## **INFORMATION TO USERS**

4

This material vas produced from a microfilm copy of the original document. While the most advanced technological means to photograph and reproduce this document have been used, the quality is heavily dependent upon the quality of the original submitted.

The following explanation of techniques is provided to help you understand markings or patterns which may appear on this reproduction.

- 1. The sign or "target" for pages apparently lacking from the document photographed is "Missing Page(s)". If it was possible to obtain the missing page(s) or section, they are spliced into the film along with adjacent pages. This may have necessitated cutting thru an image and duplicating adjacent pages to insure you complete continuity.
- 2. When an image on the film is obliterated with a large round black mark, it is an indication that the photographer suspected that the copy may have moved during exposure and thus cause a blurred image. You will find a good image of the page in the adjacent frame.
- 3. When a map, drawing or chart, etc., was part of the material being photographed the photographer followed a definite method in "sectioning" the material. It is customary to begin photoing at the upper left hand corner of a large sheet and to continue photoing from left to right in equal sections with a small overlap. If necessary, sectioning is continued again beginning below the first row and continuing on until complete.
- 4. The majority of users indicate that the textual content is of greatest value, however, a somewhat higher quality reproduction could be made from "photographs" if essential to the understanding of the dissertation. Silver prints of "photographs" may be ordered at additional charge by writing the Order Department, giving the catalog number, title, author and specific pages you wish reproduced.
- 5. PLEASE NOTE: Some pages may have indistinct print. Filmed as received.

Xerox University Microfilms 300 North Zeeb Road

Ann Arbor, Michigan 48106

## 76-3105

(international)

IRETON, Leroy F., 1936-A STUDY OF THE EFFECT OF INFLATION ON PUBLIC SCHOOL EDUCATION IN OKLAHOMA.

9 | 1

Contraction of the

The University of Oklahoma, Ed.D., 1975 Education, administration

Xerox University Microfilms, Ann Arbor, Michigan 48106

THIS DISSERTATION HAS BEEN MICROFILMED EXACTLY AS RECEIVED.

# THE UNIVERSITY OF OKLAHOMA GRADUATE COLLEGE

# A STUDY OF THE EFFECT OF INFLATION ON PUBLIC SCHOOL EDUCATION IN OKLAHOMA

## A DISSERTATION

SUBMITTED TO THE GRADUATE FACULTY

in partial fulfillment of the requirements for the degree of DOCTOR OF EDUCATION

BY

LEROY F. IRETON Norman, Oklahoma

# A STUDY OF THE EFFECT OF INFLATION ON PUBLIC SCHOOL EDUCATION IN OKLAHOMA

APPROVED BY

DISSERTATION COMMITTEE

#### ACKNOWLEDGEMENTS

Gratitude is sincerely expressed to Dr. Jack F. Parker who served as chairman of the doctoral committee and director of this study. His sincere interest and valuable assistance throughout the doctoral program are acknowledged with appreciation. Deepest gratitude is also expressed to the other members of the doctoral committee, Dr. E. F. Cates, Dr. Gene Pingleton, and Dr. Loy Prickett for their interest and assistance in the writing of this study.

The writer would like to express appreciation to the many people who contributed directly or indirectly to the development and completion of this paper. Without their encouragement, assistance, and patience, the study would not have been realized.

To my wife, Delores, for her continuous encouragement, assistance, and support, a very special thanks is expressed. To my children, Roy and Jana, for their patience and understanding throughout all phases of my graduate study, a special note of thanks is given.

**iii** 

## TABLE OF CONTENTS

																								]	Page
ACKNO	JWL	EDGI	EMEN	rs	•	•	٠	•	•	•	•	•	•	•	•	٠	•	٠	•	•	•	•	•	•	111
LIST	OF	TAI	BLES	•	•	•	•	•	•	•	•	•	•	•	•	•	•	٠	•	•	٠	•	•	•	vi
Chapt	ter																-								
I.	T	HE	PROB	LEI	M	•	•	•	•	•	•	•	•	•	•	٠	•	•	•	•	•	•	•	•	1
		In	trod	uct	tic	n	•	•	•	•	•	•	•	•	•	•	•	•	•	٠	•	٠	•	•	1
		Ba	ckgr	oui	nd	aı	nđ	Ne	ee	E	٠	•		٠	٠			٠	٠	٠	٠	٠	٠	٠	2
		St	atem	en'	t d	)ſ	Pı	rol	<b>51</b> 0	em	•	•	٠	•	•	•	•			٠	•		•	٠	10
		Hy	poth	es	es	t	5 l	be	$T\epsilon$	est	teo	1				٠	٠		•	٠	•		٠	•	10
		St	atem	en <sup>.</sup>	t d	)ſ	P۱	urj	pos	se		•	•	•	٠	•	٠	•	•	•	•	٠	٠	•	11
		Po	pula	ti	on	a	nđ	Sa	amj	ple	9	•	•	•	•		•	•	•		•	٠	•		12
		In	stru	me	nta	at:	ioi	n	•	•			•	•	•			•	•	•			•		12
		Οp	erat	10	na	1 1	De:	fi	<b>11</b>	tic	ona	з.				•		•							13
		As	sump	ti	ons	3				•	•	•		•				•		•		•	•	`.	15
		T.1	mita	$\dot{t}$	ons	3			Ì													•			16
		Or	rani	2 A.	t.10	- n	0.	ſĪ	Rei	001	rt	-	_												17
		<b>v</b> .	5				ψ.				• •	•	•	•	•	•	•	•	•	•	•	•	•	•	
II.	R	EVI	EW O	F'	THI	2	LI'	re)	RA	rui	RE	•	٠	•	٠	•	•	•	٠	•	٠	٠	٠	٠	18
		Tn	tnod	110	+ 1 /	h													_	_		_	_		18
		- Do	alcan	au	~d ~d	T	• • • ·	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	10
		Da To	CKBL	- 1 a	nu nu	יד גנט	T 01	€T.(	a 0 1	41 '		n 1	ra.	•	•+•	1~	<b>n</b> '	•	•	•	•.	•	•	•	20
		111	Trac	τ0	na.	гy	Ľ.	ττ.	ec	60	0		bu.	uu	a 0.	τ0.		•	٠	•	•	•	٠	•	29
		Su	mmar	У	٠	٠	٠	٠	٠	٠	٠	٠	٠	٠	٠	•	•	•	•	•	•	٠	•	•	40
III.	М	ETH	ODOL	OG	Y	•	٠	•	٠	•	•	•	•	•	•	•	•	•	٠	•	•	•	•	٠	41
		Po	<u>ה דוות</u>	+ 4	<u>n</u>	9	nd	S	໑ຠ	<b>n</b> 1	6													_	<u>Ц</u> 2
		 ~	pura	me me	nt.	ы. - †-	10	n		РТ.	~	•	•	•	•	•	•	•	•		•		•	•	<u>ь</u> т
			9 0 1 U	ab	ם דר ים דר		4 ~	27 11	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	<u>1</u> 6
		ne ar	sear	011	ົມ	5 2 2 2	- K	11 4 m		•	•	•	•	٠	٠	٠	٠	•	٠	٠	•	•	٠	•	
			oice	0	I i	ວບ	at	18	01	30		•	•	٠	•	•	•	•	٠	٠	٠	٠	٠	٠	40
		Te	STS	an	α	кe	sp	on	se	T,	τe	ms	•	٠	•	•	•	٠	٠	٠	٠	٠	٠	٠	49
		Su	mmar	У	0ľ	M	et.	no	ds	a	nd	- P	$\mathbf{ro}$	ce	au:	re	s	٠				٠	•		52

# TABLE OF CONTENTS--Continued

Chapt	er																					F	age
IV.	ANALYSI	IS A	AND	IN	TE:	RPF	REI	'A'	<b>TI</b>	ON	OI	F I	DA!	ГA		•	•	•	•	•	•	•	53
	Return Result Result Result Result Result Supp Supp Analt Summa	rneo Lts sult sult sult sult sult sult sult su	d Qu of ts of ts of ents ents of	les Hy of of Cary ary Fi	ti Te Te Dp Dad	onr sti sti sti n l ata te ing	nai esi ing ing Ing Res a l E: 35		es Ho Ho Ho Mo n • •	es 1 2 3 4 s s s d 1		ng ter ve;	· · · · · · · · · · · · · · · · · · ·	•	•		•	• • • • • • • • •	• • • • • • • • • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • • •	• • • • • • • • •	• • • • • • • • • • • • • • • • • • • •	55558 555568 660 788 84
v.	SUMMARY AND I	reco	FINI OMMI	DIN ENI	IG S DAT			NC:	LU •	sı •	ON:	s,		MP •	LI •	CA •	TI.	•	• 15	•	•	•	88
	Revie Summa Conci Impl: Recor	ew ary lus: lca nme	of of ion tion tion nda	the Fisns	e P Ind	urj inj •	pos gs •	se	a • •	nd	D.	es: • •	ig	n • •	of	t	he •	• •	Sti	ıdı	*	• • • •	88 89 91 92 93
BIBLI	OGRAPHY	•	••	•	•	•	•	•	•	•	٠	•	•	•	•	•	•	•	•	•	•	•	95
APPEN	DICES .	•		•			•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	٠	100

## LIST OF TABLES

Table		Page
1.	Statistical Tests Used in Testing Hypotheses	• 50
2.	Number and Percent of Questionnaires Mailed and Returned	• 54
3.	Responses for Testing Hol	. 56
4.	Responses for Testing Ho2	• 57
5.	Responses for Testing Ho3	. 58
6.	Responses to Concepts Tested Between Different School Sizes	• 59
7.	Large VS Small	. 60
8.	Medium VS Small	. 61
9.	Large VS Medium	. 61
10.	Data for Sampled Schools Listed by Region and Size Classification and Showing Percent Increase or Decrease From FY 1973 to 1974	. 65
11.	Common Responses to Question 21 Listed by Region and School Size	. 67
12.	Common Responses to Question 22 Listed by Region and School Size	. 68
13.	Common Responses to Question 23 Listed by Region and School Size	. 69
14.	Percentage of Sample Schools Reporting Increased Expenditures, Decreased Expenditures, or No Change in Expenditures for Selected Budget Items From FY 1973 to FY 1975 (School Size: Small)	. 71

.

# LIST OF TABLES, Continued

## Table

15.	Percentage of Sample Schools Reporting Increased Expenditures, Decreased Expenditures, or No Change in Expenditures for Selected Budget Items From FY 1973 to FY 1975 (School Size: Medium)	72
16.	Percentage of Sample Schools Reporting Increased Expenditures, Decreased Expenditures, or No Change in Expenditures for Selected Budget Items From FY 1973 to FY 1975 (School Size: Large)	73
17.	Total State School District Property Valuation	75
18.	Total State School Revenues From All Sources	75
19.	Total State School Surplus Fund	77
20.	State Total Revenue From Local Resources	77
21.	State Total Revenue From State Resources	78
22.	State Total Revenue From Federal Resources	78
23.	Number of Support Personnel and Percent Salary Change for FY 1973, FY 1974, and FY 1975	79
24.	Number of Teachers in Oklahoma Schools for FY 1967 Through FY 1974	81
25.	Comparison of the Number and Percentage of Change of Oklahoma Teachers for the Years of FY 1967 Through FY 1974	81
26.	Analysis of State School's Total Expenditures by Budget Classification and Budget Item Expenditures for FY 1972, FY 1973, and FY 1974 .	82
27.	An Analysis of Data Collected by Market Data Retrieval on National School Expenditures Including a Comparison of Percentages of Net Current Expenditures and Illustrating Budget Changes From FY 1970 to FY 1973 and From FY 1973 to FY 1974	85
28.	Percent of "Yes" Responses to Questionnaire Items	5
		-

1 Through 20 Listed by Region and School Size . 87

# A STUDY OF THE EFFECT OF INFLATION ON PUBLIC SCHOOL EDUCATION IN OKLAHOMA

### CHAPTER I

#### THE PROBLEM

#### Introduction

Numerous methods of financing public school education have been implemented, each in an attempt to discover an equitable and adequate method of providing revenue for funding improved educational opportunities for each child. Even with all the attempts to provide sufficient revenue, many inequities still exist; and many issues remain unsolved in public school finance.

In the majority of Oklahoma school districts, revenues have not been sufficient to insure balanced, complete, and continuous education programs and services needed by all students. The lack of adequate revenues has caused many frustrations, fears, and uncertainties for educators and will likely continue to do so until more satisfactory methods of financing public school education are found. This problem is not unique to the state of Oklahoma.

## Background and Need

One of the major administrative functions of a public school superintendent is to prepare and recommend a budget to the local board of education. The budget is a financial document detailing projected receipts and expenditures of the organization based upon and used as a means for implementing a plan, the educational plan. "Budgeting is seen as a continuous process involving both long-term and short-term planning and the establishment of priorities."<sup>1</sup> The various kinds of planning involved in budgeting can be symbolized by the pyramid shown in this diagram:<sup>2</sup>



The phases of budget preparation illustrated in the above diagram involve determining and stating the educational needs and policies, translating the accepted policies into proposed expenditures, and proposing the means of meeting the cost of the identified educational needs.

<sup>1</sup>Oklahoma, Department of Education, <u>The State Board of</u> <u>Education Regulations for Administration and Handbook on</u> <u>Budgeting and Business Management</u>, (Oklahoma: State Board of Education, 1973-74), p. 27.

<sup>2</sup>Ibid.

The school budget has numerous functions, a few of which are:

The budget is a servant of education. 1. It gives an overview. 2. It aids in analysis. 3. 4. It develops cooperation within the school. 5. 6. It stimulates confidence among taxpayers. It estimates the receipts. It determines the tax levy. 7. 8. It authorizes expenditures. 9. It aids in administering the school economically. It improves accounting procedures. 10. It aids in extra-curricular activities. It projects the school into the future.<sup>1</sup> 11. 12.

The revenue phase (income plan) of budgeting is especially important to the administrator. The financial responsibility of the administrator of a public school is complicated under normal circumstances, but it is even more trying and difficult in times of economic uncertainty. The administrator must do financial planning continuously to assure that funds will be available to implement the educational plan adopted by the district.

The problem of securing adequate revenues to support public school education is compounded by the fact that public schools must rely upon State legislatures to appropriate money for public education and upon the voters of the districts to vote tax levies that will provide the money to operate the local educational programs.

<sup>1</sup>Chris DeYoung, <u>Budgeting In Public Schools</u>, (New York: Swift, Inc., 1946), pp. 9-14.

Property taxes provide almost ninety percent of all locally controlled school district revenues.<sup>1</sup> The property tax has many weaknesses. However, as numerous states have searched for alternative revenue sources for financing education, none has voted to eliminate the property tax.

The property tax represents a special kind of problem for schools as a revenue source during inflationary times. Even though property taxes increase proportionately with inflated real estate values, the realization of higher revenues lags behind the general rise in costs in direct proportion to the interval at which values are reassessed. Therefore, the impact of inflation is immediate where school expenditures are concerned but may not be evident for several years on the revenue side of the ledger.<sup>2</sup>

Harris notes that state sales and income taxes accounted for over 55 percent of the state revenues for public schools in 1973-74. He further states that state sales and income taxes are somewhat more responsive to inflation than are property taxes.<sup>3</sup>

A report compiled and released by the Kerr Foundation indicates that approximately 45.28 percent of all state

3Ibid.

<sup>&</sup>lt;sup>1</sup>Roger Leroy Miller, <u>Economics Today--The Macro View</u>, (New York: Canfield Press, 1974), p. 134.

<sup>&</sup>lt;sup>2</sup>James Harris, "The Economics of Education," paper presented at the HEW Congressional Conference on Inflation on Health, Education, Income Security and Social Services, Washington, D. C., 19 September 1974.

financial resources in fiscal year 1974 were expended for public school education.<sup>1</sup> Such a percentage makes education a big industry in Oklahoma, and the same situation holds true for the nation as a whole. As an industry, education involves 23 percent of the American population and has an impact on everyone. According to a National Education Association report approximately \$56.5 billion was expended for public education in 1973-74 in the United States.<sup>2</sup> These monies are derived from local, state, and federal resources "... of the three, local resources provide the largest share; 49.5 percent of all revenues received in 1973-74. State governments provided 43.0 percent, and the federal share was 7.5 percent.<sup>3</sup> Within this framework of fiscal federalism, each level has its unique tax structure; and each structure responds differently to changes in the economic trends thus adding to the uncertainties faced by local school administrators in determining the level of resources for fiscal continuity and growth in the local educational plan.

In recent years, a new problem has become increasingly important in public school finance. This is the problem of rapidly increasing prices which school districts must pay for

<sup>1</sup>Kerr Foundation, <u>1974 Oklahoma State Expenditures in</u> <u>Brief</u>, (Oklahoma City: Kerr Foundation, 1974), p. 20. <sup>2</sup>Harris, "The Economics of Education," p. 1. 3<sub>Ibid</sub>.

services and goods. Because of the nature of financing public school education, the problem is greatly affecting public school budgets.

The constant and rapid increase in the cost of living and the price which must be paid for goods and services in the United States is a phenomenon of which everyone has become aware in recent years. Rising prices now seem as inevitable as death and taxes. Consumers are continually reminded by the media that today's dollar is worth only 30 percent of 1939's The decrease in value of the dollar has not been dollar. constant through the years; however, the rate has historically been changing slowly at about one percent per year. This gradual rate of change allowed time for adjusting to revenue levels and absorbing the increases through surplus funds built The rate of inflation increased at an average into budgets. rate of 2.7 percent per year from 1960 through 1969. From the second quarter of 1973 through the same period in 1974 the average national inflation rate was 9.8 percent. Economists have determined that the rate of inflation during 1974 was one percent per month resulting in an annual rate of 12 percent.<sup>1</sup> The inflation rate has spiraled very rapidly, and indications are that the rapid increase has affected the purchasing power of the school budget dollar. Time and traditional methods have not permitted budget readjustments necessary to gain new

<sup>&</sup>lt;sup>1</sup>Robert Jacobson, "Struggling With Inflation; Can The Schools Get Out From Under?," <u>Compact</u>, November-December 1974, p. 9.

replacement revenue; thus, programs and services are being reduced to make the compensation.

Each year Ben Brodinsky, a consultant to the Educational Press Association of America, makes an unofficial selection for EdPress of the top education events of the year. In the December 1974 issue of the EdPress Newsletter, Brodinsky selected seven events as exerting the most influence on education in 1974. Inflation headed Brodinsky's list as the event that most influenced education that year. More than twentyfive education groups sent representatives to President Gerald Ford's mini-summit conference on the impact of inflation on schools and colleges and the highly publicized summit meeting. These educators took advantage of the opportunity to press upon all those attending three lessons in educational econom-(1) students and schools are victims of, not the contriics: butors to inflation; (2) education itself is an antiinflationary process; (3) federal budgets should be increased for programs which will help people become more productive.<sup>1</sup>

A recent study conducted by Robert Jacobson revealed that inflation already has taken a substantial bite out of numerous education programs. Some administrators surveyed by Jacobson believe that the situation will probably get worse before it gets better.<sup>2</sup>

<sup>1</sup>Ben Brodinsky, "Major Education Events of 1974," <u>EdPress Newsletter</u>, December 1974, p. 1.

<sup>2</sup>Jacobson, "Struggling With Inflation," p. 9.

Jacobson further states that his study indicates that most states are better prepared in the 1974-75 school term to cope with the effects of inflation than they were in the 1973-74 school term because of experiences with fuel shortages and price increases in 1973 which came completely without expectation or warning. He reports that the nation-wide inflation rate in 1974 was 12 percent, that state education agencies advised him that the educational expenditures rose by 8 percent in the 1974-75 school term, and that many of the agency officials indicate that they do not believe the full impact of inflation has yet been felt.<sup>1</sup>

Educators cannot make up for the hardships brought upon our schools by economic forces. A recent National Education Association survey shows more than 39 percent of the teachers surveyed reporting an increase in class size. The larger the class size, the less likely it is that the teacher, no matter how dedicated, will be able to even uncover an individual child's problem, let alone solve it. Also, the report revealed that more than 40 percent of the teachers report a decrease in the quality of teaching materials, and 28 percent indicate the elimination of school programs. Because of inflation, school districts are spending an ever greater portion of their budgets on noneducational, nonhuman expenditures such as fuel, construction, power, and interest costs.<sup>2</sup>

<sup>2</sup>Harris, "The Economics of Education," p. 3.

<sup>&</sup>lt;sup>1</sup>Ibid, p. 10.

Robert Jacobson reports that his survey of the states conducted through state education agencies reflect several significant factors such as: (1) the purchase of instructional materials, new constructions, maintenances, and repair have each been curtailed in 65 percent of the states; (2) 59 percent of the states report cutbacks in extra-curricular activities and athletics; (3) 50 percent of the states report cutbacks in hiring of personnel and transportation; (4) 25 percent of the states report cutbacks in programs for handicapped children, and some states report that money is being moved from maintenance and operation funds to instructional funds.<sup>1</sup>

Reductions in teaching staff attributable to a lack of financial support were indicated by 33.1 percent of the respondents to a recent NEA survey. This fact alone strongly suggests that one of the major causes of unemployment among teachers is the process of inflation that consumes increased school district revenues at a rate that prohibits educational improvements through quality staffing. Education's great loss to inflation, then, is that for the first time in many years this nation has an adequate supply of qualified teachers but finds itself in the position of not being able to utilize them because of the current economic situation.<sup>2</sup>

The review of recent literature revealed much concern voiced by professional education associations, local school administrators, average citizens and taxpayers, as well as governmental agencies, regarding the spiraling costs of materials and services necessary to implement educational plans in public schools and to provide the level and quality of

> <sup>1</sup>Jacobson, "Struggling With Inflation," p. 9. <sup>2</sup>Harris, "The Economics of Education," p. 4.

education which American children have had available in past years and deserve in the future. These concerns from the review of the literature and contemporary administrative experiences in the area of inflationary effects on education led to the formulation of the following statement of the problem.

## Statement of Problem

This study was designed to investigate the effect of inflation on public school education in Oklahoma. More specifically, questions which the researcher sought to answer include:

- Has inflation in recent years produced negative changes in educational programs in Oklahoma?
- 2. What is the nature of the changes, if any, in educational programs which administrators attribute to inflation?
- 3. What actions are being taken by Oklahoma school administrators in their efforts to cope with inflation?

## Hypotheses to be Tested

To answer the questions posed in the Statement of Problem, the following hypotheses were tested for statistical significance. Kerlinger states that the .05 level of significance is a reasonably good gamble and is suitable for most social scientific research.<sup>1</sup>

<sup>1</sup>Fred N. Kerlinger, <u>Foundation of Behavorial Research</u>, 3d ed, (New York: Holt, Rinehart, and Winston, 1973), p. 119.

- Hol There is no significant difference between school district budgeting priorities under current inflationary conditions and school district budgeting priorities prior to the inflationary period of 1972-1975.
- Ho2 There is no significant difference between programming in local school districts during inflationary times and school district programming during the normal cost increase periods prior to the period of 1972-1975.
- Ho3 There is no significant difference between consideration given to school district financial needs during inflationary periods and during the normal cost increase periods prior to the period of 1972-1975.
- Hoų There is no significant difference in the effects of inflation on school districts among different sizes of school districts. (Large vs. medium, medium vs. small, large vs. small)

In addition to these null hypotheses, other comparisons were made to discover the types of changes occurring most frequently. Comparisons and contrasts were made among six regions of the state to discover differences which resulted.

## Statement of Purpose

The purpose of this study was to determine if inflation has had an effect on local school districts in Oklahoma and, if so, to identify some of the changes that have been made in an effort to cope with the rapid increases in costs of services and materials. The purpose will also determine, in the opinions of school administrators, if these changes are causing cutbacks in programs, services, and materials which will eventually have negative effects on the educational opportunities of Oklahoma school children. As a consequence, measures may be identified which will useful to other administrators in coping with the inflation problem.

The purpose can further be expanded to include the hope that the findings may prove beneficial to the State Department of Education in making recommendations to the Oklahoma Legislature for future funding of public education.

## Population and Sample

The population sampled is a group representative of all Oklahoma local school administrators. The schools were grouped by size on the basis of their average daily attendance. Schools were also grouped in regions to make possible investigation of the degree to which geography may be a factor in the study. These parameters should provide a true representative sample of the larger population of all local school administrators in Oklahoma.

### Instrumentation

A survey instrument was developed to determine the opinions and actions taken by local school administrators relating to the effects of inflation on their educational program. A select group of State Department of Education personnel who are experienced in research methods and instrument development assisted the researcher.

The validity and reliability of the instrument were tested, and revisions were made with consultation from these experts in the field of educational research and administration.

The survey instrument was completed by a selected sample of local school administrators. The sample represented 25 percent of all local school administrators in Oklahoma school districts. The sample was selected on a stratified sampling basis. The school districts were stratified by regions, and a sub-strata based on the size of the school in terms of the average daily attendance placed schools within the regions in classifications of small, medium, or large. A random sampling of each classification within a region determined the school administrators who were asked to complete the survey instrument.<sup>1</sup>

## Operational Definitions

- 1. Local School Administrator The staff member in Oklahoma school districts whose name appears on the State Department of Education's personnel report and who has been designated as the local school board's agent responsible for directing the local school district activities.
- 2. <u>Inflation</u> "A disproportionately large and relatively sudden increase in the general price level. Inflation becomes apparent when the quantity of money or deposit currency in circulation is large (when measured against some previous period) compared with the quantity of goods and services offered, or when, because

<sup>&</sup>lt;sup>1</sup>Kerlinger, <u>Foundation of Behavorial Research</u>, p. 119. A sample drawn at random is unbiased in the sense that no member of the population has any more chance of being selected than any other member.

of a loss of public confidence in the medium of exchange, a general and wide-spread attempt to convert money into commodities is precipitated. A normal increase in the price level after a period of depression is not generally regarded as inflation."1

- 3. <u>Public Finance</u> "The financial operations of all levels of government. Such operations include budgeting, taxing, appropriating, purchasing, borrowing, lending, disbursing funds, and regulating the currency."<sup>2</sup>
- 4. <u>Cost-of-Living Adjustment</u> "A term designating an arrangement, included in some important labor contracts since 1948, whereby wages are increased or decreased in the same proportion as increases or decreases in an appropriate index of prices reflecting the living costs of the workers affected."3
- 5. <u>Consumer Price Index</u> "An index of prices obtained in various parts of the United States for services and commodities deemed essential to maintain a standard of living for a working class family unit and compiled at intervals by the Bureau of Labor Statistics of the Department of Labor. The index uses a Base Period and shows the increase in cost attributable to inflation."<sup>4</sup>
- 6. <u>Purchasing Power</u> "The ability to buy--especially, the ability of consumers to make purchases as distinguished from investors, although the latter are not excluded."<sup>5</sup>

<sup>1</sup>Harold S. Sloan and Arnold Zurcher, <u>Dictionary of</u> Economics, (New York: Barnes and Noble, Inc., 1970, p. 226.

> <sup>2</sup>Ibid, p. 358. <sup>3</sup>Ibid, p. 103. <sup>4</sup>Ibid, p. 96. <sup>5</sup>Ibid, p. 360.

- 7. Recession "As applied to business conditions, a mild tapering off of economic activity, not sufficient to mark a major phase of business cycle and hence not identified as a depression."1
- 8. Inflationary Effects - Those changes in budgeting and programming which were produced by the rapid increase of prices.
- Negative Effects Those changes or reductions 9. which may eventually reduce the quality of education.
- 10. Fiscal Federalism The principle governing the collection, uses, and accounting for public revenue.

#### Assumptions

Several assumptions were necessary to make the proposed study possible. The assumptions relate to the conditions being studied, the participants in the study, the instrument used, and the data collected from the participants. They are as follows:

- 1. That the local school administrators selected are a true representation of the larger population of all school district administrators since they were randomly sampled.
- 2. That the sample was large enough to permit generalization of the results and to obtain optimum level of statistical power for comparisons made.
- That the data collection instrument was valid and 3. reliable as far as could be determined by the review of a select group of administrators.
- 4. That the data collection instrument was comprehensive and complete.
- That the reduction of services and certain changes 5. attributed to inflation could be documented, recognized, and reported by local school administrators.

15

<sup>1</sup>Ibid, p. 372.

6. That the data collected will reflect inflationary changes in educational programs and budgeting.

## Limitations

The present study, as in any research effort, assumed certain limitations in order to make the investigation feasible. The major limitations are stipulated as follows:

- 1. The sample of local school administrators was limited to a random sample of 168 drawn from a total population of approximately 634.1
- 2. The classifications of effects noted by this research lies largely in two distinct areas. Those two areas are program effects and budget changes or shifts to compensate for inflationary costs. Other areas could be identified; however, due to the prominence of these two areas in the review of the literature, it was decided to study only these two areas.
- 3. The period studied covers four fiscal years and relies very heavily upon the memory of the administrator to relate changes made due to the presence of inflation. Some of the administrators were likely not employed in the same district during the entire period. School administrators have access to records and reports from previous years and can make an accurate comparison of costs and expenditures. Additional data will be collected from various State Department of Education reports and documents.

While there are other limitations to the study, these are the only ones which need to be enumerated. The remaining limitations and restrictions are those which are part of any and every research effort.

<sup>1</sup>Oklahoma, Department of Education, <u>Comparative</u> <u>Statistics for School Years 1966 Through 1974</u>, (Oklahoma City: State Board of Education, [1975].

## Organization of Report

The introduction, background and need, statement of problem, hypotheses to be tested, statement of purpose, population and sample, instrumentation, operational definitions, assumptions, limitations, and organization of the report are presented in Chapter I. Chapter II will consist of the review of the literature. The methodology will be presented in Chapter III. Chapter IV will contain the analysis and interpretation of data. The summary, findings, implications, and conclusions will be presented in Chapter V.

## CHAPTER II

## REVIEW OF THE LITERATURE

## Introduction

A brief review of literature related to the problem of inflation and its effects on education was conducted prior to the identification of concepts to be studied in this research. A much more intensive search and review of available, although somewhat limited, literature was conducted for reporting in this chapter.

In addition to the search of the Readers' Guide, Educators Guide, card catalog, catalog of dissertation abstracts, and other library resource files, materials were requested from the National Institute of Education, the Education Commission of the State, the U. S. Department of Labor, the Bureau of Labor Statistics, Market Data Retrieval Corporation, Phi Delta Kappa, National Education Association, the U. S. Senate Subcommittee on Education; and a computer search of ERIC files was conducted.

Letters requesting additional sources of information were written to Dr. Micheal Kirst, a professor of Education at Stanford University, Dr. Henry Levin of Stanford University,

and Dr. Kern Alexander, Director of the Institute for Educational Finance. The responses of Drs. Alexander and Levin are entered in the Appendix of this report.

The review of the literature consists of two areas of concern relating to the problem. The review, therefore, is written according to articles relating to (1) background reading in financing public school education and (2) literature relating to the problems of financing of education in inflationary periods.

## Background Literature

There are numerous problems and issues in the field of public school finance. Attempts to solve many of them have been made in most of the states and in a great variety of ways. For some of the problems a fully satisfactory solution has not been found, and on some issues there is serious division of opinion. Most, if not all, of the problems and/or issues can be placed under two major headings: (1) the amount of support and (2) the methods of support, the latter category being the most extensive.<sup>1</sup>

Changes in fiscal support for education seem inevitable if this nation attains the dominent educational objective of equality of educational opportunity for every individual to develop to the limits of his capability and motivation. Two fundamental changes are crucial: (1) alterations in the changing governmental and economic

<sup>1</sup>Calvin Grieder, Truman M. Pierce, and K. Forbis Jordan, <u>Public School Administration</u>, 3d ed, (New York: Ronald Press, 1969), p. 438.

structure on which taxation depends, and (2) the further consolidation of inefficient school districts which have inadequate population to operate comprehensive programs.<sup>1</sup>

Revenue to finance public elementary and secondary education comes from three major levels of government--federal, state, and local. Approximately 49.5 percent of the revenues comes from local resources which are raised largely through taxes levied on property. State government provides 43.0 percent of the revenues, and the federal share is 7.5 percent. Each level of support base has its unique tax structure, and each structure responds differently to inflation.<sup>2</sup>

The extent and the quality of educational service influence and in turn are influenced by the financial support of the district. They are governed by state legislation and regulations and by school board policy with respect to what should be offered under school district auspices, how much should be offered, and the standards of personal service, physical facilities, and instructional materials. A good many judgments are involved in deciding the amount of financial support required and how it should be allocated.<sup>3</sup>

Developing and implementing the school district budget is one of the most important administrative functions of a

<sup>1</sup>Roe L. Johns, <u>Alternative Programs for Financing</u> <u>Education</u>, (Gainsville, Florida: NEFP, 1971), p. 53. <sup>2</sup>Harris, "The Economics of Education," p. 1. <u>3Grieder, Public School Administration</u>, pp. 418-19.

district superintendent. It should not be a one man operation, but should be a cooperative effort of the entire staff with the superintendent making the final adjustments and presentation to the board of education for adoption.

Budgeting is considered by authorities in school administration such as Grieder as a three phase operation involving the development of the educational plan, the revenue plan, and the expenditure plan. The authorities advocate that the educational plan should be developed first and the financing plan should then be tailored to fit the educational plan. Due to the uncertainty, fiscal restraints, and the unreliability of continuous levels of funding, the application of the principle is difficult and generally ignored. Financial limitations or requirements imposed by state constitutions and statutes, regulations, tradition, by "practical" considerations of what the feasible school tax load and total tax load may be all combine to hinder the application of the principle. However, the values of planning the program first are so significant and so logical even in the face of these difficulties, that no other defensible way of developing the school budget can be advanced.<sup>1</sup>

In forty-nine of the states the financing of the schools is a joint enterprise of the entire state and the local school districts. Courts have been uniform in holding that school districts are instrumentalities of the state

lIbid.

created by the legislature to carry out the constitutional mandates relative to providing educational opportunities for the boys and girls of the state.<sup>1</sup> "Inequities in fiscal capacity and effort among the school districts of a state are a problem which can be solved by that state."<sup>2</sup>

The Oklahoma School Code provides for free schools supported by public taxation and consists of nurseries, kindergartens, elementary and secondary schools, limited junior colleges, night schools, adult classes, and instruction as may be supported by public taxation or otherwise authorized by laws of Oklahoma.<sup>3</sup>

The Oklahoma State Constitution provides for the funding of public schools in Article X, Section 10. Through the powers of the Constitution and Statutory Law, Oklahoma school districts may levy thirty-five mills for general fund revenues, five mills for the building fund, and may levy a sinking fund millage which will be used to retire district building bonds which may amount to a total of but not exceeding ten percent of the district valuation.<sup>4</sup>

The districts also receive a number of miscellaneous general fund revenues including automobile license fees,

<sup>1</sup>Edmund Reutter and Robert Hamilton, <u>The Law of Public</u> <u>Education</u>, (New York: Foundation Press, 1970), p. 166.

<sup>2</sup>Johns, <u>Alternative Programs for Financing Education</u>, p. 101.

<sup>3</sup>Oklahoma, Department of Education, <u>School Laws of</u> <u>Oklahoma</u>, (Oklahoma City: State Department of Education, 1974), p. 18.

<sup>4</sup>Ibid, pp. 155-57.

school land earnings, gross production taxes, public utilities revenues, boat and motor home revenues, a pro rata share of the county four mill levy, and numerous revenues for special federal programs. In addition, the state provides an amount determined by a formula which is intended to guarantee and provide a foundation program in each district. The districts also receive incentive aid from the state based on the district wealth and the level of local millage voted. These resources and provisions for raising revenues for public schools encompass most of the types of resources available in Oklahoma to school districts from local, state, and federal levels of government.

The local district levies are responsible for raising approximately 45 percent of the total district controlled revenue.<sup>1</sup> The larger percentage of this local revenue is raised through the levying of the 35 mills on the district property valuation. According to Miller, property taxes account for 90 percent of all local tax revenues.<sup>2</sup> In a report to the HEW Congressional Conference on Inflation on Health, Education, and Income Security and Social Services, National Education Association President James Harris cites the special problem with property taxes during inflationary times. Harris says that even though property taxes increase

<sup>1</sup>Oklahoma, State Department of Education, <u>Annual</u> <u>Statistical Report of Finance Division</u>, (Oklahoma City: State Department of Education, 1975), p. 30.

<sup>2</sup>Miller, <u>Economics Today--The Macro View</u>, p. 135.

proportionately with inflated real estate values, the realization of higher revenues lags behind the general rise in government costs in direct proportion to the interval at which property values are reassessed. He further emphasizes that the impact of inflation is immediate where the school expenditures are concerned, but may not be evident for several years on the revenue side of the ledger.<sup>1</sup>

Miller states that many school districts have been faced by a real financial pinch as inflation has caused the cost of schooling to rise at a much faster rate than property taxes.<sup>2</sup> A study by the National Education Finance Projects shows that 98 percent of local school district revenues collected in 1969 came from the property tax.<sup>3</sup>

The property tax issue is not a new issue to those familiar with public school finance, but some of the inherent problems are more pronounced during inflationary times as was pointed out by both Harris and Miller. DeYoung relates problems of financing public school education during the "depression years" which have relevance to the present finance problems. DeYoung said:

The depression reminded educators that some of the principal sources of school revenue are usually susceptible to fluctuations in business and economic conditions. From the revenue standpoint the decline

<sup>1</sup>Harris, "The Economics of Education," p. 1. <sup>2</sup>Miller, <u>Economics Today--The Macro View</u>, p. 134. <sup>3</sup>Johns, <u>Alternative Programs for Financing Education</u>, p. 61.

in property tax during the depression was the most significant. The problem of securing more stable revenue for schools is a relative one. No important tax source can be expected to show the same productivity at given rates under both adverse and favorable business conditions. A certain amount of change is inevitable.<sup>1</sup>

Even though DeYoung recognized the inevitability of change in revenue patterns due to economic trends, he was concerned that educators and government leaders do something to insure more stability in the tax structure.

While complete fixation of school revenue is impossible, nevertheless attempts should be made to stabilize it enough so that a child in school during an economic depression has as good an education as his brother or sister had during a prosperity era.<sup>2</sup>

Numerous conferences and groups of educators have attempted to resolve the problem which DeYoung alluded to in his writings; however, we again find education in another economic crisis which is placing restraints on school budgets and, in turn, the potential of educational opportunity for boys and girls is likely being placed in jeopardy.

U. S. Commissioner of Education Marland speaking at a Health, Education, and Welfare conference on issues in school finance stated that, "property tax revenues expand more slowly than the needs they finance."<sup>3</sup> A similar report given to HEW in 1973 by Mabel Walker states:

> <sup>1</sup>DeYoung, <u>Budgeting in Public Schools</u>, pp. 126-127. <sup>2</sup>Ibid, p. 127.

<sup>3</sup>S. P. Marland, "Issues in School Financing," (A discussion paper; DHEW/OE, Washington, D. C., 1972), p. 3.

There are five major defects in property taxation and all result in inequalities. They are: (1) assessment inequalities (2) inequities and inefficiencies resulting from fragmentation of local units (3) inequities resulting from exemptions and concessions (4) substantial failure to tax windfall and speculative gains in real estate transfers, and (5) the residual nature of the tax burden.

Ronald Crisman, in a recent article in <u>Compact</u>, states that "dependence on the local real property tax, which is widely viewed as regressive and inequitable limits the possibilities of a large increase in the revenue base."<sup>2</sup>

The problem of legislative mandates upon education for additional courses of study, for teacher salary increases which are not fully funded at the state level, and for other program additions and standards lays additional burdens upon the local administrator as he attempts to fit the revenue plan to the educational plan. As consideration is given to appropriation amounts for education at the state level, state educational planners tend to think that the amounts of funds for education are increasing at a rate which will solve the financial woes of the past; however, those who study school finance are aware that sufficient funds are still lacking. Saunders says:

What is happening is that elementary and secondary school budgets, while rising rapidly, are getting a smaller proportionate share of the total available dollar--at

<sup>&</sup>lt;sup>1</sup>Mabel Walker, "Problems and Issues of Property Taxation in School Finance Reform," (Report of discussion at HEW Conference, DHEW/OE, October 15, 1973), p. 10.

<sup>&</sup>lt;sup>2</sup>Ronald Crisman, "The Other Side of the Inflation Coin," <u>Compact</u>, November-December 1974, pp. 13-14.

least at the state level. State appropriations for elementary and secondary schools have risen 187 percent over the past decade (1963-1973), but at a decreasing rate over the last five years (71.9 percent).<sup>1</sup>

It would seem that additional funds from any or all sources could resolve the financial pinch now being felt by educators; however, as Crisman says, "large infusions of new funds from any sources are no longer real possibilities."<sup>2</sup>

The expenditures for education have increased sharply for a number of reasons throughout the years such as increased school enrollments, longer school terms, increased scope and quality of education, and rising costs. About 7 percent of the GNP [gross national product] is spent for education.3

The gross national product is just one indicator used by economists to determine how fast or slowly the nation is growing.

It is the value of all final goods and services produced during the period of question. The per capita GNP in the United States was \$2,115 in 1958 and \$3,578 in 1968.<sup>4</sup>

The growth of the GNP and the percentage spent for education reflect the fact that education is a big business. Education directly involves 23 percent of our American population.

<sup>1</sup>Charles B. Saunders, Jr., "Fewer Dollars, Shrinking Enrollments, Fixed Costs: New Educational Dilema," (paper presented to AASA, Atlantic City, New Jersey, 1974), p. 2.

<sup>2</sup>Crisman, "The Other Side of the Inflation Coin," p. 14.

3Chris DeYoung and Richard Wynn, <u>American Education</u>, (New York: McGraw-Hill Book Company, 1968), p. 443.

<sup>4</sup>Miller, Economics Today--The Macro View, p. 43.
Approximately \$56.5 billion was expended for public education in the United States during the 1973-74 school year.<sup>1</sup> During the 1973-74 school year \$436,678,932 was expended under the classification of the general fund for public school education in Oklahoma school districts.<sup>2</sup>

The number of elementary and secondary school students has decreased slightly since the 1971-72 school year; however, the number of secondary school students, generally considered higher cost students, has increased each year from 1966 to 1974. The number of classroom teachers has increased each year from 1967 to 1974.<sup>3</sup> The additional costs for personnel and services from this growth through the years have placed a greater burden on the taxpayer. This growth has not only been evidenced in Oklahoma but also throughout the United States.

Since 1960, education has been the fastest growing segment of the public sector. While a great part of this growth has been due to increasing school populations (enrollments rose by some 8.3 million pupils, 23 percent), the 237 percent increase in expenditures resulted for the most part from program enhancements, expanded capital facilities, and greater compensation for teachers and administrators. The pupil-teacher ratio, a popular measure of quality among educators, decreased from 25:1 in 1960 to 20:1 in 1973.<sup>4</sup>

<sup>1</sup>Harris, "The Economics of Education," p. 1.

<sup>2</sup>Oklahoma, Department of Education, "Annual Statistical Report," pp. 27-29.

<sup>3</sup>Oklahoma, Department of Education, "Comparative Statistics."

"Crisman, "The Other Side of the Inflation Coin," p. 13.

The additions of new programs, the specialists added to many staffs, the increased compensations for staff members, the better facilities, and the lower pupil-teacher ratios are generally considered as factors which bring improvement to the potential quality of education available to our children. The added services and, consequently, the increased costs per student have been an indicator of potential quality for several years.

#### Inflationary Effects on Education

A recent study of the relationship between per pupil expenditures and achievement gains in compensatory reading programs in Michigan show that both schools and per pupil expenditures make a significant difference. The study further points out the importance in planning to achieve the maximum usage of every available dollar.<sup>1</sup>

Mort reports that:

Every empirical study of the relationship between expenditure level and quality of education adds its bit to the presumption that the relationship is strong. Studies of the relationship in acceptably organized districts suggest that schools that spend more contribute more to the life-long personal happiness of their charges and to the social and economic strength of Americans as people.<sup>2</sup>

The crisis of spiraling costs for educational services and products threaten to undermine the progress which has been

<sup>1</sup>Roy K. Wilson, "Schools-and Money-Make a Difference, Study Says," <u>Education U. S. A.</u>, March 24, 1975, p. 1.

<sup>2</sup>Paul R. Mort, <u>The Foundation Program in State</u> <u>Educational Policy</u>, (Albany: New York State Education Department, 1957), p. 25. made to improve the quality of education. According to statistics released by the U. S. Department of Labor, the Consumer Price Index which measures the average price changes of goods and services usually bought by urban wage earners and clerical workers showed an increase month by month during the period of December 1973 through December 1974. The annual percentage rate of increase totaled 12.2 percent.<sup>1</sup> The taxpayers are reminded of the increasing CPI and the decreasing power of the dollars as a result. Inflation had been increasing at a rate of about 1 percent per year from 1867 to the 1960's at which time the rate made a substantial increase. The rate increased to approximately 2.7 percent per year during the period of 1960-1969. The U.S. Department of Labor. Bureau of Statistics, states that the purchasing power of the consumer dollar has decreased from an index rating of 1.127 in 1960 to an index rating of 0.648 in 1974 using the 1967 calendar year as a base year for comparison.<sup>2</sup> This indicates that the purchasing power of the dollar in 1974 had decreased to approximately half its value in 1960. A year by year average of the CPI for the period of 1972 through 1974 reveals the rate .799 in 1972, .752 in 1973, and .648 in 1974.<sup>3</sup>

<sup>1</sup>U. S., Department of Labor, "CPI Detailed Report for October 1974," (Washington, D. C. January 1975), p. 1. <sup>2</sup>Ibid, p. 10. <sup>3</sup>Ibid.

Each year Ben Brodinsky, consultant to the Educational Press Association of America, makes an unofficial selection for EdPress of the top education events of the year. This year Brodinsky selected seven events as exerting the most influence on schooling in 1974. Inflation heads Brodinsky's list as the event that most influenced education last year.<sup>1</sup>

The effects of inflation have been felt by schools in numerous ways according to recent newspaper, journal, and other media reports. A report in the <u>Daily Oklahoman</u> indicated that nationally the cost of school supplies is up by 65 percent since 1973.<sup>2</sup> Eileen D. Cooke, Associate Executive Secretary of the American Library Association, stated in her testimony to the Subcommittee on Labor recently that the price of essential books, filing records, magazines, and other library supplies have increased by 9 percent from 1973 to 1974 and 22 percent from 1972 to 1974.<sup>3</sup> A comparison of school bus list prices in the 1972-73 school term to the 1974-75 school term reflect a 26.11 percent increase on bus bodies and a 13.69 percent increase on school bus chassis.<sup>4</sup> According to

<sup>1</sup>Brodinsky, "Major Education Events of 1974," p. l.

<sup>2</sup>"Economic Uptrend Predicted," <u>Daily Oklahoman</u>, 24 January 1975, p. 11.

<sup>3</sup>Eileen D. Cooke, "Statement before Subcommittee on Labor-HEW Appropriations," (Washington, D. C., 20 March 1975) p. 15.

<sup>4</sup>Oklahoma, Department of Education, <u>Listing of School</u> <u>Bus Standards and Price Lists</u>, (Oklahoma City: State Department of Education, 1974).

a report compiled by the <u>Education Daily</u>, the average American public school student cost rose by 14.4 percent during the 1974-75 school term. The rise is attributed primarily to a 49 percent rise in heating costs, gasoline and transportation rising by 37 percent, and teacher's salaries rising by 14 percent.<sup>1</sup>

Representatives of post-secondary education pointed out some inflationary effects on their institutions to the U. S. Congress's Committee on Labor and Public Welfare on November 26 and 27, 1974. One of the representatives was Keith Spaulding, president of the Board of Directors of the Association of American Colleges. Mr. Spaulding's testimony revealed that inflation hits institutions of higher education with particular force because of their dependence on items increasing in cost at a rate greater than that of the general cost of living index--fuel, wages and salaries in the wake of the "freeze" years, periodicals, buildings and remodeling supplies, and interest rates. At the same time, inflation makes it harder for us to buy what we need, and it makes those to whom we try to "market" our offerings less able to purchase them as well as conscious of price differentials.<sup>2</sup>

<sup>1</sup>Emily Harris, <u>Education Daily</u>, (Washington, D. C., March 10, 1975), p. 5.

<sup>2</sup>Washington, D. C., Committee on Labor and Public Welfare, <u>Hearings Before the Subcommittee on Education of the</u> <u>Committee on Labor and Public Welfare</u>, (Washington, D. C., United States Congress 1975), p. 51.

In further testimony, Dr. Carl Fjellman, president of Upsala College, says that inflation is having an impact on his institution. His testimony reveals that the College is unable to meet the needs of faculty and staff for salary increases . . . actually froze all wages in 1973-74. He further reported the cost of keeping the College open increases every day through such factors as: (1) paper costs are spiraling up; (2) supply costs are increasing as fast as inflation; (3) food costs to resident students are increasing; and (4) utility costs doubled in one year.<sup>1</sup> Many of the problems revealed in these testimonies are not unique to higher education institutions and are likely being experienced by other educational institutions who must purchase the same types of goods and services.

A testimony given by Ben C. Sutton, business manager of Choawn College, indicates that this institution has experienced increases of 90 percent in social security, group hospitalization insurance by 57 percent, paper supplies by 93 percent, fuel and electricity by 137 percent to name a few common items purchased during the period of 1971 to 1974.<sup>2</sup>

These rapid increases in costs of services and materials are causing some schools to make budget and program

<sup>2</sup>Ben C. Sutton, "How Inflation Has Affected One College," <u>Southern Baptist Educator</u>, January 1975, p. 16.

<sup>&</sup>lt;sup>1</sup>Ibid, p. 133.

changes in an attempt to maintain a basic program. Walter Heller, Regents Professor of Economics at the University of Minnesota, stated in an interview with a member of the <u>Kappan</u> staff recently that "the most important single short-run thing that the federal government can do to ease educational finance problems is to improve economic health, so that the flow of revenues into state and local coffers will be restored."<sup>1</sup> However, as Crisman stated, large infusions of new funds from any sources are no longer real possibilities.<sup>2</sup> The prospect is that education, which accounts for some 40 percent of all state-level expenditures nationwide, will be living with austerity for a long time.

Robert Jacobson made a study of alterations schools are making in the U. S. as a result of inflation. Some of the changes he reported are: (1) innovation and experimentation are decreasing; (2) administrators are now asking, "Is it less expensive?" instead of, "Is it better?"; (3) buildings and books will have to last much longer; (4) the job market for teachers is getting tighter; (5) many taxpayers are so hard pressed to deal with inflation's effects on their own lives that they are not fully supporting education and the inflated costs of school needs; (6) some states indicate that they do

<sup>1</sup>Harold Shane, "Stagflation," <u>Kappan</u>, March 1975, p. 477.

<sup>2</sup>Crisman, "The Other Side of the Inflation Coin," p. 14.

not believe the full impact of inflation has been felt; (7) many schools are discussing and considering the inflation factor as a separate budget item. Jacobson further stated that in his study he found many states reporting no serious cutbacks as yet, but they do not expect new education programs to be established.<sup>1</sup> If educational institutions cannot get the money they need at least to stay even with inflation, this study seemed to indicate that they will have to change methodology and techniques to get more from the money available.

Jonathon Hoffman conducted a study for <u>School Manage-</u> <u>ment</u> to compare costs of instructional materials and equipment. He found that the costs of instructional materials and equipment increased by 17.9 percent from the 1972-73 school term to the 1973-74 term.<sup>2</sup>

A study conducted by research personnel for <u>School</u> <u>Management</u> publications revealed a number of budgetary changes during the 1973-74 school year. They reported that the total expenditures have increased by almost 15 percent; and, assuming half this increase is used to offset rising costs, a substantial real growth in appropriations has been made. Such an increase in expenditures may accurately reflect

<sup>1</sup>Jacobson, "Struggling With Inflation," p. 9-10.

<sup>2</sup>Jonathan Hoffman, "Spending for Instructional Materials and Equipment," <u>School Management</u>, October 1974, p. 10.

national expenditure patterns. During the 1971-72 and 1972-73 school years the Cost of Education Index showed decreases in the expenditure pattern when appropriations were adjusted for the effects of inflation.<sup>1</sup> It may very well be that some of the increased revenue is being consumed by items whose purchase was deferred during prior tight budget years.

The study by <u>School Management</u> further reported that program expansion has given way to a situation in which each program is questioned. In many districts there have been cutbacks in programs which have long been considered basic such as elementary music, art, and physical education. Budget makers throughout the country have wisely increased their allocation of funds for maintenance and operation. According to the report, fuel and utilities will rise at rates higher than those predicted by almost all administrators. In plant operations, appropriations were increased by 25 percent in 1973-74; and transportation appropriations were increased by 16 percent the same year.<sup>2</sup>

Fixed charges represent another budget area that has been hit by rapid increases. Since the 1967-68 school year, total costs have risen by about 80 percent while fixed charges have grown by almost 250 percent.<sup>3</sup>

lRobin Pollack, "What This Year's Cost of Education Index Shows," <u>School Management</u>, January 1974, p. 14. <sup>2</sup>Ibid, p. 15. 3<sub>Ibid</sub>.

James Harris recently stated in his testimony before the HEW Congressional Conference that we cannot "make up" for the hardships brought on schools by economic forces. Teachers live with the deprivations every day, and students will live with the results for the rest of their lives. Harris stated that more than 39 percent of the teachers surveyed by the NEA reported increases in class size, and more than 40 percent of the teachers indicated that they now have fewer teaching materials. Twenty-eight percent of the teachers indicated the elimination of programs, and also 26 percent report a reduction in special subject teachers.<sup>1</sup> Because of the inflation crisis, school districts are finding it necessary to allot an even greater portion of their budgets to noneducational, nonhuman expenditures such as fuel, construction, power, and high interest rates.

Inflated prices which schools must pay for various consumable products have eroded local budgets considerably, and pre-empted the use of new revenues merely to keep pace with rising costs. Since 1967, the wholesale price of fuel and power has increased by 110 percent; paper and paper products are up 48 percent; metal products are up by 74 percent; chemical products are up 43 percent; and transportation equipment up by 23 percent since December 1968. These are all basic costs over which local schools have no control.<sup>2</sup>

With the increased costs and the continued needs of service, the school district is faced with a choice of cutting back, securing more funds, or using up the surplus funds generally

> <sup>1</sup>Harris, "The Economics of Education," p. 3. <sup>2</sup>Ibid, p. 2.

needed to start operating early in the fiscal year. Most educators would agree that cutting back is false economy.

Inflation has been with us for some time and appears to be slowly easing, but some feel that a greater inflationary period is ahead. While the financial crisis created by inflation is present, students in Oklahoma continue to grow up and graduate from school. Some of us should ask ourselves if we are ready to say to these youth that we are sorry that education let them down, but they grew up during the period of inflation.<sup>1</sup>

Several states have recognized problems associated with their present finance structure and are attempting to make adjustments which will be advantageous during good and bad economic eras.

The U. S. Department of Commerce regularly issues reports which demonstrate the varying costs of a standardized 'market basket' of items purchased in regions throughout the United States. Upon occasion, a state is sufficiently complex geographically and diverse economically to contain cost of living differences within its own boundries. When it is possible to construct a valid cost of living index for regions within a state, these differences can be incorporated into a distribution formula simply in the form of a multiplier.<sup>2</sup>

A similar index might be necessary for the entire state during periods of rapid economic change.

<sup>1</sup>Tommy Fulton, "Inflation Keeps Going, Kids Keep Growing," <u>Oklahoma Teacher</u>, 28 February 1975, p. 2.

<sup>2</sup>James Guthrie, "Equity in School Financing," (Bloomington, Indiana: The Phi Delta Kappa Educational Foundation, 1975), p. 13-14.

Benson advocates that educators must accept the fact that we live in an inflationary economy. He reported that some students of finance proposed an absolute lid on high spending districts until all the rest of the districts in the state caught up with them. As inflation proceeds and as the lid on expenditures is maintained, the real value of school outlays per pupil in the high spending districts must fall. Generally, teacher's organizations will exert enough pressure on Legislatures and Governors to close the gap somewhat in a period of time; however, the higher the rate of inflation, the more quickly the gap will close. Taking it for granted that such a transition period would be a difficult time in any state's educational history so that the more quickly it is closed the better, we arrive at one of the few positive contributions inflation can make to our social life: we quicken the pace toward equity in education.<sup>1</sup>

The state of California provided \$28.9 million for inflation adjustments in the 1972-73 school year. The Act provided that the State Director of Finance would determine the inflation factor or operational index to be used to determine the amounts distributed to the districts.<sup>2</sup>

<sup>&</sup>lt;sup>1</sup>Charles Benson, "Equity in School Financing: Full State Funding," (Bloomington, Indiana: Phi Delta Kappa Educational Foundation, 1975), p. 14.

<sup>&</sup>lt;sup>2</sup>Doris Ross, "School Finance: A Survey of the States," (Denver: Education Commission of the States, 1974), p. 7.

Cost of living differentials have been developed and are currently in operation in funding each school district in Florida. Several other states are involved in the Florida study and may implement similar plans if Florida finds the success expected with the cost of living differentials formula.<sup>1</sup>

#### Summary

The review of the literature was somewhat limited due to the recency of the problem. It is apparent that extensive studies have not been conducted in the problem area at the present time. However, the materials available and surveyed brought attention to numerous problem areas relating to inflation's effects on education. The background literature evidences that problems in educational finance have existed for many years and that economic conditions greatly influence revenues supporting public education. It also informs educators that groups such as the states involved in the National Educational Finance Project are seeking alternatives to existing finance structures.

The articles and the analysis of statistical data reviewed are consistant in reporting the rapidly increasing costs of recent years and problems brought upon school budgets as a result. The prominence of the organizations that have studied the problems of inflation emphasizes the significance of the findings.

<sup>1</sup>Ibid, p. 15.

4

40

# CHAPTER III

#### METHODOLOGY

This study is designed to investigate the effect of inflation on public school education in Oklahoma. The study is designed to provide answers to the following questions:

(1) Has inflation in recent years produced negative changes in educational programs in Oklahoma?

(2) What is the nature of the changes, if any, in educational programs which administrators attribute to inflation?

(3) What actions are being taken by Oklahoma school administrators in their efforts to cope with inflation?

In order to answer the questions posed, the following hypotheses were posed to be tested for statistical significance.

- Hol There is no significant difference between school district budgeting priorities under current inflationary conditions and school district budgeting priorities prior to the inflationary period of 1972-1975.
- Ho<sub>2</sub> There is no significant difference between programming in local school districts during inflationary times and school district programming during the normal cost increase periods prior to the period of 1972-1975.

- Ho<sub>3</sub> There is no significant difference between consideration given to school district financial needs during inflationary periods and during normal cost increase periods prior to the period of 1972-1975.
- Ho<sub>4</sub> There is no significant difference in the effects of inflation on school districts among different sizes of school districts. (Large vs. medium, medium vs. small, large vs. small)

## Population and Sample

One hundred and sixty-eight public school administrators were asked to complete a 23-item questionnaire to determine their opinion relating to the effects of inflation on their local district. If they responded that inflation had had some effects on their local district, they then were asked what actions had been taken as necessary steps in coping with the problems created by inflation. One hundred and twenty-five of the districts surveyed were independent school districts. The remaining forty-three were dependent districts.

The school districts in the state were classified by geographical region and by size (ADA) within each region. The six geographical regions chosen were coincident with the Oklahoma Department of Tourism's designations of the six countries of Oklahoma.<sup>1</sup> The schools within each of the six

<sup>1</sup>Oklahoma, Department of Tourism, <u>Oklahoma!</u> State of <u>Many Countries</u>, (Oklahoma City 1975), pp. 6-7. <u>Red Carpet Country--Northwestern Oklahoma; Green</u> Country--Northeastern Oklahoma; Great Plains Country--Southwestern Oklahoma; Frontier Country--Central Oklahoma; Fun Country--South-Central Oklahoma; Kiamichi Country--Southeastern Oklahoma. regions were classified in three groups based on the average daily attendance of the district during the 1973-74 school term. Schools having an average daily attendance of 249 or fewer were classified as small; schools having an average daily attendance of 250-999 were classified as medium; and schools with an average daily attendance of more than 1,000 were classified as large. It was decided to include the two largest school districts in the state in the sample since their size is unique in comparison with other Oklahoma school districts. Every school in the state was identified with a size strata within one of the six regions.

The decision was made to randomly select 25 percent of the state schools in the interest of having an adequately large sample to survey. The next operation was to multiply 25 percent times the number of schools of each size within each region to determine the number of schools from that strata to be included in the sample. The results provided the following numbers of schools to be selected within each region and size grouping: Northwest, 12 small, 9 medium, and 3 large; Southwest, 12 small, 12 medium, and 3 large; Central, 12 small, 12 medium, and 7 large; Southeast, 7 small, 8 medium, and 3 large; Northeast, 19 small, 18 medium, and 10 large; South-Central, 7 small, 9 medium, and 3 large.

Random numbers were assigned to each school district within a particular region and size classification. Random numbers were selected and assigned from Table A of <u>Statistical</u>

<u>Methods in Education and Psychology</u>.<sup>1</sup> The sample, therefore, included seventy-one small schools, sixty-eight medium size schools, and twenty-seven large schools plus the two districts having the largest average daily attendance.

#### Instrumentation

In order to gather information needed to answer the questions relevent to this study, it was necessary to devise an instrument in which respondents could describe the effects of inflation on their local school in terms of program and budget changes. The questionnaire was based upon extensive reading of literature pertinent to school finance, programming, budgeting, and studies of inflationary effects on school districts. Pertinent concepts, opinions, and actions were thus identified. These concepts, opinions, and actions were then used to formulate the items for response in the survey questionnaire.

The survey instrument contained twenty items requiring a "yes" or "no" response. It also contained three open response items which solicited responses indicating changes made in budgeting as a result of inflation, effective procedures for coping with inflation, and suggested actions for the State Education Agency which in their opinion would assist local schools in coping with inflation.

<sup>1</sup>Gene V. Glass and Julian C. Stanley, <u>Statistical</u> <u>Methods in Education and Psychology</u>, (Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1970), pp. 510-512.

A budget table of the most common public school expenditure classifications was also included in the survey. The respondents were asked to compare numbers of staff members in those classifications requiring staff and the amount of expenditures in each classification for the years of 1972-73 and 1974-75 by indicating that more, less, or no change in staff and expenditures occurred from 1972-73 to 1974-75.

The process of validating the instrument involved assistance from educators and specialists in the State Department of Education. The initial instrument was drafted and submitted to this committee of specialists. Their reactions were submitted in writing and were taken into account when revising the instrument. The revised instrument was submitted to the committee for their comments. The instrument was discussed with the entire committee of research specialists for their final comments regarding the validity and reliability of the items selected for the instrument. The chairman of the researcher's Advisory Committee was consulted during the development of the instrument, and his comments were considered in developing the final instrument. The instrument was also submitted to a research professor for his evaluation of the validity and reliability, and his comments were incorporated along with those previously mentioned in order to assure that the instrument was valid and would measure what it purported to measure. Koenker lists the procedure of constructing an instrument and sending it to experts in the field for their opinions

and then revising it accordingly as an acceptable procedure for validating an instrument. He further states that a valid test is usually reliable.<sup>1</sup>

## Research Design

The research design chosen for this investigation was a survey-type study supplemented by additional data from other sources. The research design included the plan, structure, and the strategy of the investigation. This included identifying the problem, concepts relating to the problem which will be answered, construction of the instrument to seek answers, selection of respondents, collection and compilation methods, and the methods of data analysis.

Survey research is considered to be a branch of social scientific research which is relatively new but is very useful to the researcher who is interested in the accurate assessment of the characteristics of whole populations of people. The social scientific nature of survey research is revealed by the peculiarity of its variables, which can be classified as sociological facts, opinions, and attitudes. The survey researcher is interested in what people think and what they do.<sup>2</sup>

Robert H. Koenker, <u>Simplified Statistics</u>, (Bloomington, Illinois: McKnight and McKnight Publishing Company, 1961), p. 65.

<sup>&</sup>lt;sup>2</sup>Fred N. Kerlinger, <u>Foundation of Behavioral Research</u>, 3d ed., (New York: Holt, Rinehart, and Winston, 1973), pp. 410-411.

A research design serves two basic purposes: (1) it provides answers to research questions posed by the investigation, and (2) it controls external sources (independent variables) of variation. In other words, it is through the design of the study that research is made effective and interpretable. Kerlinger made the following statement in regard to research and evaluation design's contribution to effectiveness and to interpretation:

. . . How does design accomplish this? Research designs set up the framework for "adequate" tests of the relations among variables. The design tells us, in a sense, what observation (measurements) to make, how to analyze the quantative representations (data) of the observations. Strictly speaking, design does not "tell" us precisely what to do, but rather suggests the directions of observation-making and analysis, how many observations should be made and which variables (independent) are active variables and which are assigned. A design tells us what type of statistical analysis to use. Finally, an adequate (proper for the particular situation) design outlines possible conclusions to be drawn from the statistical analysis.<sup>1</sup>

In addition to the survey data collected, numerous additional reports and records were examined and supplementary data were collected. School district expenditure reports for 1971-72, 1972-73, and 1973-74 were secured from records on file with the State Department of Education.<sup>2</sup> These data were carefully reviewed and analyzed to determine the percentage of expenditures made by public schools for the various expenditure functions.

<sup>1</sup>Ibid, p. 301.

<sup>2</sup>Oklahoma, Department of Education, (Unpublished Data Center Records for FY 72, FY 73, and FY 74). Statistical data revealing the number of students in average daily attendance during the 1971-72, 72-73, and 73-74 school terms were collected. Also, the number of certified teachers employed during this three year period was obtained from reports on file at the State Department of Education. Data were collected to ascertain the total school district expenditures during the three year period (1971-74), and the amounts of surplus funds were also obtained from State Department of Education records.<sup>1</sup> The Annual Statistical Reports of the State Department of Education's Finance Division were used to obtain the school district valuations and millages levied during the period. The reports were also used to obtain the total current expenditures of the school districts in the sample for the years covered in the study.<sup>2</sup>

Additional expenditure data were acquired from <u>School</u> <u>Management</u> and from Data Market Retrieval, a commercial firm which specializes in data collection and analysis.<sup>3</sup>

# Choice of Statistics

The responses to the survey questions required an opinion or verification of an action taken by the local schools

<sup>1</sup>Ibid.

<sup>2</sup>Oklahoma, State Department of Education, <u>Annual</u> <u>Statistical Report of Finance Division</u>, (Data compared from FY 71, FY 72, FY 73, and FY 74 reports).

3Rubin Pollack, "What This Year's Cost of Education Index Shows," pp. 16-20.

as a result of inflation. The questions were designed so that only a "yes" or "no" response was required. The responses were compiled in frequency tables according to their relation to the various hypotheses stated in Chapter 1.

Kerlinger commends the convenience of cross-partitioned variable analysis when data are compiled by frequency tables or percentages. He says that the cross partition method of analysis is a common form of analysis that can be used with almost any kind of data; however, its principal use is with nominal data.<sup>1</sup> The cross partitions can also be used to organize data in convenient form for statistical analysis. The organized data can then be analyzed by using the Chi Square test to determine how many times the discrepency, if any, would happen by chance.

The level of significance is chosen somewhat arbitrarily to compensate for the occurances by chance.<sup>2</sup> The .05 level of significance is quite common in educational research studies and was chosen for this study.

# Tests and Response Items

Several response items contained in the survey instrument were designed to provide information related to each stated hypothesis. The response items whose composite responses

> <sup>1</sup>Kerlinger, <u>Foundations of Behavorial Research</u>, p. 160. <sup>2</sup>Ibid, p. 169.

were used in the statistical test of significance for each hypothesis are illustrated in Table 1. Multiple response items for each hypothesis reduces the chance of inadvertant marking errors as well as attempts to identify the variety of items related to the particular hypothesis.

## TABLE 1

STATISTICAL TESTS USED IN TESTING HYPOTHESES

Hypothesis	Statistical Test Used	Question No. Responses to Hypothesis
Hol	Chi Square	3-5-8-9-10-14-16- 18-20
Ho2	Chi Square	6-7-12-13-15-17-18-19
Ноз	Chi Square	5-7-13-15-16-19
Ноц	Chi Square	<ul> <li>(a) Responses to 1 and 9 Large vs. responses to 1 and 9 Medium</li> <li>(b) Responses to 1 and 9 Medium vs. responses to 1 and 9 Small</li> <li>(c) Responses to 1 and 9 Large vs. responses to 1 and 9 Small</li> </ul>

The series of questions which provided responses for testing hypothesis one included the following concepts: (1) improved efficiency resulting from inflation, (2) awareness of staff to need for setting priorities, (3) full impact of inflation has not been felt, (4) inflation is a problem, (5) relation of budgetary increases and loss of purchasing power, (6) rate of increase in district resources is less than 12 percent inflation rate, (7) inflation being considered as a factor in the budget, (8) the burden on the budget as a result of increased salaries, and (9) anticipation of decreasing surplus funds.

The series of questions which provided responses for testing hypothesis two included the following concepts: (1) reduction of innovation and experimentation, (2) predict more failure of tax levies for education, (3) less teacher turn-over, (4) closer evaluation of programs and essential components of program, (5) delayed building programs, (6) reduction in extra-curricular activities, (7) programs reduced to keep salaries up, and (8) changes in staffing patterns being considered.

The series of questions which provided responses for testing hypothesis three included the following concepts: (1) more awareness of personnel to the need for setting priorities, (2) more reluctance of taxpayers in passing tax levies for education, (3) closer evaluation of essential school programs and services, (4) a delay in building programs, (5) including the inflation rate as a factor in budgeting, and (6) the consideration of alternative staffing patterns to cope with inflation.

The two comprehensive questions which provided responses for testing hypothesis four included the following broad

categories: (1) inflation has affected the quality of education because of cutbacks and other changes, and (2) inflation is causing budgeting and program problems for the local school district.

#### Summary of Methods and Procedures

The survey method was used to collect information from local school administrators in Oklahoma relating to their opinions about the inflationary effects on education and if their district had taken any actions as a result of inflation in the areas of programs and budgeting changes. The data collected were used to analyze the four hypotheses stated in Chapter 1. The results of the statistical calculations made served as a basis to draw inferences regarding the effects of inflation in other school districts in the state.

Chapter IV contains the results of the statistical analysis. The results of testing the stated hypotheses are proceded by the descriptive data associated with each hypothesis tested. Additional data analyzed in connection with the survey data collected are described in this section also.

# CHAPTER IV

## ANALYSIS AND INTERPRETATION OF DATA

This chapter contains the analysis and interpretation of the data taken from the survey questionnaires. The respondents were the public school administrators selected for the sample.

The major questions to which this research effort was directed were as follows:

- (1) Has inflation in recent years produced negative changes in educational programs in Oklahoma?
- (2) What is the nature of the changes, if any, in educational programs which administrators attribute to inflation?
- (3) What actions are being taken by Oklahoma school administrators in their efforts to cope with inflation?

## Returned Questionnaires

The number of local school administrators selected in each strata and the number who returned the completed survey instrumentare contained in Table 2. The percentage of return by strata is also given in this table.

Since the period under study covered more than one year, the respondents were asked to indicate the number of years in their present positions. An analysis of the responses shows that the respondents have been in their present positions from a minimum of one year to a maximum of twenty-six years with the median tenure being 3 1/2 years. This lends strength to the responses since this median tenure period is approximately the same as the period with which this study was concerned.

#### TABLE 2

	Small			Medium				Large	
Region	Mail.	Ret'd	%	Mail.	Ret'd	%	Mail.	Ret'd	%
N.W.	12	7	58	9	8	89	3	3	67
s.W.	12	6	50	12	9	75	3	3	100
с.	12	7	58	12	10	83	7	6	86
S.E.	7	2	29	8	5	63	3	2	67
N.E.	19	12	63	18	11	61	10	7	70
S.C.	7	6	86	9	7	78	3	2	67
Totals	69	40	58	68	50	74	29	22	76
Total M	lailed:	168 Tc	tal	Returne	ed: 112	Per	cent Re	eturned	:67%

# NUMBER AND PERCENT OF QUESTIONNAIRES MAILED AND RETURNED

The questions comprising the survey instrument were designed to solicit a response to particular changes in budgeting or programming which in the opinion of the local school administrator were the result of inflation. The specific concepts included in each of the following series of questions are enumerated in Chapter 3. Questions 3, 5, 8, 9, 10, 14, 16, 18, and 20 were designed to measure opinions relating to school district budgeting changes as a result of inflation. Questions 6, 7, 12, 13, 15, 17, 18, and 19 were designed to measure opinions relating to school district program changes as a result of inflation. Questions 5, 7, 13, 15, 16, and 19 were designed to measure the opinions of local school administrators regarding the prioritizing of needs in inflationary times as opposed to normal cost periods. Questions 1 and 9 were designed to measure the composite effects of inflation on school districts.

The responses to each series of questions listed in the preceding paragraph were summed. The statistical significance of the responses in relation to Ho<sub>1</sub>, Ho<sub>2</sub>, Ho<sub>3</sub>, and Ho<sub>4</sub> was tested.

## Results of Hypothesis Testing

Results of Testing Ho1

The proposition tested in hypothesis 1 was as follows:

Ho<sub>1</sub> There is no significant difference between school district budgeting priorities under current inflationary conditions and school district budgeting priorities prior to the inflationary period of 1972-1975.

Table 3 contains data relating to responses to the items having to do with Ho<sub>1</sub>. It also provides information as to the Chi Square test of significance. TABLE 3

RESPONSES FOR TESTING Ho,

Yes	No	Significance Level	Chi Square Table Value	Computed Value
827	152	₽⊲.05	3.841	232.93

The Chi Square test of significance was applied to the responses which indicated opinions related to the concepts included in the questions listed in Table 1 in Chapter 3. The total responses to this series of questions were significant at the .05 level and Ho<sub>1</sub> was rejected. The specific concepts included in this series of questions were: (1) improved efficiency resulting from inflation, (2) awareness of staff to need for setting priorities, (3) full impact of inflation has not been felt, (4) inflation is a problem, (5) relation of budgetary increases and loss of purchasing power, (6) rate of increase in district resources is less than the 12 percent inflation rate, (7) inflation being considered as a factor in the budget, (8) the burden on the budget as a result of increased salaries, and (9) anticipation of decreasing surplus funds.

# Results of Testing Ho2

The proposition tested in hypothesis 2 was as follows: Ho<sub>2</sub> There is no significant difference between programming in local school districts during inflationary times and school district programming during the normal cost increase periods prior to the period of 1972-1975.

Table 4 contains data relating to responses to the items having to do with Ho<sub>2</sub>. It also provides information as to the Chi Square test of significance.

#### TABLE 4

# RESPONSES FOR TESTING Ho2

Yes	No	Significance Level	Chi Square Table Value	Computed Value
565	245	P⊲.05	3.841	126.4

The Chi Square test of significance was applied to the responses which indicated opinions related to the concepts included in the questions listed in Table 1 of Chapter 3. The total responses to the series were significant at the .05 level, and Ho<sub>2</sub> was rejected. The specific concepts in the series of questions were as follows: (1) reduction in innovation and experimentation, (2) predict more failure of tax levies for education, (3) less teacher turn-over, (4) closer evaluation of programs and essential components of program, (5) delayed building programs, (6) reduction in extra-curricular activities, (7) programs reduced to keep salaries up, and (8) changes in staffing patterns being considered. The total responses reflect the significance of the changes in programs as a result of inflation. The proposition tested in hypothesis 3 was as follows:

Ho<sub>3</sub> There is no significant difference between consideration given to school district financial needs during inflationary periods and during the normal cost increase periods prior to the period of 1972-75.

Table 5 contains data relating to responses to the items having to do with Ho<sub>3</sub>. It also provides information as to the Chi Square test of significance.

#### TABLE 5

# RESPONSES FOR TESTING Ho3

Yes	No	Significance Level	Chi Square Table Value	Computed Value
530	130	P ⊲.05	3.841	242.4

The Chi Square test of significance was applied to the responses which indicated opinions related to the concepts included in the questions listed in Table 1 of Chapter 3. The total responses were significant at the .05 level; therefore,  $Ho_3$  was rejected. Concepts included in this series of responses are: (1) more awareness of personnel to the need for setting priorities, (2) more reluctance of taxpayers in passing tax levies for education, (3) closer evaluation of essential school programs and services, (4) a delay in building programs, (5) including the inflation rate as a factor in budgeting, and

(6) the consideration of alternative staffing patterns to cope with inflation. The total responses reflect the significance of changes in prioritizing district needs and expenditures as a result of inflationary conditions.

Table 6 contains data relating to the total responses, regardless of school size, to the items being used in the test of  $Ho_4$ . It also contains information as to the Chi Square test of significance.

TA	BL	E	6
_			_

Yes	No	Significance	Chi Square	Computed
		Level	Table Value	Value
173	55	P ⊲.05	3.841	61.6

RESPONSES TO CONCEPTS TESTED BETWEEN DIFFERENT SCHOOL SIZES

The total responses were significant at the .05 level. Tables 7, 8, and 9 contain data relating to questions 1 and 9 which were collected by school size to be used for testing Ho<sub>4</sub>. The concepts which are imbedded in these two questions are numerous but may be summarized in two categories. Those two categories are: (1) inflation has affected the quality of education because of cutbacks and other changes, and (2) inflation is causing budgeting and program problems for local school districts. A related concept was asked in question 2. Administrators were asked if inflation would affect the quality of education in their local district if the rate of increase continues as it has been, and the responses revealed that 99 percent responded yes and 1 percent responded no.

## Results of Testing Hou

The proposition tested in hypothesis 4 was as follows:

Hoų There is no significant difference in the effects of inflation on school districts among different sizes of school districts. (Large vs. medium, medium vs. small, large vs. small)

The data collected from responses to questions 1 and 9 were summed by the school size classification. The data were then analyzed according to the relations of the school sizes as: large vs. small; medium vs. small; and large vs. medium to determine if a significant difference existed among the school sizes.

The first test compared responses between large and small size schools. The data are contained in Table 7.

# TABLE 7

## LARGE VS SMALL

Size	Yes	No	Significance Level	Chi Square Table Value	Computed Value
Large Small	36 57	8 22	P 4.05	3.841	0.38

The second test compared responses between the medium and small size school. The data are contained in Table 8.

m	۸	Th I	Τ.	17	0
$\mathbf{T}$	А	0	чĿ	Ľ	0

MED]	LUM	VS	SMALL

Size	Yes	No	Significance Level	Chi Square Table Value	Computed Value
Medium Small	80 57	25 22	P∢.05	3.841	0.38

The third test compared responses between the large and medium size schools. The data are contained in Table 9.

TABLE 9

LARGE VS MEDIUM

Size	Yes	No	Significance Level	Chi Square Table Value	Computed Value
Large Medium	36 80	8 25	P⊲.05	3.841	0.569

The Chi Square test of significance was applied to each of the three school size comparisons as illustrated in Tables 7, 8, and 9. The results of the Chi Square test show that there is no significant difference in the overall effects of inflation among the different size school districts in Oklahoma; therefore, Ho4 was accepted.

A further analysis of the data collected by response to each item of the questionnaire brought out some of the areas which in the opinions of administrators were of the greatest concern and were most affected by inflation. Some of the specific concerns are as follows: Some 94 percent of the respondents anticipated that their districts' reserve funds will be less than they had for the past year. A study of the expenditure and budget data for sample schools reflected that 45 percent of the districts had less surplus funds in FY 74 than they had the previous year. One may conclude that decreasing surplus funds are likely to present more severe financial problems a year or so hence if inflation continues to eat away the surplus funds which many districts rely heavily upon to meet financial obligations near the beginning of each fiscal year.

Eighty-eight percent of the respondents indicated that inflation is a problem in their school district. Eighty-six percent indicated that the rate of increase in district revenue is less than the rate of inflation thus causing them to draw on surpluses, drop staff, delete programs, or make other changes to compensate for the difference. Eighty-six percent of the respondents indicated that they do not believe the full impact of inflation has been felt. There was strong indication (86%) that administrators believe that school tax levies will become more difficult to pass if inflation continues.

Some 81 percent of the respondents indicated that they and their staff are presently doing careful evaluation of present programs and discussing which programs should be considered as the high priorities and which programs or services may be deleted in order to keep a balanced budget and a reasonably sound program. Ninety-six percent of the respondents indicated that inflation is being considered as a factor in preparing their FY 76 budgets. Eighty-five percent of the respondents indicated that salary increases were requiring increasingly higher percentages of their total budgets thus causing decreases in other areas such as instructional supplies. Eighty-six percent of the administrators indicated that they will consider changing staffing patterns to cope with the salary problem if inflation continues. Some 92 percent of the administrators indicated that their school district resources are increasing at a slower rate than the 12 percent inflation rate of 1974.

Another finding which indicated the negative effects of inflation on education is the reduction of innovation and experimentation in educational programs. The reductions in these two areas were reported by 82 percent of the respondents.

In reply to the question of local education expenditures being a contributing factor to inflation, 79 percent did not concur. One of the positive effects noted in the responses is the fact that 84 percent of the administrators indicated that they and their staff were more aware of the need for setting priorities in programs and in expenditures.
Table 10 contains some comparative data relating to the ADA, number of teachers employed, total general fund expenditures, and surplus funds in sample schools. The data reflect the percent of increase or decrease in each category for schools in each size and region of the sample as well as the total percentage change in each category by region. It should be noted that the ADA change is very small in every region and every school size and that the number of teachers increased in most of the regions which indicates that the levels of program services and staff members showed a slight increase from FY 73 to FY 74.

It should also be noted that general fund expenditures increased in every school size and region in the sample. There was an increase in the amount of surplus funds in nine of the school size and region groupings; however, as mentioned previously, 45 percent of the individual districts had a decrease in surplus funds, and 94 percent of the respondents to the survey believed that their surplus accounts will drop more this year than they did in FY 74. It should be noted that the majority of the districts in Oklahoma are in the small and medium categories, and the majority of the schools in the survey sample were from these two categories. The budgets in these schools are substantially less than most of the larger school districts' budgets; therefore, a small increase in surplus in a large district could have offset several decreases in small and medium size budget surpluses when the percent of increase was computed.

б4

## DATA FOR SAMPLED SCHOOLS LISTED BY REGION AND SIZE CLASSIFICATION AND SHOWING PERCENT INCREASE OR DECREASE FROM FY 1973 TO 1974

	A	DA	Numb Teac	er of hers	Tota Fu Expe	l Gen nd ndi.	Surplus		Total Resources	
	% : Inc	% Dec	% Inc	% Dec	% Inc	% Dec	% Inc	% Dec	% Inc	% Dec
N.W. Small Medium Large	.1 <u>3.7</u>	1.5	11.8	1.9	20 3 12		30	11 25	10 8 8	
TOUAL	<u> </u>	2.0			<u> </u>		<b> </b>	2.0	0.2	
S.W. Small Medium Large		.4 1.1 2.7	3.2 0.3	0.7	12 8 10	·	30	8 1	8 6 12	
<u>Total</u>		1.8	0.2		9.8	والواري والمتعادين والم	5.3		9.1	د انبو وجنعتمان وم
S. C. Small Medium Large	1.8	2.8 5.0	0.0 5.7	5.4	14 14 6		30 2	12	10 16 5	
<u>Total</u>		2.2		1.1	9.6		9.8		9.2	
C. Small Medium Large		2.3 .9 5.2	1.0 8.6 1.3		7 8 8		25	1	6 11 8	
TOTAL	<b>_</b>	4.9	<u> </u>		1.0		0.2		0.7	
S. E. Small Medium Large	.5	.7 1.0	3.5 2.8 <u>3.7</u>		5 9 11		38 28 3		9 11 10	
TOLAT	╉	0.0	- 3.3		1 <u>2.c</u>		H0.2		TTO . C	
N. E. Small Medium Large	0.1	1.0	7.8 1.3	4.2	16 18 13		37	19 	11 18 10	
TOTAL		<u> </u>	1.0		132		<u> </u>	75.2	TO 8	
Grand Total:		2.9	2.0		10		5.4		11	

A study of the total resources in the districts surveyed indicated that from FY 73 to FY 74 there was an 11 percent increase. The inflation rate was approximately 9.8 percent during this same period of time; therefore, very little resource growth was actually realized.

#### Analysis of Open Response Items

In addition to the closed response items in questions 1-20, three open response items were included in questions 21, 22, and 23. Table 11 contains the common responses to question 21 as well as the regions and school sizes making the responses. The most pronounced changes in budgeting indicated in Table 11 are: (1) reduction in teaching supplies, (2) reduction in maintenance, and (3) more prioritizing of purchases.

Table 12 contains information that illustrates the most common responses to question 22 which asked for the most effective procedures that had been found to cope with inflation. The most pronounced actions were as follows: (1) re-evaluation of spending priorities, (2) greater accountability of funds, (3) being conservative with supplies, and (4) reduction of purchases. It should be pointed out that these are not necessarily negative practices provided that the district has sufficient funds to plan an effective education program and implement the plan.

Table 13 illustrates the responses to question 23. This question asked for suggestions that the State Department

# COMMON RESPONSES TO QUESTION 21 LISTED BY REGION AND SCHOOL SIZE

Infl	Inflation is responsible for the following changes in budgeting in		SW	1		SC	;		С			S	E		NI	E		NW
my system:		S	М	L	S	M	L	S	М	L	S	М	L	S	М	L	S	ML
1. 2. 3. 4. 5.	Reduction in maintenance personnel Greater portion of budget in salaries Reduction of teaching supplies Reduction of maintenance Increased amount spent in plant operation	x	x x x x	X X X X X X	x x x	x x	x x x	x x x	x x x x x x	x x	x	x x	x	x x x x	x x x	x x x	x x	x x x x
6. 7. 8.	Reduction in teaching staff Reduced transportation services Reduced extra-curricular	x x	x		х	x	x		X		÷	X X			X X			X X
9. 10. 11.	Activities More prioritizing of purchases Changing staffing patterns Buying quantities of materials at reduced rates	X X X	X			x x			x	x x	x x		X	x x	x x	x x	х	X X X X
12. 13. 14. 15.	Hiring less experienced teachers More of budget in transportation Less budgeted for capitol outlay Increased spending for fixed	x			X X	X X X X		x	X X X		x			x x	x	X X X	х	X X
16. 17.	charges Delayed building programs Deleting some subjects with small enrollment	x							X	x		X X		x	x	x		хх
18. 19. 20.	Larger class sizes Less surplus funds Less innovation	x			X		х		x	x x	x			x	X X	X X		x

.

# COMMON RESPONSES TO QUESTION 22 LISTED BY REGION AND SCHOOL SIZE

The shan	The most effective procedures or changes that our school has found to		SC	С	SE	NE	NW	
cope	with inflation are:	SML	SML	SML	SML	SML	SML	
1.	Re-evaluation of spending practices	X X	хх	XXX	X X X X	x	X X X X X	
2. 3. 4.	Reduction of personnel Being conservative with supplies	X X X X X X X X	X X X X X X	X X X X X X	x x x x	X X X X X X X X X	X X X X X X X	
5.	Reduction of purchasing Reduction of "special" high- cost programs	X X X X X	X X	XXX	XXXX	XXX XX	X X	
7. 8. 9.	Reduced activity trips Reduced transportation services Sharing textbooks with other	x x	x x	Х	X X	X X	X X	
10. 11.	Reducing level of maintenance Requiring extra-curricular activities to support themselves	x		x x		x x	x x	
12.	Reduction in capital outlay			ХХ			Х	

## COMMON RESPONSES TO QUESTION 23 LISTED BY REGION AND SCHOOL SIZE

\_\_\_\_\_

		<u></u>					
The for	The following actions are suggestions for the State Department of Education which will assist local school		SC	с	SE	NE	NW
districts cope with the proglem of inflation		SML	SML	SML	SML	SML	SML
1.	Support school district reorganization	x			x		
2.	Increase state aid for matching fixed charges	x x x	x	хх	ххх	ххх	ххх
3. 4.	Discourage mandated programs Special allowances for rapid increases in costs equal to inflation rate	x x X	x x x	X X X X	x x x x	хх	XX XX
5.	Reduction in number of inter- scholastic activities	х			х		х
6.	Establish central purchasing plan for schools	х	хх	хх	х	ххх	ХХ
7.	Support equalization of property taxes	x		хх			хх
8.	Encourage fully-funded pay raises	х		хх	X	ххх	ххх
9.	Suggest funding on number of teachers	хх					
10.	Support full funding of all legislation	Х	ххх	ххх	хх	ххх	x x x

of Education might consider in an effort to assist local school districts in coping with the problem of inflation. The most common responses noted were: (1) increase state aid for matching fixed charges, (2) discourage mandated programs, (3) special allowances for rapid increases in costs equal to the inflation rate, (4) seek to establish a central purchasing plan for public schools, and (5) support full funding of all legislation.

#### Supplementary Data From Survey

In addition to the 20 closed response questions and the three open response items, the survey instrument included a table of common budget items to which the administrators were asked to make two responses to each item. One response was to indicate the relationship of expenditures for that item in FY 75 with what it was in FY 73. The second response was to indicate the relationship of the number of staff members needed in that budget item in FY 75 with the need in FY 73. Table 14 contains the responses to some of the most common items where change was noted by the small schools. The table contains information which shows the percentage of schools responding to the survey who indicated an increase, a decrease, or no change for a particular budget item. Table 15 contains the same illustrative data for medium size schools, and Table 16, the large size schools. Some did not respond to certain items because they had no funds or personnel assigned to those budget classifications. The total number who responded to

# PERCENTAGE OF SAMPLE SCHOOLS REPORTING INCREASED EXPENDITURES, DECREASED EXPENDITURES, OR NO CHANGE IN EXPENDITURES FOR SELECTED BUDGET ITEMS FROM FY 1973 TO FY 1975

Cl	Budget assification	Increased Expend.	Decreased Expend.	No Change	Number Responding
100	Travel	53%	26%	21%	19
200	Textbooks	76	10	14	21
200	Teaching Supplies	83	4	13	23
500	Replacement of Vehicles	79	16	5	19
600	Utilities	100	0	0	23
600	Operation Supplies	95	0	5	22
700	Replacement of Equipment	82	17	1	22
700	Building Repair	77	9	14	22
800	Social Security	80	0	20	20
800	Fringe Benefits	56	6	38	16
900	Supplies	76	5	19	21
900	Travel	70	10	20	20
900	Other	71	12	41	17
1200	Buildings	47	12	41	17
1200	Equipment	55	20	25	20

.

School Size: Small

## PERCENTAGE OF SAMPLE SCHOOLS REPORTING INCREASED EXPENDITURES, DECREASED EXPENDITURES, OR NO CHANGE IN EXPENDITURES FOR SELECTED BUDGET ITEMS FROM FY 1973 TO FY 1975

## School Size: Medium

C	Budget Classification	Increased Expend.	Decreased Expend.	No Change	Number Responding
100	Travel	50 <b>%</b>	27%	23%	30
200	Textbooks	76	7	17	29
200	Teaching Supplies	66	24	10	29
500	Replacement of Vehicles	81	10	9	26
600	Utilities	89	3	8	28
600	Operation Supplies	86	0	14	28
700	Repl <b>a</b> cement of Equipment	83	10	7	29
800	Social Security	97	0	3	29
800	Fringe Benefits	70	7	23	28
900	Supplies	71	11	18	28
900	Travel	64	14	22	28
900	Other	60	12	28	25
1200	Buildings	75	21	4	28
1200	Equipment	79	18	3	28

.

## PERCENTAGE OF SAMPLE SCHOOLS REPORTING INCREASED EXPENDITURES, DECREASED EXPENDITURES, OR NO CHANGE IN EXPENDITURES FOR SELECTED BUDGET ITEMS FROM FY 1973 TO FY 1975

## School Size: Large

C	Budget Classification	Increased Expend.	Decreased Expend.	No Change	Number Responding
100	Travel	55%	27%	18%	11
200	Textbooks	83	17	0	12
200	Teaching Supplies	58	25	17	12
500	Replacement of Vehicles	83	8	8	12
600	Utilities	91	0	9	11
.600	Operation Supplies	83	8	8	12
700	Replacement of Equipment	82	18	0	11
700	Building Repair	75	17	8	12
800	Social Security	100	0	0	12
800	Fringe Benefits	92	8	0	12
900	Supplies	73	9	18	11
900	Travel	64	18	18	11
900	Other	70	10	20	10
1200	Buildings	67	33	0	12
120 <b>0</b>	Equipment	75	25	0	12

each item is listed in the right-hand column of each of the three tables.

#### Supplementary Data

Data indicating total state school resources, total state school district valuations, total state level, local level and federal level appropriations, and total state schools' surplus funds were collected from State Department of Education records. These data have been tabulated and are presented in Tables 17-25.

The data in Table 17 indicate the total of the property valuation of all school districts in the state of Oklahoma and the percent of increase from FY 71 through FY 74. The average rate of increase of property valuation for the period is 6.77 percent. The average rate of inflation during this period was approximately 5.8 percent. The growth rate represented in this comparison illustrates that the tax base growth has not kept up with the growth rate of inflation as it affects goods and services to be purchased from the proceeds of millages levied on the tax base.

The data in Table 18 indicate the total of all revenues to all state school districts for the period of FY 71 through FY 74 and the percentage of change from each preceding year in that period. The average rate of revenue growth from all sources was approximately 7.9 percent. This rate is somewhat less than the 12 percent inflation rate of 1974, and it should be noted that much of the increase was appropriated to take

## TOTAL STATE SCHOOL DISTRICT PROPERTY VALUATION

School Year	\$ Amount	% Change From Preceding Year	Inflation Rate
70-71	\$3,665,785,809		
71 <b>-7</b> 2	3,923,053,356	7.0%	8.8%
72-73	4,141,854,992	5.5	5.6
73-74	4,411,743,890	6.5	<b>9.</b> 8
Total Chan 20.3 + 3 = Average In	nge from 70-71 to 5.77% Per Year C Aflation Rate = 5.	73-74 = 20.3% Change 8%	

## TABLE 18

TOTAL STATE SCHOOL REVENUES FROM ALL SOURCES

School Year	\$ Amount	% Change From Preceding Year	Inflation Rate
70-71	\$352,174,636		
71-72	384,293,666	9.1%	8.8%
72-73	399,816,791	4.0	5.6
73-74	436,678,933	9.2	9.8

care of teacher pay raises mandated by the legislature; therefore, it would appear that many districts were experiencing tighter budgets during this period.

Table 19 contains information showing the total surplus funds for all school districts in the state from FY 71 through FY 74. The surplus represented approximately 11 percent of the total of all state school district resources. The average percentage of change in total surplus amounts from FY 71 to FY 74 was approximately 10 percent per year with a 13 percent decrease noted from FY 72 to FY 73.

The data in Tables 20-22 show the total state school resources from local, state, and federal levels. The data in these three tables show some increase from all levels on most years. However, it appears that FY 73 was a year that school districts experienced a smaller increase in funds than previously. This would indicate that surplus funds would likely be needed to finance current level programs, and this is verified by a decrease in surplus funds in FY 73 as shown by the data in Table 19.

The information in Table 23 indicates the kinds and numbers of support personnel and the percentage of salary increases during the period of FY 73, FY 74, and FY 75. The number of support personnel has increased each year during this period, and substantial salary raises have been given in most categories.

TABLE	19
	~ ~ ~

TOTAL STATE SCHOOL SURPLUS FUND

School Year	\$ Amount	% of Total Revenue	% Change From Preceding Year
70-71	\$38,702,732	10.9%	
71-72	53,094,017	13.8	37.1% Increase
72-73	46,215,363	11.6	13.0 Decrease
73-74	49,029,196	11.2	6.1 Increase

Total Percent Change From 70-71 to 73-74= 26.7%. Average=8.%

TABLE 20

STATE TOTAL REVENUE FROM LOCAL RESOURCES

School Year	\$ Amount	% Change From Preceding Year
70-71	\$201,890,917	
71 <del>-</del> 72	198,829,124	1.5% Decrease
72-73	221,510,613	11.4 Increase
73-74	230,334,815	3.9 Increase
Total Percent Ch	ange From 70-71 to 73-74	=13.8% Average=4.6%

## STATE TOTAL REVENUE FROM STATE RESOURCES

School Year	\$ Amount	% Change From Preceding Year			
70-71	\$172,113,464				
71-72	198,114,441	15.1% Increase			
72-73	201,819,623	1.8% Increase			
73-74	226,965,779	12.4% Increase			

Total Percent Change From 70-71 to 73-74=29.6% Average=9.8%

## TABLE 22

STATE TOTAL REVENUE FROM FEDERAL RESOURCES

School Year	\$ Amount	<b>%</b> Change From Preceding Year
70-71	\$49,142,326	
71-72	53,094,017	8.0% Increase
72-73	50,709,674	4.5% Decrease
73-74	56,714,110	11.8% Increase

•

.

# NUMBER OF SUPPORT PERSONNEL AND PERCENT SALARY CHANGE FOR FY 1973, FY 1974, AND FY 1975

Classification	Number FY 73	Number FY 74	Number FY 75	% Increase From FY to FY	ease in Salary 73 From FY 74 74 to FY 75
Non-Certified Admin. Assistants	223	227	239	8.65	11.27
Secretaries	1,931	1,990	2,136	8.15	6.30
Aides	1,599	1,771	1,832	-1.58	19.26
Maintenance & Operations	3,823	3,906	4,225	7.22	5.61
Food Service	4,020	4,178	4,266	6.79	9.36
Transportation	2,928	3,055	3,167	9.57	8.48
Other Personnel	243	271	313	45	16

Additional data which reflect the number of teachers in fiscal years 1967-74 are presented in Tables 24 and 25. The number of teachers increased each year during this period except FY 73. This is the year when funds from all sources decreased and may indicate it resulted in a cutback in personnel.

#### Analysis of State Expenditures

The State Department of Education's data center records were surveyed to secure total state school districts' expenditure data for analysis. The data in Table 26 indicate the percentage of the total State expenditures that was used for each budget classification for FY 72, FY 73, and FY 74. This analysis was done in an effort to locate major budget trends during the period studied. Further analysis indicated the percentage of change of expenditures in each budget classification from FY 72 to FY 73 and from FY 73 to FY 74. From FY 72 to FY 73, substantial increases in expenditures were found in the categories of textbooks, contracted transportation services, expenditures in lieu of transportation, contracted services for operation of plant, heat for buildings, school district contribution to Social Security and retirement, salaries for food services, other expenses for food services, expenses for student body activities, recreation, libraries, non-public school pupils, and replacement of transportation equipment. Decreases in expenditures in several categories were also noted during this same period.

NUMBER OF TEACHERS IN OKLAHOMA SCHOOLS FOR FY 1967 THROUGH FY 1974

FY 67	FY 68	FY 69	FY 70	FY 71	FY 72	FY 73	FY 74
27,062	27,979	28,567	29,355	30,272	31,231	31,186	32,191

## TABLE 25

COMPARISON OF THE NUMBER AND PERCENTAGE OF CHANGE OF OKLAHOMA TEACHERS FOR THE YEARS OF FY 1967 THROUGH FY 1974

Schoo]	Years	From FY 67 to FY 68	From FY 68 to FY 69	From FY 69 to FY 70	From FY 70 to FY 71	From FY 71 to FY 72	From FY 72 to RY 73	From FY 73 to FY 74
Number	Increase Decrease	917	588	788	917	959	45	1,005
Percent	Increase Decrease	.03%	.021%	.027%	.03%	.03%	.003%	.032%

## ANALYSIS OF STATE SCHOOLS' TOTAL EXPENDITURES BY BUDGET CLASSIFICATION AND BUDGET ITEM EXPENDITURES FOR FY 1972, FY 1973, AND FY 1974

=

Bud	get Classification	≸ of Budget FY 72	\$ of Budget FY 73	5 Change FY 72 to	From FY 73	≸ of Budget FY 74	<b>% Change From</b> FY 73 to FY 74
110	Salaries	3.4	3.5	+ .(	086	3.6	+ .120
120	Contracted Services	•8	• 2	:	268	• 2	018
130	Other Expenses for Administration	-0-	•5	+ .2	291	•6	+ .242
210	Salaries	66.1	65.4	+ .(	03	64.7	+ .079
220	Textbooks	.2	.2	+ .:	186	• 2	187
230	School Libraries and Audio-Visual Materials	•7	.8	+ .:	113	.8	+ .166
240	Teaching Supplies	2.1	2.07	+ .(	038	2.2	+ .178
250	Other Expenses for Instruction	1.3	1.09	:	147	1.4	+ .411
310	Salaries	.2	• 2	9	957	.2	+2.600
320	Other Expenses for Attendance Services	.009	• • • • •	7 - •9	965	.01	+ .901
410	Salaries	•3	• 3	+ .(	036	• 3	+ .128
420	Other Expenses for Health Services	.07	.05	:	236	.05	+ .056
510	Salaries	1.8	1.8	+ .(	006	1.8	+ .109
520	Contracted Services an Public Carriers	nd .2	. 4	+ •'	731	• 4	+ .037
530	Replacement of Vehicles	1.0	•9	+ .(	057	.8	+ .004
540	Transportation Insurance	.2	.16	+ •	073	.15	+ .064
550	Expenditures in Lieu of Transportation	of .07	•07	+ .	181	.07	+ .036
560	Other Expenses for Operation and Maintenance	•9	•9	+ .	069	1.2	+ .419
610	Salaries	4.3	4.4	+ .	071	4.3	+ .062
620	Contracted Services for Operation of Plant	or .09	.17	+.	832	.16	+ .038
630	Heat for Buildings			÷.	228	• 1	+ .055
640	Utilities, Except Heat	c 2.07	2.1	<b>†</b> •	062	2.1	+ .093
650	Supplies, Except Utilities	.72	.72	+.	031	•73	+ .110
660	Other Expenses for Operation of Plant	.19	.19	+.	034	.24	+ .461
710	Salaries	• <u>7</u>	• 9	<b>~</b> .	086	• <u>7</u>	+ .190
720	Contracted Services f Maintenance	or .5	•5	- •	004	•5	+ .239
730	Replacement of Equipment	•5	•5	+.	116	•5	+ .176
740	Other Expense for Maintenance	1.1	1.0		049	1.0	+ .070

TABLE 26, Continued

Bı	dget Classification	% of Budget FY 72	S of S Budget F FY 73	Change From Y 72 to FY 73	S of S C Budget FY FY 74	hange From 73 to FY 74
810	School District Contri butions to Social Security and Betire.	3.8	4.1	+ .127	4.2	+ .125
820	Insurance	1.1	1.2	+ .071	1.2	+ .139
820	Pental of Landa and		<b></b>	- 067		+ .057
030	Buildings	• *	• -	001	• •	
850	Other Fixed Charges	.1	.1	060	.1	+ .192
910	Salaries for Food Services	• 4	•5	+ .152	.4	+ .034
<del>9</del> 20	Other Expenses for Food Services	.1	.2	+ .243	.2	+ .389
1010	Solowies	.03	.03	+ .019	- 02	+ .048
1020	Other Expenses for Stu dent Body Activities	i1	.1	+ .194	.2	+ .092
1110	Beenestion	<b>ا</b> ل (	0.11	+ 102	04	- 081
1120		.07	• • • •	- 575	.07	+ 680
1120	Dublic Idbacaios	້ຳ້ຳ	12 °001	- • J15 +4 716	• • • • • • • • • • • • • • • • • • • •	- 264
1120	Fublic Dibraries			+ 011	0009	- 760
1140	Care of Children			+ ••••	.001	1 1 109
1150	Welfare Activities	.02	.02	+ .215	.02	+ • 339
1160	Non-Public School Pupils	.02	.18	+11,688	.08	490
1210	Sites	.5	.5	+ .005	.5	+ .299
1220	Buildings	1.6	1.6	+ .043	1.4	056
1230	Equipment		.8	+ .086	.8	+ .056
	1230.05 Transportation	1 . 3	14	+ .703	.2	- 455
	1230 (Except 1230.05) Other	•5	• 3	474	•3	+ 350

.

Analysis of data for the period of FY 73 to FY 74 reflects substantial budget increases in the areas of administration expenses, libraries, teaching supplies, other expense for instruction, expense for attendance services, expenses for operation and maintenance of transportation equipment, other expenses for operation of plant, maintenance expenses, fixed charges, food services, civic activities, acquiring school sites and equipment for plant operation and maintenance.

Table 27 contains data which are similar to those reported in Table 26 except that they were collected by a commercial firm and analyzed for purposes of this report. The commercial firm has reported total general fund expenditures for all schools in their national study. The budget classifications are not the same as the regularly accepted budget classifications used in Table 26; however, the data provide a comparison of and support of findings from other sources.

## Summary of Findings

The purpose of this chapter was to report data collected and analyzed as it relates to the problem of inflation and its effects on educational programs and budgets of local school districts. The data presented have shown that the opinions of school administrators indicate their concern for the problems they are experiencing as a result of inflation. The data collected to supplement the survey of school administrators seem to support the concerns of the administrators.

## AN ANALYSIS OF DATA COLLECTED BY MARKET DATA RETRIEVAL ON NATIONAL SCHOOL EXPENDITURES INCLUDING A COMPARISON OF PERCENTAGES OF NET CURRENT EXPENDITURES AND ILLUSTRATING BUDGET CHANGES FROM FY 1970 TO FY 1973 AND FROM FY 1973 TO FY 1974

Budget Classification	Pe: Current	rcent o Expend	of Net litures	Change FY 70-	FY 73	Change FY 73-	From FY 74
	69-70	72-73	73-74	Inc.	Dec.	Inc.	Dec.
Administration Professional Salaries	3.9 1.8	3.3 1.3	3.2 1.3		.154 .277	.023	.036
Sec. & Cler. Salaries	1.1	1.2	1.2	.091	i		.066
Other Instruction Classroom Teachers	1.0 77.2 62.6	.8 74.4 56.4	•7 72.5 54.8		.200 .036 .099		.087 .026 .028
Other	7.9	9.4	8.9	.189	ļ		.055
Sec. & Cler.	2.0	3.6	3.5	.800			.033
Textbooks School Library Material	1.0 -	•7 •5	•7 •5	.500	.300	.014	.080
Audio-Visual Material	-	•3	•3	.300			.133
Teaching Supplies	2.7	1.7	1.7		.370	.018	
Other Instru. Attendance Serv. Health Service Professional	1.0 _ .6 .5	1.8 .4 .8 .6	2.2 .4 .7 .6	.800 .400 .333 .200	:	.206 _	.136 .050
Plant Operation Salary Expense Heat for Build. Other Utilities Food Service Plant Mainten. Salary Expense Fixed Charges Employee Retirement	8.7 4.9 1.2 1.8 3.0 1.1 6.3 4.4	8.6 5.3 1.9 3.5 1.7 8.0	8.6 5.0 1.9 3.5 1.7 8.5 7.5	.082 .055 .500 .167 .545 .302 .591	.011 .250	.077 .011 .034 .073	.001 .049 .010 

The total "yes" responses to questions were tabulated to make a geographic comparison of the over-all effects of inflation. Table 28 contains data that seem to indicate that geographic region does not have a significant impact on the effect of inflation.

The findings of this study are in substantial agreement with the findings of Jacobson which were reported in Chapter 2. Jacobson reported that his survey reflected decreases in the purchasing of instructional materials, new construction, maintenance and repair, extra-curricular activities, and cutbacks in personnel and transportation. He reported sharp increases in the above areas and in fixed charges and utilities. The study reported herin indicates a similar pattern for the state of Oklahoma.

TABLE	28
-------	----

PERCENT OF "YES" RESPONSES TO QUESTIONNAIRE ITEMS 1 THROUGH 20 LISTED BY REGION AND SCHOOL SIZE

Region	NW	SW	SC	С	SE	NE	Mean
Small	56	62	71	76	77	77	70%
Medium	70	77	76	68	74	69	72
Large	80	60	78	72	68	77	72

.

#### CHAPTER V

#### SUMMARY, FINDINGS, CONCLUSIONS, IMPLICATIONS, AND RECOMMENDATIONS

#### Review of the Purpose and Design of the Study

The purpose of the study was to determine if inflation has had any effect on local school districts in Oklahoma. The study was designed to survey a sample of public school administrators and to solicit their opinions regarding inflation in order to determine if program changes and/or budget changes had resulted and, if so, to determine if the changes were related to the problem of inflation. The study further sought to discover types of actions being taken by administrators who felt that inflation had caused program and/or budgeting changes. The study also requested suggestions and practices which might be helpful to other administrators in coping with the problem of inflation if it became a problem in their district.

The sample was randomly selected to represent school administrators from three sizes of schools within six geographic regions of the state. One hundred and sixty-eight administrators received the questionnaire. One hundred twelve of the questionnaires were completed and returned. This represented a 67 percent return of the questionnaire.

Data taken from the returned questionnaires were tabulated in frequency tables for statistical analysis. The Chi Square was chosen as the statistical test. Response tallies were transferred from the frequency tables to the cross partition format for computation. Computed values were then compared with the appropriate Chi Square table value to determine if the hypothesized concept indicated by the "yes" responses was significant.

The instrument provided for open response by the administrator as well as the twenty closed response items. It also provided an opportunity to indicate budget and staff changes in the final section of the instrument. The results of these questions were tabled, and the results analyzed to answer certain questions posed in this study.

## Summary of Findings

This study sought to answer three specific questions which were:

- (1) Has inflation in recent years produced negative changes in educational programs in Oklahoma?
- (2) What is the nature of the changes, if any, in education programs which administrators attribute to inflation?
- (3) What actions are being taken by Oklahoma school administrators in their efforts to cope with inflation?

Four hypotheses were posed to assist in testing answers to each of the questions.

Hypothesis 1 stated that: There is no significant difference between school district budgeting priorities under current inflationary conditions and school district budgeting priorities prior to the inflationary period of 1972-1975. The hypothesis was rejected.

Hypothesis 2 stated that: There is no significant difference between programming in local school districts during inflationary times and school district programming during the normal cost increase periods prior to the period of 1972-1975. The hypothesis was rejected.

Hypothesis 3 stated that: There is no significant difference between consideration given to school district financial needs during inflationary times and school district programming during the normal cost increase periods prior to the period of 1972-1975. The hypothesis was rejected.

Hypothesis 4 stated that: There is no significant difference in the effect of inflation on school districts among different sizes of school districts. (Large vs. small, large vs. medium, medium vs. small). The hypothesis was affirmed.

Analysis of open response questions and State Department of Education financial reports revealed numerous additional findings. It was found that many districts are reducing quantities of teaching supplies, reducing maintenance,

re-evaluating spending priorities, being much more conservative, and dropping services that are not required. Administrators report reductions in experimental and innovative programs, and a large percentage of the districts report that inflation will be considered as a factor in their budgets for next year. Some 94 percent of the respondents reported that they anticipate a smaller amount of reserve funds this year than in prior years due to inflation.

An analysis of the total resources in the districts surveyed indicated that from FY 1973 to FY 1974 there was an 11 percent increase. The inflation rate was approximately 9.8 percent during this same period of time; therefore, very little resource growth was actually realized. Numerous similar findings are reported in Chapter 4 of this paper.

#### <u>Conclusions</u>

The following conclusions seemed justified on the basis of the data collected and analyzed in this study.

- (1) Inflation has affected Oklahoma school districts and the children attending Oklahoma schools. Inflation, either directly or indirectly, has influenced reduction in certain programs and budget items.
- (2) Inflation has been a contributing factor to the decreased purchasing of instructional supplies.
- (3) Effects of inflation are not all negative. Districts become more aware of expenditures and the need for prioritization of purchases as a result of inflation. More effective management procedures are likely to result from these conditions.

(4) Inflation has affected schools regardless of their size or geographic region.

## Implications

There was strong evidence that school district administrators had been and were continuing to experience problems in fitting the revenue plan of the budget to the educational program plan. It was the opinions of the administrators that a vast amount of the problem could be attributed to inflation.

Assuming that all services provided in the educational program by the revenue plan under normal economic periods are necessary, then it may be concluded that a reduction in purchasing power during inflationary times will reduce the educational opportunities of students during such periods.

Services which were labeled instructional and which were of primary importance in education seemed to be absorbing many of the negative effects of higher costs and much of the reduction of purchasing power. This does not appear to be a sound practice, but apparently it is a necessary one under inflationary conditions.

Schools and children in Oklahoma schools feel the effects of inflation in a variety of ways. However, caution should be exercised in predicting actual decreases in educational opportunities and quality as a result of inflation. It is generally concluded that higher per pupil expenditures, low teacher-pupil ratios, and increased services and program opportunities provide for a higher quality potential, although empirical studies and data to verify this are somewhat lacking. A time of inflation is a prime time for educators to give consideration to better and more effective management procedures. The possibility of using management specialists should be considered since this type of specialist is better trained in effective management procedures than are most educators. Areas such as duplication of equipment, subject specialists, facilities, as well as other services could well be a starting point for the management specialist. The results of better management of available resources could well be one alternative for coping with current economic conditions.

There appears to be a need for studying the benefits of cooperative educational services. Such services could be coordinated to insure maximum usage of human resources, equipment, as well as making the services available to larger numbers of students from a variety of schools and school districts. Present conditions seem to set the stage for redesigning education in order to assure a more effective product at a reduced cost.

#### Recommendations

It is recommended that further studies be conducted to answer the following questions:

- (1) What effect has inflation had on school districts developing a systems approach to budgeting and decisions process?
- (2) What has been the result in other states of incorporating inflation as a factor in determining each district's state allocation?

(3) What factors in the educational program are most supportive of a high quality educational program? Such a study should attempt to isolate individual and collective items and their relationships to maximum gains by students.

This study has verified that inflation has had and is having effects on education programs in the state of Oklahoma. Inherent in these findings seems to be the need for all those who have responsibility in determining school finance policy to hasten the progress of finance reform to insure that every child will have the maximum educational opportunity regardless of economic conditions of the times.

#### BIBLIOGRAPHY

#### <u>Books</u>

- DeYoung, Chris. <u>Budgeting in Public Schools</u>. New York: Swift, Inc., 1946.
- DeYoung, Chris, and Wynn, Richard. <u>American Education</u>. New York: <u>MeGraw-Hill Book Company</u>, 1968.
- Glass, Gene V., and Stanley, Julian C. <u>Statistical Methods</u> <u>in Education and Psychology</u>. Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1970.
- Grieder, Calvin; Pierce, Trumen M.; and Jorden, K. Forbis. <u>Public School Administration</u>. 3d ed. New York: Ronald Press, 1969.
- Hack, Walter, and Woodard, Francis. <u>Economic Dimensions of</u> <u>Public School Finance</u>. New York: McGraw-Hill, 1971.
- Johns, Roe L. <u>Alternative Programs for Financing Education</u>. Gainsville, Florida: National Education Finance Project, 1971.
- Kerlinger, Fred N. Foundation of Behavorial Research. 3d ed. New York: Holt, Rinehart, and Winston, 1973.
- Kerr Foundation. <u>1974 Oklahoma State Expenditures in Brief</u>. Oklahoma City: Kerr Foundation, 1974.
- Knezevich, Stephen J., and Fowlkes, John. <u>Business Management</u> of Local School Systems. New York: Harper and Brothers, 1960.
- Koenker, Robert H. <u>Simplified Statistics</u>. Bloomington, Illinois: McKnight and McKnight Publishing Co., 1961.
- Miller, Roger Leroy. <u>Economics Today--The Macro View</u>. New York: Canfield Press, 1974.
- Mort, Paul R. <u>The Foundation Program in State Educational</u> <u>Policy</u>. Albany: New York State Education Department, 1957.

- Moser, C. H., and Kaltan, G. <u>Survey Methods in Social</u> <u>Investigation</u>. New York: Basic Books, Inc., 1972.
- Oklahoma Department of Education. School Laws of Oklahoma. Oklahoma City: State Department of Education, 1974.
- Reutter, Edmond, and Hamilton, Robert. <u>The Law of Public</u> Education. New York: Foundation Press, 1970.
- Sloan, Harold S., and Zurcher, Arnold. <u>Dictionary of</u> <u>Economics</u>. New York: Barnes and Noble, Inc., 1970.
- Tuckman, Bruce W. <u>Conducting Educational Research</u>. New York: Harcourt, Brace, Jovanovich, Inc., 1972.
- Umans, Shelly. <u>How to Cut the Cost of Education</u>. New York: McGraw-Hill Book Company, 1973.

#### Articles

- Brodinsky, Ben. "Major Education Events of 1974." <u>EdPress</u> <u>Newsletter</u>, December 1974.
- Crisman, Ronald. "The Other Side of the Inflation Coin." Compact, November-December 1974, pp. 13-14.
- Curry, John C. "Hopes for Halting Cancerous Inflation Dim." Daily Oklahoman, 17 April 1975.
- "Economic Uptrend Predicted." Daily Oklahoman, 24 January 1975.

"Frisco Drops Prep Sports." Daily Oklahoman, 1 February 1975.

- Fulton, Tommy. "Inflation Heads Top Education Events." Oklahoma Teacher, 2 February 1975, p. 8.
- Fulton, Tommy. "Inflation Keeps Going, Kids Keep Growing." Oklahoma Teacher, 28 February 1975, pp. 1-2.
- Harris, Emily. <u>Education Daily</u>. Washington, D. C., 10 March 1975.
- Hoffman, Jonathan. "Spending for Instructional Materials and Equipment." <u>School Management</u>, October 1974, pp. 10-14.
- "Inflation Brings Serious School Cutbacks, ECS Warns." <u>Kappan</u>, December 1974.
- "Inflation, Enrollment Declines Spell Trouble for Teachers." Oklahoma Teacher, 14 January 1974.

- "Is Abert Wrong? Seven Prominent Educators Comment." <u>Kappan</u>, March 1974, pp. 446-47.
- Jacobson, Robert. "Struggling With Inflation: Can the Schools Get Out From Under?" <u>Compact</u>, November-December 1974, pp. 8-12.
- Pollack, Rubin. "What This Year's Cost of Education Index Shows." <u>School Management</u>, January 1974, pp. 14-40.
- "Refueling the Inflation." <u>Sunday Oklahoman</u>, 23 March 1975, sec. a, p. 16.
- "Replaying the Bad Old Days." <u>Newsweek</u>, 17 February 1975, pp. 71-72.
- Shane, Harold. "Stagflation." Kappan, March 1975.
- Sutton, Ben C. "How Inflation Has Affected One College." Southern Baptist Educator, January 1975, p. 16.
- "Tax Inflation Rate Highest of All, Legislative Study Reveals." <u>Daily\_Oklahoman</u>, 10 February 1975.
- "That Sudden Sinking Feeling." <u>Newsweek</u>, 17 February 1975, pp. 16-18.
- "The Economy: Can They Fix It?" Newsweek, 24 February 1975.
- "Typical Family Needs \$14,300 a Year." <u>Cappers Weekly</u>, 15 April 1975.
- Wilson, Roy K. "Schools-and Money-Make a Difference, Study Says." <u>Education U.S.A.</u>, 24 March 1975. p. 1.

#### Other Sources

- Benson, Charles. "Equity in School Financing: Full State Funding." Bloomington, Indiana: Phi Delta Kappa Educational Foundation, 1975.
- Campbell, Leonard. "Relationships of Socio-Economic Conditions and Expenditure Per Pupil to Academic Achievement in the State of Oklahoma." Unpublished doctoral dissertation, University of Oklahoma, 1970, pp. 63-64.
- Cooke, Eileen D. "Statement before Subcommittee on Labor-HEW Appropriations." Discussion paper; Washington, D. C., 20 March 1975.

- Garms, Walter. "Practical Problems of Studying School Finance Reform." Paper presented at the National Symposium on State School Finance Reform, Silver Springs, Maryland, 27 November 1973.
- Guthrie, James. "Equity in School Financing." Bloomington, Indiana: Phi Delta Kappa Educational Foundation, 1975.
- Harris, James. "The Economics of Education." Paper presented at the HEW Congressional Conference on Inflation on Health, Education, Income Security, and Social Services, Washington, D. C., 19 September 1974.
- Johns, Thomas L. "School Finance Reform in 1973--an Overview." Address delivered at National Symposium on School Finance Reform, Silver Springs, Maryland, 26 November 1973.
- Marland, S. P. "Issues in School Financing." Discussion paper; DHEW/OE, Washington, D. C., 1972.
- National Comparison Local School Costs. Westport, Connecticut: Macmillan Professional Magazines and Market Data Retrieval, 1975.
- Oklahoma Department of Education. <u>Annual Statistical Report</u> of Finance Division. Oklahoma City: State Department of Education, 1975.
- Oklahoma Department of Education. <u>Comparative Statistics for</u> <u>School Years 1966 Through 1974</u>. Oklahoma City: State Department of Education [1975].
- Oklahoma Department of Education. Listing of School Bus Standards and Price Lists. Oklahoma City: State Department of Education, 1972.
- Oklahoma Department of Education. Listing of School Bus Standards and Price Lists. Oklahoma City: State Department of Education, 1973.
- Oklahoma Department of Education. Listing of School Bus Standards and Price Lists. Oklahoma City: State Department of Education, 1974.

Oklahoma Department of Education. Support Personnel Statistical Survey Compiled by Data Center Program B02001 on 17 April 1975.

- Oklahoma Department of Education. The State Board of Education Regulations for Administration and Handbook on Budgeting and Business Management. Oklahoma City: State Board of Education, 1971-72.
- Oklahoma Department of Education. Unpublished Data Center Records for FY 72, FY 73, and FY 74.
- Oklahoma Department of Tourism. Oklahoma! State of Many Countries. Oklahoma City 1975.

Red Carpet Country--Northwestern Oklahoma; Green Country--Northeastern Oklahoma; Great Plains Country--Southwestern Oklahoma; Frontier Country--Central Oklahoma; Fun Country--South-Central Oklahoma; Kiamichi Country--Southeastern Oklahoma.

- Olson, Lawrence S. "Notes on Distortions in the Market for Educational Services." Report by the Rand Corporation, Santa Monica, California, July 1973.
- Saunders, Charles B., Jr. "Fewer Dollars, Shrinking Enrollments, Fixed Cost: New Educational Dilemma." Paper presented to AASA, Atlantic City, New Jersey, 1974.
- Ross, Doris. "School Finance: A Survey of the States." Denver: Education Commission of the States, 1974.
- U. S. Congress. Senate. Committee on Labor and Public Welfare. <u>Hearings before the Subcommittee on Education of the</u> <u>Committee on Labor and Public Welfare</u>, 93d Cong., 2nd sess., 1975.
- U. S. Department of Health, Education, and Welfare, National Center for Statistics, Education Division. The Condition of Education. 1 March 1975.
- U. S. Department of Labor, Bureau of Labor Statistics. <u>CPI Detailed Report for October 1974</u>. January 1975.
- Walker, Mabel. "Problems and Issues of Property Taxation in School Finance Reform." Report of discussion at HEW Conference, DHEW/OE, 15 October 1973.
APPENDICES

٢

APE	PENDIX	Α
-----	--------	---

Pos	tion or Title of Respondent Y	ears in System	Years	In Present	Position
DIRI whic	ECTIONS: Respond to the following s th best reflects your opinion or the	tatements by place action being tal	cing an ken.	"X" in the	blank
				YES	NO
1.	Inflation has affected the quality system.	of education in r	ny schoo	ol 	
2.	Inflation will affect the quality of it continues at the present high	of education in my rate.	y schoo	I	
3.	l view inflation as an opportunity in educational programs.	to improve effic	iency		
4.	I believe the increase in our local tures has contributed to inflation.	educational expo	end i -		
5.	Inflation has caused our personnel need for setting priorities.	to be more aware	of the		
6.	Inflation has reduced innovation ar our program. (a) No Innovation or experimentat in our system.	nd experimentation	n in		
	(b) We were planning to start son have decided to wait until fi certain.	ne innovations, bu inances are more	ut		<u></u>
7.	I believe that taxpayers will becom pass tax levies for education.	ae more reluctant	to		
8.	The full impact of inflation on edu felt.	cation has not b	een		<u> </u>
9.	Inflation is a problem for our syst	tem at the presen	t time.		
10.	I believe that budgetary increases purchasing power in my school dist rate equal to that of 1972-73, or to the inflationary rates, or (c the inflationary rate.	are maintaining rict: (a) at (b) at a rat ) at a rate le	the a e const ss than	ant	
11.	We have experienced lower teacher t last two years.	turn-over during	the		<u></u>
12.	If the answer to question 11 is yes is a result of inflation?	s, do you believe	this		
13.	We are presently evaluating our pro- which school services are essential eliminated.	ogram and discuss I and which might	ing be		

14.	My school district resources are increasing at a slower rate than the 12% inflation rate of 1974.		
15.	We have delayed building programs as a result of inflation.		
16.	Inflation is being considered as a factor in our budgeting process.		
17.	Extracurricular activities have been decreased in the last two years.	·	
18.	Salaries and salary increases for school personnel have required so much of our budget that it is causing reductions in other expenditures.		<u>.</u>
19.	We will consider changing our staffing patterns if present rates of inflation continue.		
20.	The amount of surplus general funds which we anticipate at the end of this fiscal year will be less than the amount we had last year.		
DIRE in p	CTIONS: Respond in brief statements to questions 21-22-23. L riority order from highest to lowest.	.ist your	responses

YES

NO

21. Inflation is responsible for the following changes in budgeting in my system.

22. The most effective procedures or changes that our school has found to cope with the problem of inflation are:

23. The following actions are suggestions for the State Department of Education which will assist local school districts cope with the problem of inflation.



Compare the expenditures and the number of staff members employed during the school terms 1972-73 and 1974-75 by placing an "X" in the appropriate column indicating:

- (a) that more or that less funds are being used this year than was used for that budget item in the 72-73 budget, and (b) that more or less staff members are employed for a budget category this
- year than was employed in that category during the 1972-73 school term.

		(a) Expenditures		()	f		
		More	Less	Same	More	Less	Same
100 A	Administration			1			
$\overline{(1)}$	Administrators	1		l .			
(2)	Support Staff			<u> </u>	-		
(2)	Travel					~~~~~	******
	Public Relations				-	~~~~~	<u> </u>
(5)	Research				-{		
				+	╸╽╞┈╼┈╼╶╌╼┈╸		
200 1	Instruction					ł	
(1)	Principals				11		
(2)	Consultants and/or		<u> </u>	1	-		
	Supervisors	ł			{}		
(3)	Teachers						
(4)	Special Subject		1				
	Teachers						
(5)	Instructional Support						
	Personnel (Librarian,						
	Counselors, etc.)						
(6)	Textbooks				<b>KXXXXXXX</b>	KXXXXXX	KXXXXXXX
(7)	Teaching Supplies				<b>KXXXXXXX</b>	<u> XXXXXX</u>	<b>KXXXXXX</b> X
					1		
<u>500 1</u>	Pupil Transportation	-					
$\overline{(1)}$	Salaries for Personnel					1	
(2)	Replacement of Vehicles		1		<b>KXXXXXXX</b>	<b>KXXXXXX</b>	<b>KXXXXXX</b> X
(3)	Maintenance						
600 0	Operation of Plant					1	
$\overline{(1)}$	Staff	1					
(2)	Utility Services			+		******	*****
(3)	Supplies for Operation		+	<u>†                                    </u>		XXXXXXX	XXXXXXXX
			+	+			
700 M	Naintenance of Plant						
(1)	Staff						
(2)	Replacement of Equipment			1	<b>KXXXXXXX</b>	<b>KXXXXXX</b>	<b>KXXXXXXX</b>
(3)	Repair of Buildings			1	KXXXXXXX	<b>KXXXXXX</b>	<b>KXXXXXXX</b>
			1	1			
800 1	Fixed Charges						
$\overline{(1)}$	Social Security		ł		<b>k</b> xxxxxxx	<b>k</b> xxxxxx	<b>k</b> xxxxxxx
(2)	Other Fringe Benefits		+			<b>XXXXXX</b>	XXXXXXXX
•••			+	-	-11		
900 3	Student-Body Activities						
$\overline{(1)}$	Supplies				1		*******
$\dot{z}$	Travel		+	1			
(3)	Other Expenses		+	+			****
			+	1		T	T
1200	Capital Outlay	1		1			
(1)	Ruildings	1		1	kxxxxxxx	<b>*</b> ××××××	XXXXXXXX
(2)	Four ment		<u>+</u>	+		LYYYYYY	
(4)	Equipment		.l		1 4 4 4 4 4 4 4 4	<u> </u>	<u> </u>

## APPENDIX B

## RESPONSES TO QUESTIONNAIRE ITEMS (COLUMN 1) BY ADMINISTRATORS OF SCHOOLS BY SIZE (Columns 2, 3, 4)

-

· .

	School Size							
Questions	Small		Medium		Large		Total Responses	
Related to Hol	Yes	No	Yes	No	Yes	No	Yes	No
3 5 8 9 10 14 16 18 20	12 35 32 28 35 38 33 37	26 4 7 8 1 3 1 7 1	2703527925	22 10 7 56 3 1 6 4	12 18 21 14 19 20 19 21	841 17 32 31	51 93 96 98 84 101 107 94 103	56 18 15 14 14 9 16 16 16 6
Questions Related to Ho <sub>2</sub>								
6 7 12 13 15 17 18 19	38 32 7 30 16 17 33 32	11 8 14 23 7 9	45 43 218 233 232 45	8 13 10 25 6 4	22 21 6 19 12 9 19 21	4 8 30 13 3 1	105 96 34 87 51 49 94 98	23 15 35 21 60 61 16 14
Questions Related to Ho <sub>3</sub>							-	
5 7 13 15 16 19	35 32 30 16 38 30	4 8 24 1 9	40 43 23 49 45	10 6 10 26 1 4	18 21 18 12 20 22	4 1 3 8 2 1	93 96 86 51 107 97	18 15 21 58 4 14
Questions Related to Ho4								
1 9	25 32	14 8	35 45	20 5	15 21	7 1	75 98	41 14
Totals	57	22	80	25	36	8	173	55

APPENDIX C

February 18, 1975

Dr. Henry Levin College of Education Stanford University Palo Alto, CA 94305

Dear Dr. Levin:

I am interested in securing results of recent studies relating to the effects inflation is having on education, particularly during the past two years. Your name was given to me by an official of the RMC Research Corporation as one who would likely know of studies on this subject.

If you know of studies indicating budgeting trends, employment patterns, changes in purchasing patterns, etc., I would appreciate receiving the names and addresses where I can secure the information.

I will appreciate any help or information you can give me.

Sincerely,

Leroy Ireton, Deputy Administrator Compensatory Education

Ll:gb

## INSTITUTE FOR EDUCATIONAL FINANCE

COLLEGE OF EDUCATION UNIVERSITY OF FLORIDA guinesville, florido-32611 (904) 392-1481

February 10, 1975

Director Kern Alexander

Associate Director K. Forbis Jordan

> Mr. Leroy Ireton 3309 Ridgewood Drive Midwest City, Oklahoma 73110

Dear Mr. Ireton:

The Institute for Educational Finance has conducted no specific studies on inflation in education. I am sorry we are unable to help you.

Sincerely yours,

Kern Alexander

Director

KA/dp

STANFORD UNIVERSITY STANFORD, CALIFORNIA 94305

SCHOOL OF FDUCATION



21 February 1975

Leroy Ireton, Deputy Administrator Compensatory Education State Department of Education Oklahoma City, Oklahoma 73105

Dear Mr. Ireton:

Thank you for your letter of February 18 on the effects of inflation on education. My colleague, Professor Michael Kirst has recently completed a study examining the problems of budget cuts on spending patterns. Since inflation may have the effect of cutting the <u>real</u> budget, his study may be relevant. I am referring your letter to him for a response.

Sincerely,

Henry M. Levin' Associate Professor

HML/rd

cc: M. Kirst

March 10, 1975

Dr. Michael Kirst School of Education Stanford University Stanford, CA 94305

Dear Dr. Kirst:

I am conducting a study of inflationary effects on education and education budgeting. A recent letter from Dr. Henry Levin indicated that you have done some research in this area.

If you have some data that you could share with me, I would appreciate that assistance. My study will be confined to Oklahoma but national trends would be helpful.

I would appreciate any data or other assistance you can give me.

.

Sincerely,

Leroy Ireton, Administrator Innovative, Resource, and Support Programs

Ll:gb

## APPENDIX D

Part of the increase in educational expenditures is attributable to inflation.



Chart 1.1: - Table 10

SOURCE: U. S. Department of Health, Education, and Welfare, National Center for Statistics, Education Division, The Condition of Education, 1 March 1975, p. 15.