,650.10	7,084.02	25.38
Phy. Hand.	971.95	136.79	-85.91
Vision	151.29	120.83	-19.87
SH-D/B		867.79	
State	31,108.56	30,421.03	-2.21

Source: Utah Public School System Annual Reports, 1973-74 and 1975-76.  
For SH-D/B, data supplied by the Office of Education of the  
Handicapped, State Department of Public Instruction.

TABLE 8.10

NEW MEXICO--CHANGE IN EXCEPTIONAL EDUCATION ADM  
BY PROGRAM  
1974-1975 TO 1976-1977

<u>Delivery System</u>	<u>1974-75</u>	<u>1976-77</u>	<u>% Change</u>
A/B	2,510	9,827	291.51
C	4,805	4,312	-10.26
D*	745	1,600	114.77
Total	8,060	15,739	95.27

Source: Calculated from Actual 40/80-Day Funding Printouts, 1974-75 and 1976-77, Public School Finance Division, Department of Finance and Administration.

\* Excludes children in institutions.

## Comparative Analysis

In each of the three states we studied, Florida, Utah, and New Mexico, district variations in the incidence of exceptionalities demonstrated the need to match educational resources to educational needs. Each of the states chose to meet this need by adopting a pupil weighting system for distributing educational funds. However, each state has developed generally different procedures for implementing its program, primarily through different state policies regarding counting and classifying students, capping programs, and establishing case loads.

Several similarities exist, however, specifically in the pupil weighting systems in Florida and New Mexico, where considerable growth patterns can be discerned. First of all, programs did not grow immediately during the first year of the reform. It took time to expand programs, to diagnose children, and to locate and hire appropriate personnel. Second, districts did offer more high-cost programs, responding to a major rationale and impetus for adopting the pupil weighting approach. In Florida, even where districts "lost" money, high-cost programs were expanded. In New Mexico, where some rural school administrators reported that they did not envisage their role as "tending to those children," programs for severely handicapped children have more than doubled.

This is not to say that there have not been some problems of implementation, or instances of "games" played, all of which are addressed below, but to posit that the primary mission of the pupil weighting system has been accom-

plished; a greater variety of more appropriate services is being offered in more districts than before, and the essential task of educating exceptional children has been shouldered by all.

### Implementation: District Interviews

As a part of determining how the pupil weighting system was actually working, interviews that focused on the implementation of the delivery of special education services were conducted with 23 local district directors or coordinators of special education (10 in Florida, 7 in Utah, 6 in New Mexico). Although each of the three states has a pupil weighting system, there are a number of different practices or implementation methods that produce substantially diverse reactions from local directors of special education.

As described in Chapter 4, each state has its own means of defining and counting units, establishing funding limits or caps, and prescribing expenditure requirements. Each state has established its own preferences for delivery of services, both directly through regulations and by the fiscal incentives inherent in its weighting system law.

The remainder of this chapter will address many issues identified by the practitioners, make comparisons among the states, and discuss the states individually where the problems are unique. Two areas of caution should be exercised in reading this section of the report:

1. Since the pupil weighting system was a new model, not all of the "bugs" have been worked out; state leaders are aware of many of the problems articulated by district respondents and are working toward solutions.

2. Direct quotes have been used often to reflect precisely the feelings and perceptions of district personnel, but it should be remembered, as occasionally illustrated, that perceptions and reality may not always coincide.

Below is a list of the issues raised in the three states and which will be addressed:

<u>Issues</u>	<u>Florida</u>	<u>Utah</u>	<u>New Mexico</u>
Hours of service	X	X	
Student count	X		X
Caps or limits for funding	X	X	X
Expenditure requirements	X	X	
Classification of students	X	X	
Incentives established	X	X	X
Accountability	X	X	X
SDE role changes	X		X
Support staff	X	X	
Recommended weight changes	X	X	X
Start-up costs			X
Rural delivery of service	X		
Indirect/direct costs		X	X
Relationship with Public Law 94-142	X	X	X

### Hours of Service

In Florida, which uses an FTE system, hours of service are funded rather than numbers of students served as in a head count system, which the other two states use. Consequently, the concept of "contact hours" dominates many discussions with local special education personnel. Several comments were: "The problem is, you only get credit for contact hours, not for planning or traveling." "Itinerant programs need a higher weight to offset the amount of time that cannot be counted; you don't earn contact hours when you are working with a teacher." "The problem with the FTE is you don't get contact hours

for support services, for placement and diagnosing, or for consultation with parents or social service agents."

The irony related to this line of thinking is that with the implementation of Florida's new cost accounting system came the information that many districts were underspending in special education. Al-

most all district special education directors were concerned that necessary support personnel were not "earning their way" because of too few contact hours. Yet the weights were set high originally to cover the costs of the "noncontact hour" services. The breakdown in the system occurred because most district special education directors did not have sufficient financial information to realize that their district was not spending all the dollars generated by the special education weights. This confusion over "contact hours" at the local level caused some state leaders, unaware of the situation, to think that special education weights should be lowered. Meanwhile, district special education

personnel thought the weights should be raised because they didn't have enough money. The lesson to be learned is that there should be clear communication about what costs the weights are to cover, and district special education directors should keep informed of their students' earnings and program expenditures.

In contrast, in Utah, where a head count is used, local special education directors were concerned that "there is no differentiation in the hours served in the formula." The director of a large district explained, "We have no idea how many hours our special education students are being served; we just require our teachers to have a case load of at least 33 students." Another director related the hours of service to Public Law 94-142. "If you serve the most severe first in a resource room, they may take three hours a day, and you will cut down on the dollars you earn." This lack of differentiation of time of service was considered problematic by most district personnel and contributed to "the game of packing the resource rooms with 40 kids" which will be discussed later under incentives.

### Student Count

The major issue regarding student count in Florida and New Mexico was bluntly put by one district special education director, "There is a mad crunch to get kids placed by early October." This problem appears to be particularly acute in small or highly transient districts where there are insufficient diagnostic personnel; in some cases there is no actual service until after the time of the first count. One Florida respondent recommended an accumulative, rather than twice-a-

year count, apparently such as Utah has. This, however, could present a considerable management challenge to an FTE system.

### Caps or Limits

The problem of state limits on spending, or "caps," was most discussed in Utah, where the legislature has limited special education spending every year since the reform--perhaps because of the state's already high level of service compared to other states. The sequence has been for districts to submit estimates (which some admitted to inflating) and then to have their dollars reduced on a pro rata basis at the end of the year. One frustrated special education director explained, "I can't fund a \$15,000 teacher salary when I am prorated at 75 percent." Another pointed out, "With the value of the unit floating, or really sinking, you don't know until the end of the year how much you will get." The problem of caps is exacerbated in Utah because apparently all districts are not equally aggressive in inflating their service population number, and one could claim that, therefore, honesty is penalized. By reducing all districts at the same rate, the system has not allowed those districts that were behind in offering special education services to catch up with the more developed districts. Apparently, some differential treatment was applied last year by the state department, but the rationale or system used is not understood by district personnel. A recent shift in law to utilizing count data from the previous year may resolve many of the problems.

In Florida, districts are not allowed to exceed state established prevalence rates for any program by

more than 130 percent without special approval and a pattern of prior service. This led one special education director to comment, "We are not identifying kids because we are at 130 percent in some areas." Although there is some leeway, this practice of limiting expenditures appears to some to contradict the basic concept of the pupil weighting approach, which is based on the premise of district disparity of incidence of children with handicapping conditions.

Utah also has a "prevalence limit" and requires state department approval to go beyond the limit. New Mexico in 1975 ended the use of caps, and the legislature has fully funded all special education requests for the past two years. A comparison of the three states' established prevalences shows a considerable disparity based in part on different classification systems and state practices:

should be clear that it would be difficult to offer guidance to new pupil weighting states based on the prevalences set by these states.

Classification of Students

Student classification systems directly affect prevalence rates and service patterns, and are vital to the functioning of any state special education allocation system. The alterations of the classification systems in both Florida and Utah were discussed and related to changes in district behavior.

It was reported in Florida that the classification for EMR had been changed since the reform. One respondent explained, "Before, there was a high growth of blacks in EMR programs, but a Civil Rights review resulted in changes in the criteria. There was a reduction in the IQ score (from 75 to 68) and multiple

	<u>Florida</u>	<u>Utah</u>	<u>New Mexico</u>
Educable mentally retarded	2.00%	2.00%	8.92%
Trainable mentally retarded	.30	.60	.56
Physically handicapped	.15	.50	1.53
Homebound and hospitalized	.50	.29	--
Speech and language impaired	3.50	3.50	7.80
Hard of hearing	1.50	.50	(3.91
Deaf	.10	.08	.28
Blind and partially sighted	.09	.10	2.00
Emotionally disturbed	1.00	5.00	7.38
Specific learning disabilities	1.00	5.00	--
Socially maladjusted	1.00	--	--
Gifted	<u>2.00</u>	<u>--</u>	<u>2.51</u>
Total	13.14	17.57	28.89

New Mexico's prevalence projections were developed by the state's Department of Special Education and are not operational in the state. Based on the definitions of handicapping conditions used, it

criteria established." Consequently, when reviewing the change in program populations during the past few years, the dramatic drop in EMR's can be explained by this significant act by the state department.



Similarly in Utah, a change in the classification of EMR's has had a significant impact, which was reported by several special education directors. One explained that the IQ for LD used to be 85 plus and for EMR, 84 minus. That has been changed to 90 plus for LD and 75 minus for EMR, leaving an IQ gap of 76-89. It was explained, "We labeled the in-betweens EH (emotionally handicapped) because they needed service, and we had been serving them before." Another special education director explained, "EH is sort of a catch-all."

One Florida respondent grasped and reported an extremely important point: "The pupil weighting funding system means the classification criteria need to be very precise."

#### Expenditure Requirements

District special education directors were generally pleased that in Florida there is an 80 percent expenditure requirement and in Utah a 100 percent requirement that special education dollars earned by districts be spent on special education programs in general. However, there was disagreement with making the expenditure requirements apply to individual programs for they felt that necessary management flexibility would be removed.

One Florida respondent said, "Now, with the 80 percent requirement, more money goes into special education"--a phenomenon that will increase with the successful functioning of the cost accounting system. In contrast, in New Mexico, expenditure decisions are deemed a local decision, and one district special education director lamented, "We have to fight for dollars at both the legislative and local level now."

#### Incentives Established

The numerous incentives established by new formulas are clearly understood by some, totally misunderstood by others, and, surprisingly, still to be discovered or hardly considered by many. In all three states it was the clear intention of the formulators of the new finance formulas to provide the right amount of money to districts to cover reasonable costs of different programs for students with different needs. While many specialists differ on the details of handicapping conditions or best service prescriptions, the goal of state finance policymakers was to substantially free local curriculum specialists from major funding resource constraints as they identified the most reasonable program placement for children. Weights established a secure financial base for program planners. Long-term entitlements of funds on an objective per-student count basis provided the confidence needed to make long-term plans. One Florida director of special education articulated the general feelings in all three states, "As a result of the pupil weighting system, teachers are glad to start new programs; the first year, even, we had a much higher referral rate."

Behind all this new freedom to identify and prescribe, however, there exist certain financial realities that in some districts only the business officers understand. In others, continued pressures due to fiscal constraints are reflected in comments by special education directors. The following comments from Florida, while only correct for certain limited cases, provide valuable insight into service-finance conflicts and demonstrate contradictory perceptions:

I get more pressure from principals to go to self-contained classrooms; you get more money and it's easier to manage.

With part-time weights you really have to load your classroom.

With FEFP we have to keep students in special classes longer in order to generate enough dollars.

The headhunting goes on in some districts; some went wild in the area of gifted and SLD's; that's why the 80 percent was put on.

If full-time kids in EMR go to PE, art, etc., with regular kids, the district loses money since they, for that contact hour, are counted at the basic weight rather than the special ed weight.

To understand these concerns and to explain them, it is useful to compute Florida earnings in a few cases. Let us assume the value of one unweighted FTE to be \$800 and, with that base, examine the impact on district revenues of alternative ways of serving a class of 12 students with special education needs.

#### Case One: Full-Time EMR vs. Mainstreaming

Full-Time EMR: The students are in the EMR class all 25 hours per week. Earnings are computed for this program with a 2.3 weight as follows:

12 students at 25/25 wk.  
represent 12 FTE's x \$800  
x 2.3 = \$22,080

Mainstreaming: The students are in EMR classes only 18 hours per week and are mainstreamed into PE and art classes the remainder of the time. Earnings are computed as follows:

12 students at 18/25 per wk.  
represent 8.64 FTE's x \$800  
x 2.3 = \$15,898

12 students at 7/25 per wk.  
represent 3.36 FTE's x \$800  
x 1.0 = \$ 2,688

Total \$18,586

Thus, a district loses revenues when students are mainstreamed. In the example above, the class of EMR students earns \$3,494 less (\$22,080 - \$18,586) when mainstreamed than when in the EMR classroom during the entire week, unless additional students are added to the class.\* Moreover, \$2,688 is earned for the basic program, not for the EMR class.

The incentives associated with part-time placements are even more dramatic. The following case compares full-time placement of 12 learning disabled children (weight 2.3) with part-time placement (weight 7.5).

#### Case Two: Full-Time SLD vs. Part-Time SLD

Full-Time SLD: The students are in the SLD class all 25 hours per week. Earnings are computed for this program with a 2.3 weight as follows:

12 students at 25/25 wk.  
represent 12 FTE's x \$800 x  
2.3 = \$22,080

\* A class of 15 students would generate \$23,232 if they were in EMR classes 15 hours per week and mainstreamed into PE and art the remainder of the time.

Part-Time SLD: Typically, the 12 students might be taught 10 hours each in groups of 6 at a time by a resource room teacher, spending the remainder of their time in basic classes. Under this arrangement, earnings would be calculated as follows:

12 students at 10/25 wk.  
represent 4.8 FTE's x \$800 x  
7.5 = \$28,800

12 students at 15/25 wk.  
represent 7.2 FTE's x \$800  
x 1.0 = \$ 5,760

Total \$34,560

Thus, in the example above, district earnings would be increased by more than \$12,000 (\$34,560 - \$22,080) if the children were served in part-time rather than full-time SLD classes. With a very modest case load a clear fiscal incentive exists under the Florida plan to establish part-time programs for SLD students, and that is precisely what has happened throughout most of the state, with the districts skimming the "profits" for use in other program areas. The shifts from full-time to part-time SLD programs, the apparent "profit" as reflected from underspending, especially in part-time EH, SLD, and gifted programs, and the desires of many persons for the creation of a part-time weight for EMR can be explained in part by pursuing alternative calculations, as in the previous cases. It is also noteworthy that districts have responded quite differently given such incentive systems. For example, during 1975-76, part-time SLD students in Dade County spent 36 percent of their time in the high-weighted (7.5) program while in Hillsborough, the same type of students only spent 18 percent of

their week in the part-time 7.5 weight SLD program.

The examples above illustrate the impact of alternative delivery systems on district earnings. To calculate the impact on a district's "profits" each program's earnings must be compared to its cost. While the earnings and costs of the numerous delivery models vary, it remains clear that complex patterns of funding incentives have been created and that they require close and continuous evaluation.

Utah's system presents quite a different set of incentives. The issue is described by this comment from a special education director:

ED's were weighted at 1.1 compared to EMR's at .70 and SLD's at .73 before the classification system was changed. There was a fiscal incentive, if borderline, to place children in ED programs.

Of course, Utah cured that potential problem by setting all three weights at 1.00 in subsequent years. Since the delivery system model is essentially the same in all cases, and the classification guidelines are now clear, a fiscal incentive no longer exists.

Another comment represents a case of a maximum guideline becoming a minimum:

State guidelines limit the resource room to a 40-student case load; everyone tries to pack 40 kids in each room.

Since that comment was made the maximum case load for resource room teachers has been reduced to 33. These kinds of controls are simple

to write, and are legislators' way of saying they do not want districts to profit from placing students.

Another quite candid Utah educator recognized clearly the realities of incentives and controls as applied to full-time programs for the severely handicapped:

We classify all TMR's as multiple handicapped instead, because of the higher weight. If the weights aren't fair and don't cover the cost of the program, that's what you get. However, with the implementation of 94-142 we will have to reclassify everyone.

Here is a case where the weights for MH were set higher than for TMR because of presumed higher per student costs due to judgments based on lower MH class loads. Whether the weights are "fair" or not depends on local incidences and expenditure plans, and on regulations specifying programs and class size limits. Certainly an inclination to look at fiscal incentives, though, is demonstrated by the quotation above.

Utah has some basic service and fiscal incentive advantages and problems unique to its system of counting. As earlier chapters point out, they do not count by an FTE method, as does Florida, but have a very neat cutoff between full-time and part-time programs. If a student is in the exceptional education class more than 1/2 of an average day, he is full-time, if less than 1/2, the part-time weight applies. Most part-time classes have the add-on weight of 1.0 whether the student receives services for half an hour or two hours daily, yet only the days when served count as a

part of the ADM count. For example, a child served for one-half hour three days a week counts as 3/5 of a part-time ADM, but a child served two hours for one day a week counts only 1/5 of a part-time ADM. As complex as the Florida FTE system can seem, without it, situations such as this Utah example can occur, where a student receiving two hours of service each week would earn only one-third the amount earned by a student receiving one and one-half hours of service weekly.

Looking at full-time programs in Utah is a good way also to compare the mainstreaming incentive systems with Florida's. We saw earlier that a Florida school/district "lost" money by sending a student to PE and art seven hours a week. That does not happen in Utah. As long as the student spends at least half a day in the special placement room he can be placed elsewhere for 2 or 10 hours without affecting earnings.

In both Florida and Utah, where further examination of detailed examples could make the complexities appear even greater, several basic checks on placement abuses eliminate most problems. First, essentially all the money earned in special education must be spent there. There is little profit motive in reality. Second, the development of state placement criteria and program prescriptions has made errors in placement highly unlikely and readily auditable. Third, and of the greatest importance, educators generally, and particularly special education professionals, seek first what is best for the child. However, in some districts there is a tension between special educators and business officers seeking to

maximize district earnings. Finally, the due process requirements mandated by Public Law 94-142--which include IEP's, parental involvement, and sign-off placements; rigorous hearing and appeal procedures; and surrogate parent provisions--will all aid in the "pure," as opposed to "profit," placement of exceptional children. Even with the many fiscal pressures existent in a weighting system the most general findings of the data analysis and the interviews were that the educators were placing students, and staffing and conducting special education programs, not only without regard to, but even without knowledge of, the fiscal implications. Many of the safeguards, thus, have been established by the states "just in case" and do not seem to impede most district operations.

New Mexico's system is based almost entirely on local decision-making. Throughout the state, special education staffs generally have no record of what their programs earn or cost, so fiscal incentives for placements are minimal. Program cost accounting has not been seriously considered, for it is a concept deemed antithetical to local control.

The major concern voiced by special educators involves the new Option II for A/B resource rooms. As described earlier, 38 of the state's 88 districts have elected to receive an added amount of 12 percent of the number of grade 1-3 members times the base unit value, instead of submitting a special education service count for all part-time programs. The concern is that some of these districts may not just be avoiding paperwork with the state department, but may be diverting the funds into other program areas. As long as New Mexico

can continue to expand all educational funding from 10 to 14 percent annually, as has been true since the reform, the problem is not expected to be too severe. However, in a revenue shortfall year, or given added pressures to conform to the intent, if not the directives, of Public Law 94-142, a significant clash of ideals was predicted by several persons interviewed.

In all three states, most comments about incentives were associated with problems or concerns with the system. There was surprisingly little recognition of the things that had been done to prevent problems, such as the purposeful setting of several full-time weights at 2.3 and part-time weights at 7.5 in Florida or the setting of most part-time weights at 1.0 in Utah. New Mexico's greatly simplified process of funding just three delivery systems in place of disabilities virtually eliminates misplacements that could be attributed to tempting fiscal incentives: Desirable positive incentives in all three states, which use generous weights for many part-time programs that tend to encourage the placement of children in the least restrictive environment also, were seldom mentioned.

### The Old System

A number of candid comments were made regarding incentives and consequences of the distribution system in use before the pupil weighting system. In Utah, one respondent described the manipulations of that system: "Under the Distribution Unit, the game was to get more dollars for a teacher's unit with teachers who were certified in special education, but who taught regular students."

The major focus of attention in former systems in Florida and New Mexico was on the state department's discretionary power and the proposal process. In New Mexico, one district administrator commented, "Before the reform there was a lot of state department discretion as to where units would go; now they go out on a formula basis." One result of that system was described by a Florida respondent: "This county was over-staffed under the old MFP; we had many teachers with only three or four kids." Relating the significant difference, one Florida district special education director reported, "We make FTE projections instead of writing proposals for funding; now we have more lead planning time."

Generally, even with some implementation problems, district special education personnel did not want to return to the old system and thought the pupil weighting system was fairer, with fewer headaches, but still had some kinks to be worked out, and they were willing advisers.

### Accountability

One reason that the pupil weighting systems in Florida and Utah were preferred over the old systems related to accountability issues. An enthusiastic Floridian commented, "People are now more aware of programs; now dollars can be tracked. There is greater accountability; you know what you have to spend. You are no longer at the whim of the legislature." There was general relief that special education dollars were a part of the equalization formula rather than a separate categorical appropriation that had to be renegotiated every year. This sentiment was echoed in Utah, "The

WPU offers better accountability; you can count on it. It provides greater equality and security."

However, in New Mexico, where dollars are not tracked and expenditure requirements not made as a matter of state policy, the feeling was different among district special education directors. A fairly common theme among them was that "there is better tracking and accountability needed."

### State Department of Education Role Changes

The move to a pupil weighting system and greater accountability has altered the role of state department of education program staff. This change was most often discussed in Florida:

The state department role has really moved to an auditing role. It is a totally different role, and you can't play two roles as a consultant and an auditor. Some people resigned over this.

Furthermore, there has reportedly been a transition in the nature of auditing. "Auditing now is for eligibility in programs rather than a program auditing for appropriate instruction." As one district director stated, "The state department of education is no longer in a helping role, but in an auditing role." This, no doubt, has been an extremely difficult transition for people who are accustomed to working as associates in a collegial manner. For a successful transition to a pupil weighting system with auditing, staff reorientation is extremely important, and new means of developing "helpful auditors" should be established.

## Support Staff

Perhaps one of the greatest concerns expressed by district special education staff related to such ancillary personnel as diagnosticians, psychometrists, psychologists, etc. A Utah respondent articulated this concern concisely: "Weights don't take into account the diagnostic and administrative personnel; under the DU you got one 'free' unit for support services for every nine regular units." Florida also formerly had special support units. Now, according to district special education staff members, "Administrators, diagnosticians, psychologists, etc., have a problem of earning their own way."

District personnel in both states assumed that the weights are to generate dollars only for direct service. However, in Florida the weights, as originally established, were set high to generate dollars sufficient to cover the cost of ancillary personnel. It is ironic that district personnel feel the way they do when statewide in special education an underspending of generated dollars has been determined (Table 8.8). Unfortunately, some district personnel have been told not to hire these essential staff members and do not know the financial situation of their program earnings.

In Utah, where part-time weights are designed to cover direct instructional costs only, a solution has been developed to cover the costs of such support services as diagnosis and placement. Districts now earn 20 days of time, or 20/180 ADM for each child properly diagnosed and placed in a special education program.

## Suggested Weight Changes by District Respondents

A number of district special education staff members had recommendations for specific changes in pupil weights. If there was general agreement, these suggestions are reported here with the belief in the usefulness of feedback from districts. This report does not, however, indicate our endorsement of these suggestions. Our intent is not to evaluate the weights; this can best be accomplished internally by each state.

### ● Florida

1. There was some concern that the areas of extremely low prevalence (physical and occupational therapy, deaf and hard of hearing, and visually impaired) were weighted too low.

2. It was pointed out that the itinerant teacher delivery model was more expensive because of travel time, which was not accounted for by the FTE student count weight system; the part-time weight seems to assume the resource room model.

3. The addition of a part-time EMR weight was suggested.

### ● Utah

1. Part-time TMR is an empty cell; no weight is needed.

2. A full-time SLD weight is needed.

3. A full-time weight for severe speech disorders was suggested.

4. The homebound and hospitalized weight does not cover the cost of that program.

## New Mexico

The D weight is too low for some disabilities; it was suggested that severe cases could be funded by program areas, in a manner similar to the Florida and Utah systems.

It should be recognized in considering weight changes that current spending patterns alone are insufficient for determining adjustments. Additionally, policy priorities and long-range planning and goals should be considered. There is no doubt that the accuracy of weights is important. As one district respondent said, "With weights you must be accurate, particularly if you earmark and require program expenditures. The less accurate the weights, the more games are going to be played."

### Start-up Costs

One problem in reasonably funding programs is related to "one-shot start-up costs." A New Mexico respondent explained a view held by several district personnel, "Weights are accurate except for start-up costs." This difficulty was discussed most often in New Mexico, where one local administrator elaborated on the need: "We need lift buses, ramps, new bathrooms, and special instructional equipment."

### Rural Delivery of Service

The difficulty of delivering special education services in rural areas was most often addressed in Florida, which is the only state with no sparsity adjustment. One respondent noted, "In some small districts, they've stopped services because of low incidences where exceptional students can't pay their

own way." In some cases, however, shared services have been developed, as explained by one district special education director: "When you have low prevalence you go to a multi-county agreement." Alternatively, children still earn funds if not in traditional programs. Districts with low prevalence of children with special educational needs could earn enough with a few severely handicapped children to at least hire an aide.

There is no doubt that the director of exceptional education in sparsely populated areas has a special set of challenges in offering appropriate services. In one rural county in Florida, a director explained, "We have areas of the county where we can't generate an additional teacher unit, which produces strange teaching loads, like one person teaching the gifted and the educable mentally retarded." This difficulty is not unique, however, to the weighted pupil distribution model; it is inherent in areas with low prevalence of children needing special services.

### Direct/Indirect Costs

In implementing a pupil weighting system, it is important to clarify specifically what costs the weights are to cover. A somewhat typical question from district exceptional child education directors in Utah was, "What does a WPU cover? Health insurance? Travel for itinerant teachers? Secretarial help?"

In New Mexico, several district directors commented, "Our district wants 24 percent of our generated dollars for overhead." The situation in Florida, where the need for auxiliary personnel was articulated in a statewide context of un-

derspending in exceptional child education related to earnings, has been identified earlier.

Although policies have been articulated through regulations regarding these matters, the fact that such regulations came some time after the reform has contributed to general confusion among district personnel. Local business officers and superintendents are quick to assume the responsibility of making decisions regarding indirect program charges in accordance with their beliefs as to what is best for the district. Unless cost attribution regulations are clarified, there are likely to be as many answers as there are districts.

#### Relationship of a Pupil Weighting System with Public Law 94-142

Although the three states were generally concerned about a number of regulations of Public Law 94-142, few difficulties mentioned were related specifically to the implementation of a weighted pupil distribution model. Two of the states, Florida and New Mexico, at one time were not going to participate (Florida has since changed its mind), and Utah legislators were feeling a strong disincentive to put any more state dollars into special education. A brief summary of their chief concerns about this interface of state and Federal law included:

1. the fiscal burden on state/local governments attempting to reach full service by 1978;
2. the cost and manpower needs associated with developing IEP's for all handicapped children;

3. the conflict with state constitutional provisions over
  - a. the proposed role of the state department of education and the local boards in settling due process hearings, and
  - b. the role of the state department of education in overseeing other state agencies;
4. the problem of establishing excess costs where no program cost accounting system existed;
5. undue Federal intervention in the desired state/local balance of educational governance;
6. the conflict with state counting requirements;
7. the fiscally disequalizing effect of the Federal allocation of funds; and
8. the amount of Federal dollars forthcoming for Public Law 94-142.

With these fundamental concerns, the issues related to a pupil weighting system were minor and viewed as quite solvable. It was noted that each state had different categories for funding, 15 in Florida and Utah and 3 in New Mexico, while the Federal government had established its own set of 11 categories. States would have to collect two sets of data in order to comply with Federal reporting requirements. This would also necessitate gathering unduplicated student count data in addition to the service count data that is the basis of state funding.

Additional concerns related to counting procedures. There was some concern in Florida that the FTE system worked against the

mainstreaming of full-time handicapped children in nonacademic placements (Regulations 121 a. 553), since they would only earn the base amount of funding for that time. In contrast, in Utah there was concern expressed regarding the Federal priority of serving the most severely handicapped first. It was thought that this would require more hours of service for some part-time students, and, since there was no FTE system, districts would have to reduce total numbers of part-time students served and thus lose dollars.

There was some concern regarding the comparable services requirement (Regulations 121 a. 231) that "state and local dollars must be spread evenly among different handicapped programs." Since the pupil weighting systems, as well as some other special education finance systems, emphasize the different costs of various special education programs, this requirement seemed unbelievable at first. It was explained, however, by the U.S. Office of Education, Bureau of Education for the Handicapped, that this was intended to assure comparability among specific programs; i.e., comparing one program for the visually impaired with a program for the visually impaired in another school. Again, without program cost accounting, enforcement of this regulation could be difficult.

Another regulation that could cause considerable alarm is the waiver of the requirement regarding supplementing and supplanting with Part B funds (Regulations 121 a. 589). The regulation requires that the "FTE of regular and special program students" be reported for an approval of a waiver. Since Florida is the only state in our study, and

perhaps nationally, to use an FTE count system, this regulation could be especially problematic. It was explained, however, by the Bureau for the Education of the Handicapped, that this was not to be taken literally, and that whatever count system the state was using would suffice.

In further discussions with the staff of the Division of Assistance to the States, Bureau of Education for the Handicapped, there was no indication that conflicts were perceived between the implementation of Public Law 94-142 and the use of a weighted pupil distribution model.

### Conclusion--Implementation Issues

This chapter has attempted to address the many issues associated with using a weighted pupil distribution model to fund special education. Legislators and educational policymakers considering a weighted pupil system can learn from the experience and feedback from these three states as they have selected various options within a similar framework. The comparative experience of Florida and Utah illustrates the issue of whether to count hours of service or students. The impact of establishing and then removing caps is best evidenced in New Mexico. Expenditure requirements were imposed in Florida and Utah, but not in New Mexico. The importance of classification systems is recognized by all states as refinements continue to be made.

The consequences of the many options chosen have resulted in the establishment of several different incentives. These can be reviewed as legislative intents are explored. The funding of special education is an increasingly complex area of

school finance because of the many variations in costs and programs. Our discussion of issues has sought to share the straggles of three

states that have developed weighted pupil approaches as each has forged its own unique state policy for funding these special needs.

## 9. ANALYSIS OF DISTRIBUTION AND IMPLEMENTATION ISSUES

This study has addressed numerous issues related to the development, impact, and implementation of weighted pupil systems in Florida, Utah, and New Mexico. The scope has been broad and inclusive in response to the questions raised in the request for proposals. The comparative case study methodology has served well to generate insight into similarities and contrasts among the three states. The report has focused on significant issues that emerged from the field work so that we might learn and benefit from the experience of these three states, which have pioneered in using the weighted pupil system. Most of the report has been descriptive, to provide information about the development and consequences of the pupil weighting reform that might be useful to policymakers for their own applied analysis.

This final chapter will focus on two areas of analysis that we believe will be of further interest to all education policymakers, analysts, and implementers. First, we will analyze the weighted pupil system as a model for distributing educational dollars. Second, we will focus on state efforts to implement a reform.

### The Weighted Pupil System as a Distributional Practice

State legislatures are charged with the responsibility of determining equitable and manageable means for distributing dollars to districts for educating children. As the demand for special services, i.e., for

early childhood, vocational, compensatory, bilingual, and exceptional child education, has grown, this task has become increasingly challenging and complex. A number of alternatives have been used: (1) flat grants, (2) excess cost reimbursements (with the state funding various percentages of the total), (3) support of classroom or teacher units, and (4) intermediate or district cooperative units. Funds have been allocated according to grant applications, formulas, and reimbursements. This study has focused on a fifth method, the weighted pupil distribution model as implemented in Florida, Utah, and New Mexico. This section seeks to analyze the effects of weighted pupil distribution practice(s) on equity and on management concerns.

### Equity Issues

Although the equity issues are interrelated and overlapping, there are two goals of distribution practices that can serve as a framework for this analysis: to achieve student equity, and to achieve district equity.

1. Student Equity--In contrast to the grant application/teacher unit distribution model used in the three states before the reforms, the weighted pupil unit system was enacted as a student entitlement formula program. The purpose was to guarantee different resources based on differential student need.

At the core of the weighted pupil system is this concept of en-

titlement. A prerequisite for developing such a system is to determine who should be served and at what level. What are all of the state priorities and obligations in education? These questions demonstrate a fundamental conceptual difference between a weighted pupil approach and some other categorical distribution practices in which dollars for special programs are viewed as supplementary and come from separate appropriations. Thus, comprehensive (in comparison to piecemeal or incremental) policymaking may occur as relative student equity comes into focus.

Florida legislators, for example, used their weighted pupil system to seek to establish district compliance with three state human resource development priorities: (1) a greater focus on early childhood education, (2) the development of an appropriately skilled labor force, and (3) the meeting of all reasonable special education cost needs. State-wide comprehensive planning dictated the establishment of priorities, and the weighted pupil system facilitated the shift in resources. Politically, this rational state prioritizing could be accomplished because the emphasis was on all of the state's children receiving appropriate resources, regardless of where they lived, what handicapping conditions they had, or what their career aspirations were.

Some suggest that moving to a special needs entitlement system opens a Pandora's box, and it may, if adequate preparation is not made. (A number of management options are discussed below.) Another criticism of the student equity concept is that equal programs do not necessarily follow from similar student resources. For example, if one district had only two severely handicapped

children and another had ten, then the latter district would generate more dollars and thus have a superior program. Therefore, critics would insist that the treatment is, in fact, unequal. Pupil weighting advocates would retort that: (1) equalizing resources is a fair and reasonable state position, (2) districts should work out cooperative arrangements when they have few children with special needs, (3) sparsity adjustments can, at least in part, compensate for size factors, and (4) districts should be creative in providing services with the resources they do get. The arguments on both sides of this issue seem reasonable; state preference would seem to dictate one's position.

2. District Equity--Each of the three states in this study had as a primary goal the equalization of all program support dollars. They had for years been on a course of incorporating most of the available local wealth into the state foundation program, leaving little in the way of a locally taxable source for use in supporting different local program needs. At the same time, it became clear that varying incidences of program needs, particularly in the vocational and exceptional child areas, existed, but the legislature could no longer suggest that local tax sources be used to fund the programs. The use of the weighted pupil system to fund district need entitlements evolved as the next logical step in the movement to fully equalize district income. The state, thus, provided the reasonable means to meet diverse local program needs.

The weighted pupil system in these three states was instituted in an effort to eliminate any district fiscal disincentive to meet the special needs of high-cost students.

Other distributional practices could theoretically accomplish the same goal. A fully funded classroom unit distribution system could achieve district equity if all requests for units were granted. Generally, however, classroom units either generate partial costs or there is competition for limited units. A 100 percent excess cost reimbursement system could achieve district equity, but most excess cost systems are less than 100 percent. A generously supported flat grant system might achieve district equity, but generally such systems provide limited supplemental funds and do not meet the full excess costs of special programs. Whenever a district must use local revenues to cover partially the costs of special needs programs, interdistrict inequities occur. A child's opportunity to receive special services then becomes a function of (1) the wealth of the district, (2) the grantsmanship capabilities of the district staff, (3) the strength of local advocacy for special services, or (4) the training and interest of district officials and personnel.

It should be recognized that a weighted pupil system per se does not guarantee district equity. Where the base amount is too low to generate sufficient funds for programs, districts must rely on local resources to help cover costs. Also, where the weights themselves are too low to generate necessary resources, districts must add local revenues.

Pupil weighting systems do not guarantee equity, but in the three states studied policymakers viewed the weighted pupil system as the most appropriate distribution model for facilitating equity.

## Management Issues

A neglected area of focus in school finance research relates to the management implications of alternative distributional practices. A number of issues emerged as we conducted this research, and we present this analysis as a hopeful beginning for corresponding work relating to other models. Again many interrelated implications have been somewhat artificially separated for the sake of clarifying the analysis. As one will determine, there are numerous tradeoffs in accomplishing various objectives.

1. Covering Costs--The discussion above related the significance of covering costs with equity concerns. A corresponding management issue is determining what costs are or should be. The weighted pupil system has been criticized for being "imprecise," and indeed some states have been somewhat arbitrary in determining weights (such as the practice of weighting all exceptional children at 2.0). On the other hand, absolute precision is a myth. It should be recognized that weights are at best an average of program costs that may vary from district to district. By establishing weights, most often legislatures are establishing what are perceived as reasonable relative per child support rates. As discussed in Chapter 3, these weights may be based on (1) averaging current expenditures (usually for a sample of districts), (2) projecting the costs of exemplary programs, or (3) establishing state priorities for allocation of resources.

Some other distribution models cover costs precisely. A 100 percent cost reimbursement system and a fully funded classroom unit system

could cover all costs of programs, but these models are diminishing, if not extinct, as educational policy-makers become increasingly cost conscious.

2. Promoting Efficiency--As taxpayers become increasingly reluctant to support education generously, policymakers are seeking means of introducing the concept of efficiency in an area that during recent history has been expansion-oriented. A remarkable accomplishment of the weighted pupil system is that it initiates a comprehensive focus on program costs, an historically foreign concept in education in most states. Further, by establishing weights, the legislature is prescribing either formally or informally (depending on whether or not there are program expenditure requirements) expenditure limits, or ranges, that guide numerous local decisions. As a result, local administrators need to become aware of how much the various programs are costing. In addition, the weighted pupil system promotes efficiency because it encourages neighboring districts that have low prevalences of high-cost students to coordinate services.

Excess cost reimbursement systems may also create an awareness of program costs, but there may or may not be a fiscal incentive to economize. Generally district administrators in teacher unit and flat grant system states are oblivious to the costs of programs.

3. Coping with District Entrepreneurship--One respondent summed up this issue: "There was never a funding system built that there wasn't someone sitting around trying to figure out how to beat it." It appears that one function of dis-

trict business officers is to maximize resources available from the state; therefore, a statewide network of games develops that varies depending on the nature of the distribution model. Under the competitive grants application model, expert proposal writers are hired as consultants to maximize district chances of winning. State department of education personnel are courted as if they operated their own foundations. Collegial relationships can often influence decisions.

If a teacher unit system is used, the game becomes one of submitting as many names as possible for reimbursement. Since teachers usually must be certified in the field related to the categorical funding, districts can submit lists of all teachers so certified whether they teach special classes or not. Personnel reimbursement systems for ancillary staff present similar games. Who will ever know if all the nurses' and counselors' names submitted for reimbursement spend all (or any) of their time working in the categorically funded program? Auditing, a practice lacking in most educational finance systems, is especially difficult here since it requires tracing the time of all certified personnel.

Whenever new finance systems are implemented, corresponding games are developed, and counter moves are often made by program administrators. Pupil weighting systems, as such, were vulnerable to district entrepreneurship. The primary game was to report more students with special needs than one had properly diagnosed and placed. Two quite effective countermoves were developed. The first was to implement program expenditure requirements in order to eliminate the

"profit motive." In Florida and in Utah, program expenditure requirements were developed so that districts would have to spend the dollars on the students that earned them (thus minimizing district visions of surplus discretionary funds). The second called for audits of placements and severe penalties (e.g., firing of personnel and recalling of dollars) for inappropriate procedures. Since the primary area of concern is the classification of exceptional children, a third check will emerge with the implementation of Public Law 94-142 and its IEP's, parental sign-off provisions, and due process guarantees.

#### 4. Establishing Control Systems--

In addition to coping with district entrepreneurship, states must determine what management controls they want their distribution system to establish and maintain. This is a sensitive decision which must be based on each state's unique circumstances. Desirable state/local relationships and sharing of decisionmaking dictate choices. Two major focal points emerged from our study of weighted pupil systems.

How to spend--Should the state dictate decisions regarding curriculum, teacher-pupil ratio, carpeting and bathroom specifications, etc.? The arguments for state involvement relate to efforts to assure quality control, and usually such preconditions are attached to categorical grants. Competitive grant application and teacher/classroom distribution models are good examples of this position, although other distribution models may also place such conditions on district expenditures.

On the other hand, some states believe that decisions regarding how

dollars may be spent should be determined locally. "Lump sums" are allocated to districts, and they determine what mix of teachers and aides to use, whether to have curriculum supervisors, how much administration is needed, etc., within the limits of general state standards. The weighted pupil system was used in the three states studied to facilitate this aspect of local decision-making. Other categorical distribution practices may also function this way.

Where to spend--The purpose of categorical funding generally is to target dollars to children with special needs, i.e., vocational, exceptional, compensatory, bilingual, and early childhood education. Many states require districts to account for expenditures in special programs. Florida and Utah, in implementing weighted pupil systems, imposed expenditure requirements. Florida, which developed program cost accounting and a management information system, required that 80 percent of all dollars generated for students with special needs be spent on the program area for those children, thus allowing flexibility among specific program expenditures within categories. Utah required that 100 percent of excess earnings be spent on special needs programs. (See Chapter 4 for further explanation.) Similar expenditure requirements are common in most categorical distribution models.

In contrast, however, New Mexico viewed the weighted pupil system as an equitable means of determining each district's fair share of dollars, but thought that decisions regarding program expenditures should be made locally in districts. The absence of expenditure requirements and corresponding ac-

counting procedures makes categorical funding decisions a function of local need and persuasion.

#### Establishing limits or caps--

Most categorical distribution models rely on annual appropriations ceilings to establish limits for expenditures. However, since with a weighted pupil system distribution is relative, the three states adopted various procedures for regulating growth in some special needs areas. These can be reviewed in Chapter 4, along with other management issues related to defining, approving, and counting the units; setting the dollar value of the base; and establishing expenditure requirements. In addition, our companion publication, A Policy Guide to Weighted Pupil Education Finance Systems, addresses numerous related technical issues.

#### Conclusion--Distribution Models

It is difficult to talk in generalities about categorical distribution models because the same basic model may be used to accomplish different purposes in different states. Additionally, a paucity of available research into the effects of other models limits comparisons. This study of weighted pupil systems is the first in-depth, comparative, and comprehensive analysis available to policymakers and analysts. Therefore, we have initiated an assessment based on equity goals and certain management functions that, we hope, will be applied to other distributional practices.

#### Implementation Issues

Once a distributional practice (or other reform) becomes state law, the next task is implementing that new law. A few scholars have recently begun focusing on the criti-

cal area of what happens after a bill becomes a law. Pressman and Wildavsky, in their pioneer work, explain:

We would consider our effort a success if more people began with the understanding that implementation, under the best of circumstances, is exceedingly difficult. They would, therefore, be pleasantly surprised when a few good things really happen.<sup>1</sup>

Our three-state comparative study could not focus singularly on the implementation process due to the multiple research questions raised in the request for proposals. However, a few principles of state policy toward the implementation of innovations may be garnered from our work and related to the emerging literature.

In reviewing our experience studying the implementation of the weighted pupil system in Florida, New Mexico, and Utah, and relating this to the recently reported experience of others, nine basic "implementation considerations" emerge:

1. Clarity of policy purpose;
2. Communication of the reform;
3. Collaborative efforts;
4. Organizational impacts;
5. Professional orientations;
6. Incentives for implementation;
7. Adequacy of resources;
8. Complexity of the policy; and
9. Review and revision procedures.

These areas are obviously interrelated and overlapping, but for the sake of facilitating recognition of the issues each will be addressed

below in reference to the related literature and the experiences of the three states studied.

### Clarity of Policy Purpose

Recent research reports of the implementation process generally agree that the policy to be implemented should be clearly articulated. Williams, in concluding a compilation of documented efforts, stresses that the "point that emerges...from the volume is the requirement for some specificity in the treatment packages to be implemented."<sup>2</sup> Pressman and Wildavsky argue for an inclusion of the assessment of implementation in the policy development process:

The great problem, as we understand it, is to make the difficulties of implementation a part of the initial formulation of policy. Implementation must not be conceived as a process that takes place after, and independent of the design of policy.<sup>3</sup>

McLaughlin concurs that much implementation breaks down due to "inadequate operational specificity," but points out that "there is debate concerning who should make project operations more specific, how it can be done, and when specificity should be introduced."<sup>4</sup> She argues that specificity "should evolve over time in response to local conditions and individual needs."<sup>5</sup>

In developing the weighted pupil systems in Florida, Utah, and New Mexico, the primary agenda of redistributing dollars according to varying pupil needs was clearly articulated in the enabling legislation. Each state legislature established a specific set of weights according to its own unique political processes (discussed in Chapter 3). In fact, many state-level respondents re-

marked that the weighted pupil system presented clearly and logically the state's educational finance picture and priorities.

However, in many instances the technical aspects (see Chapter 4) of implementing the weighted pupil system were not carefully thought through in the policy-development process, and state departments of education were charged with developing the "specificity." A number of difficult policy questions remained unanswered in the policy-development process, such as, "Who is eligible for the weighted programs? What is appropriate service? How should students be counted? What costs should the weights cover?" Because of the initial lack of policy clarification, the answers to many questions are still being worked out.

### Communication of the Reform

Pincus, in addressing incentives for public school innovations, concludes that "an important causal factor (for implementation failure) seems to be a lack of communication between sponsors of innovations and the ultimate users...which tends to work against significant change at the user level."<sup>6</sup>

Not only must policymakers communicate the components and technical aspects of the reform package, but there should be common understandings between reformers and users regarding the agendas for reform. Why are these reforms necessary; what is wrong with the status quo? Mann emphasizes why this is so important:

The literature on planned change stresses the importance of a high level of felt need for change. The idea occurs in two

different forms: (1) the "goal seeking" or "rational" model in which the impetus for change comes from a desire to move to a preferred future; and (2) a "problem solving" orientation in which dissatisfaction with current situations prompts a definite remedy.<sup>7</sup>

As we interviewed district respondents regarding the impact of the reforms in Florida, Utah, and New Mexico, we frequently encountered many individuals who, at best, had vague notions regarding the reforms in their state. Of the six respondent types interviewed, superintendents alone rather consistently knew of the reforms, but too few of them understood the legislative multiple agendas. Each type characteristically tended to respond to the reform from a position of a specific role's self-interest. Finance officers were for the reform if their district got more money; against it if their district lost money. Although it may not be possible to win full support with altruistic arguments, appropriate state/district communication of the intent and purpose of the reform can aid in compliance and reduce resistance grounded in provincialism. Lack of understanding of the reform agendas was especially acute in Florida.

Generally, the most functional communication system existed in New Mexico where the Director of the Public School Finance Division of the Department of Finance and Administration, Governor's Office, visits each district annually and conducts a public hearing on the district's budget. This tradition in New Mexico enables state and district personnel to communicate freely, both formally and informally, about current school finance issues.

Utah's communication system works somewhat differently, and with only 40 districts it is not too difficult to spread the word. Utah's corresponding "politics by consensus" involved numerous individuals in the policy-development process, thus setting the stage for a greater acceptance of the reform.

### Collaboration

Closely allied to communication is the consideration of the potential of collaborative action among policy-makers, implementers, and users. A major finding of the RAND study of Federal programs supporting educational change substantiates the significance of this "mutual adaptation" implementation process:

The amount of interest, commitment, and support evidenced by the principal actors had a major influence on the prospects for successful project implementation. In particular, the attitudes and interest of central administrators in effect provided a "signal" to project participants as to how seriously they should take project goals and how hard they should work to achieve them.<sup>8</sup>

Where collaboration is possible, it should be encouraged, but where redistributions of dollars and/or power are at stake, collaborative initiatives generally become unattainable.

Another issue is the dynamic of "jumping on the bandwagon of reform," or, according to Bardach, to play the "odd man out game":

We have described the policy implementation process as a program-assembly process with

control over the required program elements in the hands of relatively autonomous actors. One consideration in the minds of these actors as they weigh the decision whether or not to make some contribution is an estimate of how successful the program is likely to be.<sup>9</sup>

The experience in Florida and Utah provides interesting contrasts in analyzing the dynamic of collaborative action. Utah's key leadership in developing the reform were members of the Church of the Latter Day Saints, and there was general goodwill and trust of the intentions of the reform. The policy-development process was highly inclusive. In Utah, there are many educators in the legislature. There was generally a truly collaborative effort in Utah; most people tried to work together to sift out the details and make the new system functional.

In Florida, however, most of the key leadership in the state department of education were initially dead set against the reform and tried to subvert the policy-development process. Most of the staunch legislative supporters of the reform either left the legislature or were deprived of their power a year following the enactment of the major reform legislation. A controversial collective bargaining law, passed in 1974, created greater conflict and general discord between legislators and many local administrators. Needless to say, the Florida experience of implementing a weighted pupil system and the other complementary reforms could not be lauded as a model of the collaborative process.

#### Organizational Impacts

Considerable literature address-

es the influences of the bureaucracy upon reform efforts, with Anthony Downs's Inside Bureaucracy offering particularly useful insights in analyzing behaviors according to five types: climbers, conservers, zealots, advocates, and statesmen.<sup>10</sup>

Murphy, focusing specifically on state departments of education use of discretionary ESEA Title V funds, recognized the following attributes as influencing the results:

...differing organizational cultures, each with its own history, traditions, norms, and standard operating procedures; a pattern of bargaining among subunits, which have conflicting demands, expansionist tendencies, and a preoccupation with short-term crises; an inability to be comprehensive, leading to the search for solutions that are good enough rather than optimal; and a tendency to foster the continuation of ineffective programs and discourage candid evaluations.<sup>11</sup>

Bureaucratic influences were evident in the implementation of the weighted pupil systems in Florida, Utah, and New Mexico. Although special program dollars grew substantially (as documented in Chapter 6), state directors of these programs often resented the reform because their territorial waters had been invaded. They no longer exercised discretionary authority in allocating dollars since the weighted pupil system is a formula entitlement program.

In Florida, the key state department of education leaders were "conservers" by type and quite openly opposed the reform initially. Although considerable foot dragging

## Professional Orientations

occurred, there was eventual recognition that the pupil weighting system was there to stay, so there was gradual reorientation to get on with the business of implementing it and the complementary program cost accounting and management information system which became operational three years after the enactment of the legislation.

Utah's implementation was facilitated by bringing in new leadership to manage the reform--a respected and competent school district administrator. A new division was created and given considerable responsibilities and authority. Again, the Utah "family approach" contributed to the relatively smooth implementation of the reform. Many technical details had to be worked out, but the new man and new division were able to gain a better perspective on the "conflicting demands" and "bargaining among sub-units," and work out responsible solutions as "advocates" for the reform.

In New Mexico, the pupil weighting system reform was primarily implemented by a small staff in the Governor's Department of Finance and Administration--Public School Finance Division, rather than by the state department of education. The reformers and the implementers in this unique case were in complete harmony since their efforts were coordinated by the same individual--Harry Wugalter. Since the division staff consisted of only a few professionals, the normal bureaucratic influences were minimal. There was, however, considerable resentment of the reform by some state department of education individuals who recognized a loss of discretionary power.

Influences on implementation results can also be attributed to unique associations and perspectives of professions. Hargrove emphasizes this factor: "The various professions embody distinctive orientations toward action and knowledge which affect their behavior in service delivery."<sup>12</sup>

Focusing more specifically on the educational profession, Waller speaks of the "routinization" and "conservatism" of the profession and the "defense of the authority role."<sup>13</sup> Such characteristics, he maintains, become embedded in the personalities of numerous educators, and influence behavior whether teaching or, perhaps later in their careers, serving as administrators.

Murphy addresses the critical issue of professional association in his study of ESEA Title V implementation. He found that "SEA's (state departments of education) seem primarily accountable to one constituency--their professional peers in the schools."<sup>14</sup> The ramifications of this perspective and professional association are great when an agency is charged with implementing changes (and in particular if they are not endorsed by peers in the districts).

This view of one's profession influenced the behavior of numerous state and local administrators in implementing the reforms. Chapter 7 points out the shift in the state departments of education from discretionary authority to regulatory responsibilities that occurred with the implementation of the weighted pupil system. It was difficult for these educational professionals to adjust to their new role of conducting placement audits. There seemed to be a

basic conflict of interest and self-image, and, predictably, many were slow to respond. Yet monitoring the progress of the reform was recognized as an important state function.

### Incentives for Implementation

Closely allied to professional orientation is the influence of incentives to change which may stem from one's professional outlook or from other pressures. A general question can be raised: Who benefits from successful implementation of a reform? In the case of state educational reforms, the incentives of three types of individuals should be examined: legislators, state department of education personnel, and district administrators.

Legislators--Hargrove focuses on the motivations of legislators at the Federal level, which also apply to state legislative bodies: "(legislators') chief concerns in regard to program effectiveness are how particular constituency groups are affected rather than in the successful performance of general program goals."<sup>16</sup> Bardach expands our understanding of legislative incentives:

If they (legislators) can afford--or wish--to forego self-display and dirty their hands with the detailed aspects of policy and programs, they will attend to the work of drafting new legislation rather than to the work of making the old legislation produce the results intended and desired.

In defense of the legislators involved in the reforms in the three states, they worked extremely hard developing the various reform packages. While obviously they were concerned about the "bottom line" of

dollars that would flow to their districts, many were also equally concerned about a justified distribution of resources. Yet there was no parallel fervor to monitor the implementation of the reforms, for several understandable reasons. First, state legislatures generally meet for only a few months a year and have a lot to accomplish in a short period of time; therefore, oversight gets put on a back burner. Second, there is often turnover in committee memberships, and legislators go on to new interests. Committee staffs may likewise change. Finally, there is little recognition of the hazards to be encountered in implementing reform; most state legislators trust that their new law and interests will be dutifully carried out.

State department of education personnel--The preceding discussion of bureaucratic and professional influences does not paint a hopeful picture of state departments of education as aggressive agents of change. Of course there are exceptions, particularly where "advocates" or "statesmen" are at the helm. The fact that, as Murphy found, state department administrators generally view district administrators as their constituency contributes to a hesitancy to impose reform regulations or audit implementation progress.

District administrators--Pincus makes an important analogy between a marketplace and a typical school district's incentive to innovate. He concludes that "compared to a competitive firm, we would expect the public schools to:

1. Be more likely than the competitive firm to adopt cost-raising innovations, since there is no marketplace to test the value of the innovation in relation to its cost.

2. Be less likely than the competitive firm to adopt cost-reducing innovations, unless the funds so saved become available for other purposes within the district.
3. Be less likely than the competitive firm to adopt innovations that significantly change the resource mix, because any consequent productivity increases are not necessarily matched by greater "profits" to the district, and because any replacement of labor by capital may threaten the guild structure of the schools.
4. Be more likely than the competitive firm to adopt new instructional processes or new wrinkles in administrative management that do not significantly change institutional structure.
5. Be less likely than the competitive firm to adopt innovations that change the accustomed authority roles and established ways of doing business, because changes in these relations represent the heaviest kind of real cost to bureaucracies.
6. Be equally unwilling as competitive firms to face large-scale encroachments on protected markets.<sup>17</sup>

Considering the disincentives, it is not surprising that many districts did not stand in line to implement the weighted pupil system or the other reforms in Florida that accompanied this change, such as program cost accounting, management information systems, and the suggested school-based management.

Implementation was slow and local administrators were cautious. Bardach, reviewing the growing accounts of implementation efforts, concluded that "in the implementation process, politics appears primarily defensive. Actors seem more concerned with what they in particular might lose than with what all in general might gain."<sup>18</sup>

#### Adequacy of Resources

The issue of having adequate resources to implement reforms is curiously not often addressed in the "implementation literature," but was critical in the reform efforts in Florida in particular. A surplus of state dollars was determined to be extremely important in the passage of the reform legislation in the three states studied, and others as well.<sup>19</sup> A continued generous support of education in New Mexico and Utah, fueled by their energy resources, has greatly aided their adjustment to a new school finance system. The nation's energy situation, however, had a negative impact on Florida's economy which suffered a slump from declining tourism several years following the reform. The impact of this shortfall of revenues for education was understandably significant in contributing to the "go slow" implementation posture of many local administrators. As Chapter 6 depicts, the growth of dollars available to support the basic education program was considerably short of keeping up with inflation. This situation, in particular, made the enforcement of program expenditure requirements extremely difficult.

#### Complexity of Policy To Be Implemented

Pressman and Wildavsky dwell at length in their study on the com-

plexity of joint action "involving a multiplicity of participants, perspectives, and decisions."<sup>20</sup> Bardach, seemingly in sheer desperation, concludes his book with this advice: "...design simple, straightforward programs that require as little management as possible."<sup>21</sup>

Although the weighted pupil system was described as logical, direct, and simple in concept, it was not widely recognized for being simple to set up. There were numerous technical issues to be resolved--critical decisions to be made about defining, approving, and counting the units; establishing limits; setting the dollar value of the base; and prescribing expenditure requirements (see Chapter 4). Determining which programs to weight and what the respective ratios should be provided an additional challenge. These issues are addressed specifically in our companion policy guide (see Preface).

It should be recognized that there are several potential tradeoffs between simplicity of implementation and precision (e.g., equity of resource allocations in the case of implementing a weighted pupil system). For example, New Mexico's three categories for exceptional child education were simpler to establish than the Florida and Utah set of 15 categories. However, one could argue that the Florida and Utah systems more closely relate resources to need or resource demands. The problem of deciding whether to use a full-time equivalent counting system, which funds service hours rather than head counts, also illustrates the tradeoffs between precision and simplicity.

## Review and Revision.

Considering all of the hurdles to successful implementation of reform, it seems plausible that an appropriate process of review and revision could greatly aid any state reform effort. Yet few policymakers establish such a means for following through. Most researchers concur that this is a neglected area, and offer various solutions.

Williams recommends the following analytic and assessment activities:

Implementation Analysis: Scrutiny of (1) the preliminary policy specifications, to determine their clarity, precision, and reasonableness; and (2) staff, organizational, and managerial capabilities and implementation strategies, to determine the degree to which the proposed policy alternative can be specified and implemented in its bureaucratic/political setting.

Specification Assessment: Assessment of the final policy specifications and measurement procedures, including interim feedback devices, to ascertain the degree to which the specifications correspond to decisions, are amenable to successful implementation, and are measurable.

Intermediate Implementation Assessment: Assessment of the degree to which a field activity is moving toward successful implementation and is providing useful feedback information to improve the implementation effort.

Final Implementation Assessment: Assessment of (1) the degree to which a field activity corresponds to the design specifications; and (2) the level of bureaucratic/political functioning, to determine whether or not there is a valid basis for testing a theory or for deeming a field activity fully operational.<sup>22</sup>

Assuming that these functions are significant, the critical question remains, where do such responsibilities lie--in the legislature or an administrative office? Downs and Murphy concur that such functions could best be performed by a group separate from the agency responsible for implementation. Murphy calls for "performance audits" of state departments of education, a model borrowed from the business world.<sup>23</sup> Downs recommends that a separate monitoring agency be established by the legislature, which would: "(1) multiply direct surveillance capability, (2) provide a dual channel of communication (direct from policymakers to districts), (3) permit bypassing in dealing with the operating bureau, and (4) create a rival to the operating bureaucracy."<sup>24</sup> After all, he reminds us, "Monitors are rewarded for finding and reporting 'evils' and operators are rewarded for preventing or concealing them."<sup>25</sup> Whether a separate legislative monitoring or auditing group is essential in implementing reform is probably dependent on the interworkings of the other considerations discussed above. Bardach suggests that under certain conditions (such as influence over budgetary decisions) such analytic groups could work within the bureau as well.<sup>26</sup>

Again, the experience of the three states studied provides contrasts in review and revision of the

implementation of a weighted pupil system. In the unique case of New Mexico, where the reform was administered by a small staff in the Governor's office, the review and revision process was ad hoc. Two graduate students' dissertations reviewed the weights in relation to reported district expenditures. The annual budget hearings in each district were a means of gaining formal and helpful informal feedback regarding the progress and acceptance of the reform.

In Utah, a separate "implementation team" was established in the state department of education. A legislative analyst generally followed the implementation of the reform (when time permitted) and made valuable contributions to its progress. Where implementation forethought was lacking, Utah's consensus-oriented, problem-solving spirit pulled them through, and a comprehensive weighted pupil system became generally accepted and praised in the districts.

Florida's implementation of reform was not so fortuitous. The key legislative reformers found new areas to reform the next year, and were deprived of their legislative clout in a political coup the following year. The state experienced economic hardship. A new collective bargaining law threatened the security of local school officials. The individuals in the state department of education who originally had opposed the reform were charged with its implementation. In such a milieu, "conservers" by nature became even more cautious. Although dollars were redistributed according to a weighted pupil system immediately following the reform by law, it was three years before the system, with its complementary program cost ac-

counting and management information system, became operational and of use in the review and revision process. Again, a respected district business manager was brought into the department to facilitate the implementation of these reforms. Once there was recognition that the change could not be avoided, this new man and the analytical group were creative and highly competent in developing systems that bring the state considerable acclaim from outsiders.

#### Conclusion--Implementation Issues

The point is: operationalizing

legislative intent is not easy. A state's ability to implement educational reforms can be greatly improved if during the policymaking process thought is given to those considerations presented above. A weighted pupil system is probably no more complicated than some other distributional models, but it is something new, and that in itself causes implementation problems. However a state determines to allocate resources for education or to develop other reforms, it must recognize the critical nature of implementation issues. Our analysis has been developed to assist policymakers, analysts, implementers, and users in that task.

APPENDIX

List of Respondents

## FLORIDA INTERVIEWS

### STATE LEVEL

#### Legislative

SENATOR ROBERT GRAHAM, Chairman, Senate Education Committee during the reform

SENATOR JACK GORDON, Chairman, Finance Subcommittee of Senate Education Committee during the reform

SENATOR BUDDY MACKAY, Chairman, Finance Subcommittee of House Education Committee during the reform; subsequently on Senate Education Committee

MARSHALL HARRIS, Chairman, House Appropriations Committee during the reform

FRED SCHULTZ, former Speaker of the House of Representatives; Chairman of the Governor's Citizens' Committee on Education

REPRESENTATIVE CLARK MAXWELL, President, Florida School Boards Association during the reform; subsequently on House Education Committee

HANK COTHEN, Staff, Senate Education Committee

PAT DALLET, Staff, Senate Education Committee

#### Administrative

RALPH TURLINGTON, State Commissioner of Education; Chairman of the House Finance and Tax Committee during the reform

ROGER NICHOLS, Deputy Commissioner of Education; former Staff Director, House Education Committee; Administrative Assistant to Speaker of the House during the reform

WOODROW DARDEN, former Director, Division of Elementary and Secondary Education

CAREY E. FERRELL, Director, Division of Elementary and Secondary Education

MARIE KOHLER, Administrator, Policy Information and Implementation, Bureau of Planning, Division of Elementary and Secondary Education

SHELLEY BOONE, Deputy Commissioner of Education during the reform.

JULIAN ROBERTS, Administrator, District Planning, Bureau of Planning, Division of Public Schools

LANDIS STETLER, Chief, Bureau of Education for Exceptional Students, Division of Public Schools

WENDY CULLAR, Assistant Chief, Bureau of Education for Exceptional Students, Division of Public Schools

C. M. LAWRENCE, Assistant Director, Division of Vocational Education

ADA PURYEAR, Director of Elementary Education, Division of Public Schools

### Interest Groups

DONALD MAGRUDER, Executive Secretary, Florida School Boards Association

YVONNE BURKHOLTZ, Chief Lobbyist, Florida Education Association

BOB MARTINEZ, Executive Secretary, Hillsborough County Teachers Association during the reform

RAY TIPTON, Director of State Superintendents' Association

### DISTRICT LEVEL

#### Alachua

JAMES LONGSTRETH, Superintendent

BILL DICKEY, Comptroller

JOHN SPINDLER, Principal, Lincoln Middle School

JUDY JOHNSON, School Board Member

DARNELL RHEA, President, Alachua County Education Association

LINDA RAMSEY, Director, Exceptional Student Education

#### Brevard

THOMAS ETHEREDGE, Assistant Superintendent, Planning and Personnel Services

ROBERT PASKEL, Assistant Superintendent, Business and Fiscal Services

ROBERT FRITZ, Principal, Freedom 7 Elementary and Roosevelt Jr. High Schools

KATHY BODET, Vice President, Brevard County Teachers Association

HOWARD HINESLEY, Director, Exceptional Student Education

Broward

WILLIAM MCFATTER, Administrative Assistant for Planning, Legislation and MIS

WILLIAM DRAINER, Program Superintendent, Instructional Services

LARRY WALDE, Principal, Nova High School

DOLLYE WOODSIDE, School Board Member

ROBERT PULVER, Program Director, Operational Services

Charlotte

PAT HUNTINGTON, Assistant Superintendent for Curriculum and Personnel

JOHN SULLIVAN, Director of Finance

C. D. BURKE, School Board Member

MICHAEL EADER, Coordinator of Exceptional Child Education and Special Projects

Collier

GENE BARLOW, Coordinator of Research

FRANK HOLLAND, Business Manager

GERRI KALVIN, School Board Member

VIRGINIA EATON, Coordinator, Exceptional Student Education

Dade

LEONARD BRITTON, Acting Superintendent

HENRY BOEKHOFF, Director, Budget Department

WILLIAM ROSENBERG, Principal, Orchard Villa Elementary School

PHYLLIS MILLER, School Board Member

PAUL BELL, Executive Director, Division of Elementary and Secondary Education

**GAVIN O'BRIEN, Assistant Superintendent, Legislative and Employee Relations**

**GERALD DREYFUSS, Director, Staffing Control**

**Duval**

**HERB SANG, Superintendent**

**JIM CLEMONS, Financial Planning Officer**

**JIM ROBERTS, Principal, Sandlewood High School**

**MARGARET GRIFFIN, Assistant Principal, Sandlewood High School**

**JANICE CARTER, Teacher and Curriculum Assistant**

**RICHARD DOWNEY, Director, Exceptional Student Program**

**FRAZIER LANG, Assistant Superintendent for Educational Services**

**Gadsden**

**GRINELLE BISHOP, Superintendent**

**JAKE PARSLOW, Finance Officer**

**Hillsborough**

**WAYNE HULL, Assistant Superintendent, Business and Research**

**JOHN COX, Principal, Chamberlain High School**

**HUGO SCHMIDT, School Board Member**

**KATHY BETANCOURT, Lobbyist, Hillsborough County Education Association**

**JACK LAMB, Director of Student Services and Exceptional Child Programs**

**Levy**

**FRANK LAPORTA, Superintendent**

**JIM BENNETT, Assistant Superintendent, Business Affairs and Administration**

**HENRY COLLINS, Principal, Cedar Keys School (K-12)**

OWEN HASTINS, Teacher; Past President, Levy County Teachers Association

JO ELLEN KELLERMANN, Supervisor, Exceptional Student Education

Palm Beach

DAVID DERUZZO, Assistant Superintendent, Program Planning, Budget and Evaluation

MARTIN GOLD, Principal, Suncoast High School

BARNARD KIMMEL, School Board Member

GERALD BURKE, Chairman, Math Department, Suncoast High School

HELEN HOLMES, Director, Exceptional Child Education

Sarasota

GENE PILLOT, Superintendent

SIDNEY WINFIELD, Director of Budget, Finance and Administrative Services

MALCOLM SWEIBEL, Associate Superintendent for Business Services

ED BROWN, Principal, Riverview High School

REVEREND DAVID OLSEN, School Board Member

ROSE MARIE WEIDEMEYER, President, Sarasota Teachers Association

LEE COOSE, Director, Exceptional Student Education

NEW MEXICO INTERVIEWS

STATE LEVEL

Legislative

SENATOR AUBREY DUNN, Former Chairman, Legislative Finance Committee

REPRESENTATIVE WILLIAM O'DONNELL, Former Chairman, House Appropriations Committee

REPRESENTATIVE BILL WARREN, Former Chairman, Legislative School Study Committee

MARALYN BUDKE, Staff Director, Legislative Finance Committee

RICHARD JOHNSON, Staff Director, Legislative School Study Committee

PLACIDO GARCIA, Staff Member, Legislative School Study Committee

### Administrative

(Governor's Office)

HARRY WUGALTER, Secretary for Educational Finance and Cultural Affairs; Chief, Public School Finance during the reform

AL CLEMMONS, Administrative Assistant, Public School Finance

(State Department of Education)

LEONARD DE LAYO, Superintendent of Public Instruction

TED SANDERS, Assistant Superintendent for Instruction

ELIE GUTIERREZ, Director, Division of Special Education

WILMA LUDWIG, Director, Division of Vocational Education

### Interest Groups

FRANK READY, Executive Director, New Mexico School Boards Association

EARL NUNN, Director, New Mexico School Administrators Association

JAY MILLER, Assistant to the Executive Secretary, National Education Association of New Mexico

LYDIA WRIGHT, President, Albuquerque Classroom Teachers Association; Member, State Board of Education

### DISTRICT LEVEL

#### Alamagordo

TRAVIS STOVALL, Superintendent

DAN WOODEN, Assistant Superintendent for Business and Finance

BILL CASTORENA, Principal, Alamagordo Senior High School

EDITH HUEBERT, Alamagordo Teachers Association

ED JOHNSON, Alamogordo Teachers Association

DOUG DILLARD, Principal, Center for Exceptional Students

Albuquerque

FRANCISCO SANCHEZ, Deputy Superintendent for Operations

LOVOLA BURGESS, Principal, Rio Grande High School

MAUREEN LUNA, School Board Member

IRWIN NOLAN, Executive Director, Albuquerque Teachers Association

CLARE HUMMEL, Director of Special Education

Artesia

WARREN NELL, Superintendent

J. BURR STOUT, Director of Finance

JOHN SPRADLING, Principal, Roselawn Elementary School

JESS MCGARY, Principal, Grand Heights Achievement Center

Carlsbad

TOM HANSEN, Superintendent

REID MCCLOSKEY, Assistant Superintendent for Personnel

EARL BUSH, Director of Instruction

EVELYN FELIX, Fiscal Analyst

WILLIAM LOOS, Principal, Carlsbad High School

JERE REID, President of School Board

Espanola

PETE GARCIA, Superintendent

HORACE MARTINEZ, Associate Superintendent for Business and Finance

MARY AGNES GALLEGOS, Principal, San Juan Elementary School

DAVID MCCAIN, President, Espanola Education Association

Eunice

MAURICE HUGHES, Superintendent

ROBERT WALLACH, President of School Board

Gallup

JACK SWICEGOOD, Superintendent

SAM CROW, Business Manager

TOMMY BATSON, Principal, Jefferson Elementary School

CAL FOUTZ, President of School Board

JIM HAZELWOOD, President of Teachers Organization

BEATRICE HOLLAND, Assistant Director of Instruction; Director of Special Education

Hobbs

RAY WASSON, Director of Personnel

DON R. WOOD, Business Manager

BILL LEE, Principal, Heizer Jr. High School; President, Teachers Organization

CONNIE JOHNSON, Principal, Taylor Elementary School

R. L. WHITTEN, Vice-President of School Board

D. W. TABOR, Director of Special Services and Evaluation

Pojoaque

FRANK B. LOPEZ, Superintendent

BILL CAPERTON, Director of Instruction

FILIBERTO MARTINEZ, Principal of High School

FRANK TRUJILLO, Principal of Elementary School

JOHN RIVERA, Elementary Teacher

## UTAH INTERVIEWS

### STATE LEVEL

#### Legislative

SENATOR OMAR BUNNELL, Majority Leader; Chairman, Education Appropriations Subcommittee

SENATOR WARREN PUGH, President of Senate during the reform

SENATOR MORONI JENSEN, President of Senate; Member of Education Appropriations Subcommittee; Administrator, Granite School District

REPRESENTATIVE EASTON PARRATT, Legislative School Finance Study Committee; Former Superintendent, Murray District

REPRESENTATIVE SID ATKINS

HEBER FULLER, Legislative Analyst

MEL COOMBS, State Budget Director; former Legislative Analyst

LOWELL CRANDALL, Office of Legislative Research

PERCY BURRUP, Chairman of Legislative Study Committee and Professor of Education, Brigham Young University

#### Administrative

GOVERNOR CALVIN L. RAMPTON

WALTER TALBOT, Superintendent of Public Instruction

CHARLES LLOYD, Director, Division of External Support Services

ART BISHOP, Coordinator, School Finance Services

ELVIN OSSMEN, Coordinator, Data Collection and Retrieval Center

ELWOOD PACE, Coordinator of Special Education

WALTER ULRICH, Director, Division of Vocational Education

#### Interest Groups

LYNN BENNION, Executive Secretary, Society of Superintendents

JIM PEACOCK, Director of Governmental Relations, Utah Education Association

GARY HARMER, Director of Research, UEA during the reform; currently Clerk, Salt Lake City School Board

## DISTRICT LEVEL

### Davis

BERNELL WRIGLEY, Superintendent

LEWIS BECK, Chief Accountant

MATT GALT, Principal, Millcreek Jr. High School

MORRIS HANSEN, President of School Board

DAPHNE ALLER, President of Teachers Organization

ROY EVANS, Director of Special Education

### Emery

ORSON PETERSON, Superintendent

PHILLIP JENSEN, Clerk\*

FRANK HALL, Principal, Canyon View Jr. High School

KENDALL MORTENSEN, Teacher

TOM ROUSH, Director of Special Education

### Grand

BILL MEADOR, Superintendent

ELMER DRAVAGE, Clerk

JOHN OLEARAIN, Principal, Helen M. Knight School

EUGENE LEONARD, Teacher

### Granite

JOHN REED CALL, Superintendent

DAVID GARRETT, Clerk

EARL CATMULL, Principal, Granite High School

GARY SWENSEN, President of School Board

LOIS LOBB, Teacher

JOYCE BARNES, Director of Special Education

\*In Utah the chief fiscal officer is called a clerk.

Jordan

DONALD PARR, Superintendent

KENNETH PRINCE, Deputy Superintendent, Business and Support Services

CLEMONT BISHOP, Principal, Jordan High School

LOIS HIRSCHI, School Board Member

SPENCE YOUNG, President, Jordan Education Association

RALPH HAWS, Director of Special Programs

Kane

DOYLE SWALLOW, Superintendent

JOSEPH JOHNSON, Clerk

KAREN ALVEY, School Board Member

CAROL PENNY, Teacher

Salt Lake City

DONALD THOMAS, Superintendent

GARY HARMER, Clerk-Treasurer

LA VAR SORENSEN, Principal, South High School

RICHARD CARMAN, Member of School Board

HURLEY HANSEN, President of Teachers Organization

MARVIN PUGH, Director of Pupil Services

Washington

THOMAS ESPLIN, Superintendent

RONALD MCARTHUR, Clerk-Treasurer

DAR SMITH, Principal, East Elementary School

SHELDON JOHNSON, School Board Member

**RALPH CHRISTIAN, Teacher**

**JAY ANDREWS, Teacher**

**VICTOR FREI, Coordinator of Special Education**

**Weber**

**LELAND BURNINGHAM, Superintendent**

**DALE SCHIMMELPFENNING, Clerk**

**RAY COLEMAN, Principal, N. Ogden Jr. High**

**DAVE VANDERBOSH, President of Teacher Organization**

**JUANITA WATTS, Psychologist**

**RAY JARRETT, Director of Vocational Education**

## REFERENCES

### Chapter 2

<sup>1</sup> Jeffrey L. Pressman and Aaron B. Wildavsky, Implementation (Berkeley: University of California Press), 1973.

<sup>2</sup> Eugene Bardach, The Implementation Game: What Happens After a Bill Becomes a Law (Cambridge, Massachusetts: The MIT Press), 1977.

<sup>3</sup> Erwin C. Hargrove, The Missing Link: The Study of Implementation of Social Policy (Washington D.C.: The Urban Institute), 1973.

<sup>4</sup> Walter Williams and Richard F. Elmore, eds., Social Program Implementation (New York: Academic Press), 1976.

<sup>5</sup> Edwin A. Bock, "Case Studies About Government: Achieving Realism and Significance," Essays on the Case Method. International Institute of Administrative Sciences, The Inter-University Case Program, pp. 115-119.

<sup>6</sup> Mary Frase Williams, Decision-Making in Suburban Communities: The Case of Project Concern (Unpublished Dissertation, Yale University), Chapter 2, pp. 3-4.

<sup>7</sup> John Pincus, "Incentives for Innovation in the Public Schools," in Williams and Elmore, Social Program Implementation, p. 66.

<sup>8</sup> James W. Fesler, "The Case Method in Political Science," in Essays on the Case Method, International Institute of Administrative Sciences, The Inter-University Case Program, p. 71.

<sup>9</sup> Edwin A. Bock, "Case Studies About Government: Achieving Realism and Significance," Essays on the Case Method, p. 91.

### Chapter 3

<sup>1</sup> Joel S. Berke, Answers to Inequity, An Analysis of the New School Finance (Berkeley: McCutcher Publishing Corporation), 1974.

<sup>2</sup> "The Politics of School Finance: New Mexico Passes a State Funding Formula," Journal of Educational Finance, 1975, pp. 93-94.

<sup>3</sup> Improving Education in Florida, a report by the Governor's Citizens' Committee on Education, Tallahassee, Florida, March 15, 1973.

<sup>4</sup> Serrano v. Priest 5 C3d 584, 487 T2d 1241, 96 Cal. Rptr. 601. (1971).

<sup>5</sup> See, for example, Dimensions of Educational Need, Roe L. Johns, Kern Alexander, and Richard Rossmiller, eds. (Gainesville: National Educational Finance Project), 1969.

<sup>6</sup>San Antonio Independent School District v. Rodriguez 411 U.S. 1 (1973).

<sup>7</sup>The National Educational Finance Project, in a massive 1968 to 1972 fifty-state study, found that 40 percent more money was being spent nationally on high school.

<sup>8</sup>Alternative Programs for Financing Education (Gainesville: National Educational Finance Project), Volume 5, p. 272.

#### Chapter 5

<sup>1</sup>Roe L. Johns, An Index of Extra Costs of Education Due to Sparsity of Population (Gainesville: Education Finance and Management Institute), April 1975.

<sup>2</sup>Michael Kirst, "Pros and Cons on a State Salary Schedule for Teachers," an open letter to the Governor's Citizens' Committee, January 16, 1973.

#### Chapter 8

<sup>1</sup>William Wilken and David Porter, State Aid for Special Education: Who Benefits? (Washington, D.C.: National Institute of Education), 1977, p. 1-6.

#### Chapter 9

<sup>1</sup>Jeffrey L. Pressman and Aaron B. Wildavsky, Implementation (Berkeley: University of California Press), 1973, pp. xii-xiii.

<sup>2</sup>Walter Williams and Richard F. Elmore, eds., Social Program Implementation (New York: Academic Press), 1976, p. 268.

<sup>3</sup>Pressman and Wildavsky, p. 143.

<sup>4</sup>Milbrey McLaughlin, "Implementation of Mutual Adaptation: Change in Classroom Organization," Teachers College Record 77 (February 1976), p. 349.

<sup>5</sup>McLaughlin, p. 349.

<sup>6</sup>John Pincus, "Incentives for Innovation in the Public Schools," in Williams and Elmore, Social Program Implementation, p. 57.

<sup>7</sup>Dale Mann, "The Politics of Training Teachers in Schools," Teachers College Record 77 (February 1976), p. 324.

<sup>8</sup>McLaughlin, p. 341.

<sup>9</sup>Eugene Bardach, The Implementation Game: What Happens After a Bill Becomes a Law (Cambridge, Massachusetts: The MIT Press), 1977, p. 163.

<sup>10</sup>Anthony Downs, Inside Bureaucracy (Boston: Little, Brown and Company), 1967, pp. 92-111.

<sup>11</sup>Jerome T. Murphy, "Title V of ESEA: The Impact of Discretionary Funds on State Education Bureaucracies," in Williams and Elmore, Social Program Implementation, p. 96.

<sup>12</sup>Erwin C. Hargrove, The Missing Link: The Study of Implementation of Social Policy (Washington, D.C.: The Urban Institute), 1975, p. 93.

<sup>13</sup>Willard Waller, "What Teaching Does to Teachers," in Maurice R. Stein et al., eds., Identity and Anxiety (New York: The Free Press), 1960, pp. 329-350.

<sup>14</sup>Murphy, p. 98.

<sup>15</sup>Hargrove, p. 115.

<sup>16</sup>Bardach, p. 280..

<sup>17</sup>Pincus, pp. 48-49.

<sup>18</sup>Bardach, p. 42.

<sup>19</sup>Joel Berke, Donna Shalala, and Mary Frase Williams, "Two Roads to School Finance Reform," 13 Society (January-February 1976).

<sup>20</sup>Pressman and Wildavsky, pp. 87-124.

<sup>21</sup>Bardach, p. 253.

<sup>22</sup>Walter Williams, "Implementation Analysis and Assessment," in Williams and Elmore, Social Program Implementation, p. 270.

<sup>23</sup>Murphy, p. 98.

<sup>24</sup>Downs, pp. 148-153.

<sup>25</sup>Downs, p. 129.

<sup>26</sup>Bardach, p. 281.

## GLOSSARY OF ABBREVIATIONS

ADA	average daily attendance
ADM	average daily membership
FTE	full-time equivalent student
NEFP	National Educational Finance Project
PU	pupil unit
PWS	pupil weighting system
SDE	state department of education
T&E	training and experience (of teachers)
WFTE	weighted full-time equivalent student
WPU	weighted pupil unit

### Exceptional Child Education Abbreviations:

#### New Mexico

A/B	mildly handicapped, in resource room
C	moderately handicapped
D	severely handicapped

#### Florida and Utah

D/H of H	deaf/hard of hearing
ED/EH	emotionally disturbed (handicapped)
EMR	educable mentally retarded
H&H	hospital and homebound
MH	multiple handicapped
PH/MH	physically (motor) handicapped
SH-D/B	severely handicapped - deaf/blind
SLD/LD	specific learning disability
S&L/S&H	speech and language (hearing)
SM	socially maladjusted
S&PR	severely and profoundly retarded
TMR	trainable mentally retarded
VI/VH	visually impaired (handicapped)