# nomir **FOURTH EDITION**

ROE L.JOHNS
EDGAR L.MORPHET
KERN ALEXANDER

# **FOURTH EDITION**

# THE ECONOMICS AND FINANCING OF EDUCATION

ROE L. JOHNS

University of Florida, Gainesville

EDGAR L. MORPHET

University of California, Berkeley

KERN ALEXANDER

University of Florida, Gainesville Library of Congress Cataloging in Publication Data

JOHNS, ROE LYELL, (date)

The economics and financing of education.

Includes bibliographies and index.

1. Education—United States—Finance. I. Morphet, Edgar Leroy, (date) II. Alexander, Kern.

III. Title.

LB2825.J57 1983

379.1'21'0973

82-9802

ISBN 0-13-225128-0

AACR2

to our wives

## Gladys, Camilla, and Ruth

©1983, 1975, 1969, 1960 by Prentice-Hall, Inc., Englewood Cliffs, N.J. 07632

All rights reserved. No part of this book may be reproduced in any form or by any means without permission in writing from the publisher.

Printed in the United States of America

10 9 8 7

Editorial/production supervision: Jeanne Hoeting Manufacturing buyer: Ron Chapman Cover Design; Ray Lundgren

# IZBN 0-13-552159-0

PRENTICE-HALL INTERNATIONAL, INC., London

PRENTICE-HALL of AUSTRALIA PTY. LIMITED, Sydney

PRENTICE-HALL CANADA INC., Toronto

PRENTICE-HALL of INDIA PRIVATE LIMITED, New Delhi

PRENTICE-HALL of JAPAN, INC., Tokyo

PRENTICE-HALL of Southeast Asia Pte. Ltd., Singapore

WHITEHALL BOOKS LIMITED, Wellington, New Zealand

# **PREFACE**

This fourth revision of *The Economics and Financing of Education* is practically a new book on the financing of education. Four chapters have been added and all of the old chapters have been completely revised, combined, or eliminated.

The four new chapters deal with the following topics: the social and individual benefits of education, the legal basis of school financing, the politics of school financing, the inequalities of educational opportunity, and the redistributional effects of education.

The decade of the 1970s has been called the decade of school finance reform. However, despite the progress that has been made in this area, significant differences in educational opportunity still exist from state to state, from district to district within states, and even from school to school within districts. Furthermore, at this writing the following issues are being debated throughout the nation: the amount of school revenue needed; the percent of the total to provide at each level of government—federal, state, and local; the types of taxes to levy at each level of government; the methods used by the federal and state governments for apportioning school funds; the types and amount of fiscal control to exercise at each level of government; and whether vouchers or tax credits shall be used for the support of private and parochial schools.

The struggle for free, tax-supported public schools available on an equal basis to all children and youth has not yet been won. Taxpayer resistance to

### x Preface

school financing is greater now than at any time since the Great Depression in the 1930s. Furthermore, the public schools are being blamed for many problems—increase in crime, use of drugs, illicit sexual activity, breakdown of family life, and increase in one-parent families—which arose from the community and not the schools. Schools are also charged with a decline in achievement, which if true is no doubt at least partly due to problems in the adult community. Variations in achievement among public schools and between public schools and private schools are primarily due to variations in the socioeconomic background of students, but those variations are frequently ignored by critics of the public schools.

A brief history of the development of tax-supported public schools up to 1900 is presented in the introductory chapter of this book. We can get a better appreciation of the problems we are having today in supporting the public schools as we contemplate the antecedents of the common schools and the problems faced by our predecessors in the eighteenth and nineteenth centuries. We all stand on the "shoulders of the giants who have preceded us." Therefore we are confident that we will win the battles of the future for tax-supported, free public education because of the firm foundations laid by our courageous predecessors and our commitment to the belief that equality of opportunity preserves and extends "life, liberty and the pursuit of happiness" to everyone.

Finally, we wish to express our appreciation for the many helpful suggestions for this revision given us by our colleagues: Patricia Anthony, Nelda H. Cambron, T. Wayne Keene, Julia Underwood O'Hara, Richard A. Rossmiller, Richard G. Salmon, Martin W. Schoppmeyer, Stephen B. Thomas, Lee Shiver, Dewey H. Stollar, and L. Dean Webb.

R.L.J. E.L.M. K.A.

# **CONTENTS**

XI
1
9
9

CHAPTER THREE HUMAN CAPITAL AND THE ECONOMIC BENEFITS OF EDUCATION	32
Classical Economic Viewpoint 33 Human Capital Approach 35 Human Resources and Economic Development 35 Measuring the Benefits of Education 37 Returns on Educational Investment 49 External Benefits to Investment in Education 52 Notes 59 Selected References 63	
CHAPTER FOUR ECONOMICS OF SCHOOL FINANCE: TRENDS IN DEMAND AND SUPPORT FOR THE PUBLIC SCHOOLS	64
Trends in Population, Public-School Enrollment and Average Daily Attendance 66 Trends in Total Public School Expenditures 68 Trends in Current Expenditures and Revenue Receipts 72 Returns From Increased Educational Expenditures 72 Income Elasticity of Demand for Education 75 Social and Economic Factors That May Affect Future Demands for Education 76 Notes 78 Selected References 79	
CHAPTER FIVE TAXATION FOR PUBLIC SCHOOLS	80
Definition of a Tax 80 Objectives of Taxation 83 Desirable Characteristics of Taxation 85 Major Types of Taxes to Support Public Schools 94 Tax Reform Limitations and Exemptions 108 Tax Collections of Different Levels of Government 116 State and Local Tax Burden 121 Trends in Sources of Revenue for Public Schools 121 Notes 122 Selected References 125	

CHAPTER SIX	
LEGAL ASPECTS	
OF EDUCATIONAL	FINANCE

126

Introduction 126
Power to Tax 128
Type of Taxes to be Levied 130
Federal Funds 132
Establishment of Religion 134
Apportionment of State Funds 137
Notes 143
Selected References 144

# CHAPTER SEVEN THE POLITICS OF SCHOOL FINANCING

145

Some Depressants on School Financing 146
Politics of School Financing at the Local Level 148
Politics of School Financing at the State Level 151
Politics of School Financing at the Federal Level 154
Some Political Strategies 156
Notes 157
Selected References 158

# CHAPTER EIGHT FISCAL CAPACITY AND EFFORT TO SUPPORT PUBLIC SCHOOLS

160

Measurement of State Fiscal Capacity 161
Capacity Comparisons Among States 163
Variations in Effort Among States 165
Variations in Local Fiscal Capacity 167
Measurement of Local Fiscal Capacity 167
Variations in Local Fiscal Effort 176
Notes 178
Selected References 179

CHAPTER NINE INEQUALITY IN OPPORTUNITY AND REDISTRIBUTION EFFECTS OF PUBLIC EDUCATION	181
Educational Quality and Financial Support 182 Inequalities in Opportunity 184 Reasons for Inequalities in Opportunity 189 Redistribution Effects of Education 193 Notes 201 Selected References 202	
CHAPTER TEN DEVELOPMENT AND IMPACT OF CONCEPTUAL THEORIES OF STATE SUPPORT	203
Development of Theories of State Support 204 Progress Toward Attaining Goals Advocated by Theorists 212 Evaluation of a State's School Finance Program 213 Notes 217 Selected References 218	
CHAPTER ELEVEN PLANNING AND DEVELOPING	010
THE SCHOOL FINANCE PROGRAM  Determination of Educational Need 220 Projection of Educational Costs Based on Need 222 Responsibility for Planning the School Finance Program 234 Notes 235 Selected References 235	219
CHAPTER TWELVE STATE PROVISIONS FOR SCHOOL SUPPORT	237
Revenue and Allocation Dimensions 237 State Support in Relation to State Control 238 Elements of State Equalization Programs 240 Design of State-Aid Programs 242 Efficacy of the Flat Grant 243	

The Foundation Program 245
Full State Funding 251
Percentage Equalizing 253
District Power Equalizing 256
Radical School Finance Alternatives 260
Objections to Vouchers and Tax Credits 263
Criteria for Evaluating a State's Finance Plan 266
Summary of Findings of the National Educational Finance Project
Concerning Alternative Finance Models 268
Selecting the Best Model 269
Notes 270
Selected References 273

# CHAPTER THIRTEEN FINANCING CAPITAL OUTLAY

274

Financing Capital Facilities: Local Options 276 Financing Capital Facilities: State Options 280 Summary 287 Notes 290 Selected References 291

# **CHAPTER FOURTEEN** PERSONNEL POLICIES AND SALARIES

293

Factors Affecting Personnel Policies and Administration 294 Policies Relating to Personnel and Finance State Provisions Relating to Salaries 311 Other Economic Benefits 314 Notes 319 Selected References 321

# CHAPTER FIFTEEN THE FEDERAL ROLE IN FINANCING EDUCATION

322

National Issues Affecting Federal Aid to Education 323 Federal Constitutional Limitations 327 Historical Development of Federal Aid 330 Trends and Present Status of Federal Funds for Education 339 Notes 344 Selected References 345

CHAPTER SIXTEEN	
MANAGEMENT OF RESOURCES	346

Some Concepts of Resource Allocation 346
Evolution of the Budgetary Concept 349
Public School Budgeting 351
Accountability 359
Notes 360
Selected References 361

INDEX 363

# CHAPTER ONE INTRODUCTION

This book is devoted primarily to a study of the financing of the public schools of the United States. Although major emphasis is given to the financing of the tax-supported public schools, many of the concepts in this book are applicable to higher education, both public and private, and to private elementary and secondary schools. The evolution of tax-supported public education in the United States has reflected the needs, values, goals, and aspirations of the American people. As Johns stated in a Horace Mann lecture: "A treatise on the social, economic, political, and religious history of the United States could be centered around the history of the financing of United States public schools." Therefore, the study of the financing of education should not be considered an exercise in statistical analysis or a problem of data storage. The school financing policies of a nation reflect the value choices of the people, the order of priorities they establish in the allocation of their resources, and their political philosophy.

This chapter presents a brief discussion of the antecedents of the common schools and the evolution of tax support for the public schools.

### ANTECEDENTS OF COMMON SCHOOLS

State concern for public education and tax support for the public schools can be traced to actions of the colonial legislature of Massachusetts. The Massachusetts

### 2 Chapter One

law of 1642 directed "certain chosen men of each town to ascertain from time to time, if parents and masters were attending to their educational duties; if the children were being trained in learning and labor and other employments . . . profitable to the state; and if children were being taught to read and understand the principles of religion and the capital laws of the country and empowered them to impose fines on those who refuse to render such accounts to them when required." Cubberley observed that this was the first time in the English-speaking world that a legislative body enacted legislation requiring that children be taught to read. <sup>3</sup>

The 1642 law was tried for five years and found to be unsatisfactory. Therefore in 1647 the General Court (the legislative body of the colony) enacted the famous "ye old deluder law." The preamble of the law stated that one of the chief projects of "ye old deluder Satan" was to keep people in ignorance of the Scriptures. The obvious way to defeat Satan was to teach the people to read and write. Therefore the court, under the provisions of the 1647 law, ordered:

- That every town having fifty householders shall at once appoint a teacher of reading and writing, and provide for his wages in such manner as the town might determine; and
- 2. That every town having one hundred householders must provide a grammar school to fit youths for the university, under a penalty of 5 pounds (afterward increased to 20 pounds) for failure to do so.<sup>4</sup>

This act is remarkable for the following reasons:

- It set the precedent for the authority of the state to establish educational requirements.
- 2. It gave local governmental bodies authority to levy taxes to assist in financing both elementary and secondary schools.
- 3. It demonstrated that if the state requires an educational program to be provided, it must also provide a means for financing that program if it is to become available.

The Massachusetts laws of 1642 and 1647 had great influence on other New England colonies. Connecticut, Maine, New Hampshire, and Vermont all enacted legislation establishing public schools by 1720. The acts passed by those colonies closely resembled the Massachusetts laws of 1642 and 1647.

In the central colonies of New York, Pennsylvania, and New Jersey, various church denominations established parochial schools. These were financed by the respective churches and from fees or rate bills. A rate bill is a special tax levied on parents, assessed in proportion to the number of children sent to school. The teaching of religion, in addition to reading, writing, and arithmetic, was a central purpose of both the New England and the central colonies.

It is interesting to note that the New England colonies did not establish a school system similar to that of England. The early settlers of New England were almost all religious dissenters and they came to America to establish a society different from that in England.

The early settlers of Virginia and the other southern colonies were not church dissenters. They came to America primarily in order to improve their fortunes and they supported the Church of England. Therefore the southern colonies provided for education by much the same system as that used in England at the time. Under that system the schools were under either church or private control. Private schools were financed by tuition charges and were patronized primarily by the well-to-do. The southern colonies did provide a limited amount of schooling for orphans and the children of paupers. Cubberley, in commenting on education in colonial Virginia, stated the following: "The tutor in the home, education in small private pay schools, or education in the mother country were the prevailing methods adopted among well-to-do planters, while the poorer classes were left with only such advantages as apprenticeship training or charity schools might provide." 5

In summarizing the colonial period of American educational history, it should be noted that public education was available in only a few New England colonies, and even in those it was not entirely free because it was partly financed by tuition or rate bills. In the remainder of the thirteen colonies, education was provided by parochial or private schools financed primarily by parents of the children attending them. Under that system educational opportunity was basically a function of the wealth of a child's parents.

# EVOLUTION OF TAX SUPPORT FOR PUBLIC SCHOOLS

Let us next take a look at the beginnings of public education in the early national period. The general public attitude toward education in the beginning of our history as an independent nation is perhaps best expressed in the prefix of the Ordinance of 1787, enacted by the Congress of the Confederation for the organization of the Northwest Territory. It reads as follows: "Religion, morality, and knowledge being necessary to good government and the happiness of mankind, schools, and the means of education shall forever be encouraged." This ordinance, which applied only to the states carved from the Northwest Territory, implied that education was a state responsibility.

This section on the evolution of tax support for the public schools, emphasizes the statements and contributions of leaders in the advocacy of public education which reflect their political and educational philosophies. The beliefs of frontier thinkers of any age have a profound influence on subsequent events, even though the policies advocated may not be accepted at the time. Current problems of school financing can be understood better by contemplating the contributions of leaders of public education who have preceded us.

Public education developed slowly in the early national period. However, public education had some vigorous advocates in our early developmental period. The most well known of these early advocates was Thomas Jefferson. In 1787 he wrote in a letter to James Madison: "Above all things I hope the

### 4 Chapter One

education of the common people will be attended to; convinced that on this good sense we may rely with the most security for the preservation of a due sense of liberty." In 1816, after his retirement from the presidency, he wrote to Colonel Yancy: "If a nation expects to be ignorant and free in a state of civilization it expects what never was and never will be. . . . There is no safe deposit (for the foundations of government) but with the people themselves; nor can they be safe with them without information."

Despite the advocacy of Jefferson and many others, tax-supported public education did not generally become available in the middle Atlantic and midwestern states until after 1830 and in the southern states until the last quarter of the nineteenth century. Although some progress had been made, free public education was not generally available in the United States by the middle of the nineteenth century. According to the Seventh Census of the United States, in 1850 only about half of the children of New England were provided free education, one sixth in the West and one seventh in the Middle states. Even in 1870 only 57 percent of the population 5–17 years of age was enrolled in the public schools and the average length of the school term was only 78 days. Following are some comments concerning the statements and contributions of the leading advocates of the public schools during the nineteenth century.

The most influential advocates of tax-supported public schools in the United States were lay people and lay organizations. Professionally trained educators offered very little leadership in the nineteenth century for the establishment of free public education. Actually very little professional training was provided for educational leadership prior to 1900. Horace Mann, who became secretary of the State Board of Education of Massachusetts in 1837, and his contemporary, Henry Barnard, who served as chief state school officer of both Rhode Island and Connecticut, both had powerful influence on the establishment of tax-supported public schools, but both of these men were trained to be lawyers.<sup>9</sup>

Horace Mann is particularly worthy of special mention because he not only revitalized public schools in Massachusetts, but also had a powerful influence throughout the nation. Many states called upon him for advice and counsel and his twelve annual reports to the State Board of Education will always remain memorable documents. <sup>10</sup> Mann was particularly effective in educating public opinion in support of tax-supported public schools.

Organized labor has historically supported free public schools financed by taxes. Organized labor had gained some strength in the United States by the end of the first quarter of the nineteenth century and had begun to advocate tax-supported public schools. For example, an association of working men in Philadelphia expressed their support for public education as follows in a report adopted in 1830:

When the committees contemplate their own condition, and that of the great mass of their fellow laborers; when they look around on the glaring inequality of society, they are constrained to believe, that, until the means of equal instruction shall be equally secured to all, liberty is but an unmeaning word, and equality an empty shadow, whose substance to be realized must first be planted by an equal education and proper training in the minds, in the habits and in the feelings of the community.<sup>11</sup>

The legislator, Thaddeus Stevens, in an eloquent plea to the Pennsylvania House of Representatives in 1835 for the continuance of tax supported public schools, stated the following:

If an elective republic is to endure for any great length of time, every elector must have sufficient information, not only to accumulate wealth, and take care of his pecuniary concerns, but to direct wisely the legislatures, the ambassadors, and the executive of the nation—for some part of all these things, some agency in approving or disapproving of them, falls to every freeman. If then, the permanency of our government depends upon such knowledge, it is the duty of government to see that the means of information be diffused to every citizen. This is a sufficient answer to those who deem education a private and not a public duty—who argue that they are willing to educate their own children, but not their neighbor's children. 12

Tax support for the public schools was largely confined to the elementary grades until the latter part of the nineteenth century. Cubberley reported that up to 1840 not many more than a dozen high schools had been established in Massachusetts and not more than an equal number in all the other states. 13 Private academies and parochial schools provided most of the secondary education available. Legislation providing for the establishment of high schools was attacked in the courts of many states. Great emphasis was given to the establishment of tax-supported high schools by the famous Kalamazoo case in Michigan in 1875. The Supreme Court of the State of Michigan rendered an opinion so favorable and so positive in support of tax support for high schools that it greatly influenced the development of high schools in many other states. It should not be assumed that a high-school education was universally available by the close of the nineteenth century. As a matter of fact, only 8 percent of the population 14-17 years of age was enrolled in grades 9 through 12 in public high schools in 1900.14 In fact, public high schools did not become available in many of the rural areas of the United States until after World War I. In 1979-80, approximately 86 percent of the population 14-17 years of age was enrolled in public high schools.

Free public education developed very slowly in the United States during the first quarter of the nineteenth century. However, between 1830 and 1860 constitutional and statutory authorization for tax-supported public schools was general in the middle Atlantic and midwestern states. <sup>15</sup> All of the New England states had authorized tax support of the public schools prior to 1830. Legal authorization for tax support of the public schools in the South was not generally authorized until the last quarter of the nineteenth century. But even after tax levies for public schools were authorized, supporters of public schools, not only

in the South but also in other states, frequently faced bitter opposition to those levies. The colonial belief that church and parents were responsible for the education of children died slowly.

Even though taxes for the public schools were generally authorized during the nineteenth century, they were frequently supplemented by tuition charges and/or rate bills. Rate bills were abolished in most of the northern and midwestern states between 1834 and 1871. However the practice of charging tuition, especially for public high schools, continued well into the twentieth century. Frequently, tuition was disguised by calling it "an incidental fee."

The difficulties faced by those advocating tax-supported public schools in the South was well described by Walter Hines Page in his famous lecture "The Forgotten Man," delivered at the State Normal and Industrial School for Women at Greensboro, North Carolina, in June 1897. In that address he stated the following concerning educational conditions in North Carolina, his native state:

In 1890, twenty-six percent of the white persons of the State were unable even to read and write. One in every four was wholly forgotten. But illiteracy was not the worst of it; the worst of it was that the stationary social condition indicated by generations of illiteracy had long been the general condition. The Forgotten Man was content to be forgotten. He became not only a dead weight, but a definite opponent of social progress. He faithfully heard the politicians on the stump praise him for virtues that he did not have. The politicians told him that he had lived in the best state in the Union, told him that the other politician had some harebrained plan to increase his taxes, . . . told him to distrust anybody who wished to change anything. What was good enough for his fathers was good enough for him. Thus the Forgotten Man became a dupe, became thankful for being neglected. 17

Page, through his writings and lectures, had a significant influence on the development of public education in the United States. He stated his creed as follows:

I believe in the free public training of both the hands and the mind of every child born of woman.

I believe that by the right training of men we add to the wealth of the world. All wealth is the creation of man, and he creates it only in proportion to the trained uses of the community; and, the more men we train, the more wealth everyone may create.

I believe in the perpetual regeneration of society, in the immortality of democracy, and in growth everlasting.  $^{\rm 18}$ 

Those words express very well the philosophy of the advocates of public education today.

In concluding this chapter, it should be noted that, although great progress has been made, we have not yet developed satisfactory systems of tax support for the public schools in many states and that the struggle for a satisfactory level of financial support continues in all states. As will be shown later in this book, the public schools are still involved in Huxley's "struggle for existence,"