School Finance
A Policy Perspective

SIXTH EDITION

Allan R. Odden • Lawrence O. Picus

Mc Graw Hill Education

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Allan Odden is Professor Emeritus of Educational Leadership and Policy Analysis at the University of Wisconsin–Madison. He also is codirector emeritus of the Consortium for Policy Research in Education (CPRE), a consortium of the University of the Wisconsin–Madison, Teachers College–Columbia University, and Harvard, Northwestern, Michigan, Pennsylvania, and Stanford Universities. He is also director emeritus of Strategic Management of Human Capital in Education, a project focused on talent management in education. He formerly was Professor of Education Policy and Administration at the University of Southern California (USC) and director of Policy Analysis for California Education (PACE), an educational policy studies consortium of USC, Stanford University, and the University of California–Berkeley. Odden is an international expert on education finance, school-based financing, resource allocation and use, strategic management of talent in education, educational policy, school-based management, teacher compensation, district and school decentralization, and educational policy implementation. He worked with the Education Commission of the States for a decade, serving as assistant executive director, director of policy analysis and research, and director of its educational finance center. He was president of the American Educational Finance Association in 1979–80 and received its Distinguished Service Award in 1998. He has served as research director for special state educational finance projects in Connecticut (1974–75), Missouri (1975–77), South Dakota (1975–77), New York (1979–81), Texas (1988), New Jersey (1991), Missouri (1992–93), North Dakota (2007–08, 2014), and Vermont (2011–12). Over the past five years, together with coauthor Lawrence Picus, he has conducted adequacy studies for Arkansas, Arizona, Kentucky, Maine, Maryland, Michigan, New Jersey, Nevada, North Dakota, Ohio, Texas, Washington, Wisconsin, and Wyoming. He has directed research projects on school finance redesign, resource reallocation, the use of resources by educational strategy at the school level, the costs of professional development, and teacher compensation. He was appointed Special Court Master to the Remand Judge in the New Jersey *Abbott v. Burke* school finance court case for 1997 and 1998. He has written widely, publishing over 250 journal articles, book chapters, and research reports, and 36 books and monographs. He has consulted for governors, state legislators, chief state school officers, national and local unions, the National Alliance for Business, the Business Roundtable, New American Schools, the U.S. Congress, the U.S. Secretary of Education, many local school districts, the state departments of education in Victoria and Queensland, Australia, and the Department for Education and Employment in England.

Odden's books include *Improving Student Learning When Budgets Are Tight* (Corwin, 2012), *Strategic Management of Human Capital in Education* (Routledge, 2011), *Ten Strategies for Doubling Student Performance* (Corwin, 2009), *Doubling Student Performance . . . and*

Finding the Resources to Do It (Corwin Press, 2009) with Sarah Archibald*; How to Create World Class Teacher Compensation* (Freeload, 2007, downloadable at www.freeloadpress .com) with Marc Wallace; *Paying Teachers for What They Know and Do: New and Smarter Compensation Strategies to Improve Schools* (Corwin, 1997; 2nd edition, 2002) with Carolyn Kelley; *Reallocating Resources: How to Boost Student Achievement without Spending More* (Corwin, 2001) with Sarah Archibald; *School-Based Financing* (Corwin, 1999) with Margaret Goertz; *Financing Schools for High Performance: Strategies for Improving the Use of Educational Resources* (Jossey-Bass, 1998) with Carolyn Busch; *Educational Leadership for America's Schools* (McGraw-Hill, 1995); *Rethinking School Finance: An Agenda for the 1990s* (Jossey-Bass, 1992); *School Finance: A Policy Perspective* (McGraw-Hill, 1992, 2000, 2004, 2008), coauthored with Lawrence Picus; *Education Policy Implementation* (State University of New York Press, 1991); and *School Finance and School Improvement: Linkages for the 1980s* (Ballinger, 1983). Odden was a mathematics teacher and curriculum developer in New York City's East Harlem for five years. He received his PhD and MA degrees from Columbia University, a master's of divinity from the Union Theological Seminary, and a BS in aerospace engineering from Brown University.

Lawrence O. Picus is the Richard C. Cooper and Mary Catherine Cooper Chair in Public School Administration, Professor of Education Finance and Policy, and associate dean for research and faculty affairs in the USC Rossier School of Education. His current research interests focus on adequacy and equity in school finance as well as efficiency and productivity in the provision of educational programs for Pre-K–12 schoolchildren. Picus is past president of the Association for Education Finance and Policy, and past president of EdSource, where he served as a member of the board of directors for 14 years.

Picus's other books include: *In Search of More Productive Schools: A Guide to Resource Allocation in Education,* published by the ERIC Clearinghouse on Educational Management, and *Developing Community Empowered Schools*, coauthored with Mary Ann Burke. Picus is the coauthor of the Association of School Business Officials book *Principles of School Business Administration.* He has published numerous articles in professional journals as well. Picus has consulted extensively on school finance issues in more than 20 states. In recent years he completed equity studies in Louisiana, Kansas, Massachusetts, and Montana and has conducted adequacy studies in Arkansas, Arizona, Kentucky, Maine, Vermont, Maryland, Michigan, Nevada, Wyoming, Wisconsin, North Dakota, Ohio, Oregon, and Washington. He recently completed an evaluation of Vermont's school funding system under Acts 60 and 68.

To two friends and colleagues, James A. Kelly, who was my first school finance professor, and to Donna Shalala, who counseled me on my first state school finance project. I was fortunate to have such insightful and renowned mentors.

Allan Odden

To my family, Susan Pasternak and Matthew Picus, who help me keep this in perspective.

Larry Picus

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Preface

In this sixth edition of *School Finance: A Policy Perspective,* we continue the emphasis of the first five editions on the use of education dollars and the need to spend current and new dollars on more effective programs and services—in short, to use the dollars in the education system to more effectively produce student learning. Our prime goal in the sixth edition is to continue and strengthen the book's orientation to the issues that school principals and other site-based education leaders face on a daily basis, while maintaining our efforts to instill a deep understanding of the issues faced by those at the policy level in school districts and states. To do this, we have enhanced the chapter that describes our Evidence-Based approach to school finance adequacy, added a chapter that shows how schools and districts can weave all these elements into a cohesive and effective School Strategy, and in Chapter 10, use the allocation of resources embedded in this School Strategy to show how schools and districts can reallocate resources to research Evidence-Based school strategies. That chapter addresses the resources, programs, and services needed in prototypical elementary, middle, and high schools to provide every child an equal educational opportunity to achieve at a level that will meet any state's student proficiency standards. Following the introduction of our Evidence-Based model in Chapter 4, we discuss the use of these resources in subsequent chapters on resource allocation strategies to implement that model. Other chapters cover issues of budgeting and reform of state school finance systems. This enables readers to compare and contrast the resources in their state, district, and school, using at least one approach that could be deemed adequate in terms of funding levels and effective in terms of specific use of resources. continue to devote attention to key issues in school finance litigation, definitions of equity and adequacy, revenue raising, and revenue distribution (both state-to-district and district-to-school). Chapter 11 now considers allocation of resources for school district offices, and reflects our work in this area as part of our Evidence-Based model. We also have updated all material from the fifth edition.

The sixth edition continues to include our school finance simulation that allows readers to input staffing and resource data from a school—as well as from all schools in a district—and to immediately receive a report indicating whether the school or district can, via resource reallocation, afford the strategies included in the Evidence-Based adequacy model developed in Chapter 4. In addition, the book includes a revised and enhanced school finance simulation that enables students, professors, and researchers to use web-based tools (on Connect) to analyze the nature of school finance problems and to simulate the effects of different school finance structures on a 20-district sample. The sixth edition has five major sections:

1. Three introductory chapters, one providing an overview of key school finance issues, one on issues in school finance litigation, and one that develops an equity and adequacy framework for analyzing state school finance structures.
2. Two chapters explaining the rationale behind the Evidence-Based model. The first identifies adequate resources for prototypical elementary, middle, and high schools using the Evidence-Based approach to school finance adequacy. We have used this model in our work with a number of state legislative commissions around the country. The second chapter in this section describes how these individual programmatic elements can be integrated into a cohesive school-wide strategy to boost student learning and reduce achievement gaps.
3. Three chapters on budgeting adequate resources to districts and schools. This includes an updated chapter on state-to-district funding formulas and a completely new chapter describing the process of school finance reform over time in four states in which we have worked during the last decade. The third chapter focuses on budgeting dollars to schools, with an emphasis on moving to a school-based budgeting approach.
4. Three chapters on the effective allocation and use of education resources. The first describes how resources are currently allocated, while the second uses a district simulation to show how resources could be more effectively allocated. This chapter emphasizes the allocation recommendations in the Evidence-Based model. The third chapter in this section considers allocation of resources at the central school district level.
5. The fifth section includes an extensive chapter on the public finance context of school financing and provides an analysis of the major funding sources for schools—income, sales, and property taxes.

The book also includes an appendix that provides instructions for using the simulation in Chapter 6.

1. INTRODUCTION AND OVERVIEW

Chapter 1 serves as an introduction to the topic of school finance. It begins with information on the current status of funding for public K–12 education in the United States, showing how much is spent, where those funds come from, and how levels and sources of funding have changed over time. It shows that, as a nation, we spend a great deal of money on K–12 education and that the amount we spend has grown considerably over time. Chapter 1 also discusses the manner in which school finance inequities have changed over the past 30 years. The chapter looks at the "traditional" school finance inequities in states, where districts with lower property wealth per pupil tend to have lower expenditures per pupil—even with higher school tax rates—than do districts with higher per pupil property wealth. These high-wealth districts tend to have higher per pupil expenditures even with lower school tax rates.

The chapter then describes school funding reform in four states that over time implemented adequacy-based school finance reforms. This section describes the interactions of major education stakeholders and policymakers and the process that led to reform in each state. Finally, the chapter summarizes how the issue of adequacy has entered the school finance policy agenda.

Chapter 2 reviews the evolution of school finance court cases, from the initial *Serrano v. Priest* decision to the adequacy cases of the late 1990s and 2010s. The chapter shows how strongly litigation has shifted from equity to adequacy issues. This chapter has been rewritten to make the ideas and concepts more understandable and to update all the pertinent legal issues. A chart, which can be found on Connect, contains citations for the various school finance court decisions across the country and their constitutional bases.

Chapter 3 begins with a short discussion of whether money "matters," arguing that this was less of an issue in the 20th century, when attention was primarily focused on equity. We argue that today the adequacy issue directly relates to the "does money matter" question, so it is not an add-on, but a core issue in school finance. The chapter then develops an equity-and-adequacy framework for analyzing state school finance systems. It draws from the Berne and Stiefel (1984) equity framework that was used in the first edition of the text and adds a discussion of such issues as ex ante versus ex post equity perspectives, the unit of analysis, and various elements of equity including the group, the object, and different measures of horizontal and vertical equity. The chapter also adds the concept of adequacy to the overall framework and presents an adequacy statistic, the Odden–Picus Adequacy Index. The chapter concludes by asserting that most analyses of the equity and adequacy of state school finance systems use state and local revenues per pupil and focus on the degree of per pupil revenue equality (using the coefficient of variation and the McLoone Index statistics) and the degree of fiscal neutrality, or the linkage between revenues per pupil and property wealth per pupil.

2. AN APPROACH TO SCHOOL FINANCE ADEQUACY

This section includes two related chapters. Chapter 4 identifies an adequate level of school resources, and Chapter 5 addresses how the various individual programs can be used in a powerful school-wide strategy.

Chapter 4 updates the Evidence-Based approach to school finance adequacy, one of the four major methods used around the country to identify an adequate level of education resources. The Evidence-Based model was created by us to use in the conduct of adequacy studies in several states. The model identifies a set of research-based resources for prototypical elementary, middle, and high schools that will provide all students an equal education opportunity to meet their state's performance standards. The material in this chapter draws heavily from the work we have done in states where we have conducted adequacy studies. We are currently conducting research in schools that have used this level and type of resources to dramatically improve student performance in recent years, and we are increasingly confident that the resources identified represent a reliable approach to identifying the

resources needed to ensure school finance adequacy. The results of these studies can be found at our website, www.picusodden.com.

Chapter 5 addresses what we have found to be common elements of schools and districts around the country that have dramatically improved student learning and reduced achievement gaps—what many are now calling "moving the student achievement needle." The purpose of this chapter is to show how many different schools and districts in the country have woven the various programmatic elements described in Chapter 4 into an integrated School Strategy to increase student achievement.

3. ALLOCATING AND BUDGETING DOLLARS FOR EDUCATIONAL PURPOSES

This section includes three chapters: Chapter 6 on traditional state funding formulas, Chapter 7 on using those formulas and structures to improve state school finance structures, and Chapter 8 on budgeting.

Chapter 6 begins by noting that all levels of government (local, state, federal) in the United States play a role in funding schools; this system is called *fiscal federalism.* It then describes the core elements of state school finance formulas: base allocations provided through flat grant, foundation, guaranteed tax base (district-power-equalizing and percentage-equalizing), and combination formulas. The chapter provides a general description of how these programs work through the use of a 20-district sample in an updated simulation program. The focus of this chapter is on how different school finance formulas work (i.e., their costs and their effects on horizontal and vertical equity, as well as adequacy). The chapter includes a discussion of four different methods for determining an adequate base spending level: the professional-judgment approach, the successful-district approach, the cost function approach, and the Evidence-Based approach.

While the last part of Chapter 4 discusses the rationales and the types of adjustments for three categories of special-needs children (those from a low-income background, those with physical and mental disabilities, and those with limited English proficiency), Chapter 6 describes different ways states can adjust funding formulas for these categories of special pupil needs.

Chapter 7 provides a detailed description of the adequacy-based school finance reform process in four states—Arkansas, North Dakota, Washington, and Wyoming. We describe the process of identifying an adequate level of school resources in each state and provide a discussion of the process undertaken to identify the resource levels and to fund them in each state. These four states were selected because we have worked with all four of them in recent years as they developed Evidence-Based adequacy strategies.

Chapter 8 is an updated chapter on budgeting educational resources. It focuses more on the nuts and bolts of budgeting and less on research about budgeting processes. The chapter starts with the traditional triangle that structures budgeting—revenues, expenditures, and educational programs—and then discusses how these play out as central issues in school district budgeting. It includes explanations of the general fund and restricted funds. It also includes descriptions of various ways that districts provide resources to school sites,

from the more traditional staffing formulas to emerging needs-based, per pupil funding formulas. In addition, the chapter examines how the recommendations in Chapter 4, which identify adequate resources for prototypical schools, could be used to budget resources to all schools in a district. It also raises the issue of how expenditures might be reported by the same budgeting categories in the future. It includes short summaries of the weighted-pupil approach to budgeting. The goal is to illuminate the key ways in which districts allocate resources for schools.

4. THE ALLOCATION AND EFFECTIVE USE OF DOLLARS

Chapter 9 provides a detailed analysis of the way states, districts, and schools allocate and use educational resources, summarizing research from national-, state-, and school-level databases. The chapter shows that there are surprisingly common patterns in the uses of the education dollar. It also shows that during the past 35 years the bulk of new dollars has been used to expand services outside the regular, core instructional program (i.e., to provide extra services for numerous categories of special pupil needs). The chapter concludes that while these uses reflect good values—more money for many categories of special-needs students—the specific applications of those new dollars have not had much impact on student learning. The implication is that we need to retain these values but find more effective uses for these extra resources. The chapter concludes with a recommendation for reporting expenditures of education resources by educational strategy at the school level—a new financial reporting mechanism that would provide expenditure information, now lacking, by the categories of adequate resources Id in Chapter 4.

Chapter 10 addresses the challenge of using school resources more effectively. It discusses the issue of resource reallocation to school-level strategies that produce higher student performance. Drawing from the school staffing discussion in Chapter 4, it examines resource use and reallocation processes that could produce expenditures in line with the model. This chapter does not draw definitive conclusions about the impact of the adequacy model (though it is an approach we strongly support), but it does show how this model has a cost structure different from traditional schools and thus uses dollar resources differently.

This chapter uses both a school-level redesign or reallocation tool and a newly developed district simulation that can be used by district administrators for assessing reallocation possibilities in *all* the district's schools. To use the school redesign simulation, readers need to input staffing and discretionary dollar data (note that it is only staffing resources and not the school's actual budget), together with the average cost of teachers, administrators, and instructional aides. The simulation then provides a report analyzing whether, fiscally and via resource reallocation, the school could afford the Evidence-Based model developed in Chapter 4. The directions for the district simulation are included in the "Read First" and "FAQ" tabs of the Excel-based program, which is available on the McGraw-Hill web page for this book (Connect). The chapter suggests activities a professor could use as a course paper using results from either or both of these simulation programs.

Chapter 11 describes our Evidence-Based model research at the school district level, providing a discussion of resources for central administration, operations, maintenance and groundskeeping, as well as discussions of food services, school safety costs, and pupil transportation. We also describe the process we undertake to establish prototypical schools through which resource allocation strategies are identified, and then describe how these resource allocation strategies can be used to allocate resources to schools and districts of alternative sizes.

5. THE PUBLIC FINANCE CONTEXT

Chapter 12 reviews the public finance context for school finance, analyzing the base, yield, elasticity, equity, economic effects, and administrative costs of income, sales, and property taxes as revenue sources for public schools. It discusses mechanisms to improve the regressive incidence at lower income levels of both the sales and the property tax, and reviews various property tax limitations states have enacted on this primary public school revenue source. It also includes a short analysis of lotteries as a source of school revenues.

Many of the chapters in this sixth edition Ie a set of study questions. Many of these study questions can be used as formal assignments in a school finance course.

6. APPENDIX: THE SIMULATION

An integral part of this book is the school finance simulation designed to accompany the text. We have made a number of improvements to the simulation that accompanied previous editions of this book. The original 10-district simulation has been expanded to be 20 districts. Additionally, two new school finance statistics are provided—the Verstegen Index and the Odden–Picus Adequacy Index. The 20-district simulation is designed to accompany Chapter 6. We have found that the simulation dramatically improves student understanding of the statistics used by the school finance profession and helps them understand the myriad complexities involved in making changes to a state's school-funding system. The 20-district simulation that accompanies this edition should continue that tradition.

The simulation is available on the book's website on Connect. The appendix describes the general use of the simulation and provides information on how to access it on the web. Additional documentation is available on the website.

There also is an Excel-based tool accompanying Chapter 10 that districts can use to identify current resource allocations at their schools and compare them to resources the Evidence-Based model would provide to those schools as well as a district's own desired allocations (if funds would allow). At the end of the preface of the first edition, we said, "We hope this will help the country accomplish its goals of having all students learn to think, solve problems and communicate, graduate from high school, and be first in the world in mathematics and science." We continue this hope with this edition.

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Writing a book of this magnitude is almost always the result of activities far beyond those of the authors. We are responsible for the text and for any errors and omissions, but without the insights, assistance, support, and work of others, a book might never see the light of day. We would like to thank the people who played major roles in helping us produce the sixth edition of this book.

Professor William Glenn of Virginia Tech University rewrote Chapter 2 on the law related to school finance, updated the school finance legal chart on the book's website, and also created the Virginia simulation on the book's website. We thank Dr. Michael Goetz, an independent consultant in education finance and policy, for his work over the years on the 20-district simulation. He is a genius at debugging the glitches that have emerged in the simulations over the years, and in tailoring new data sets to state simulations. David Knight, assistant professor of education leadership and foundations and associate director of the Center for Education Research and Policy Studies at the University of Texas at El Paso, began the programming for the district tool used extensively in Chapter 10, which over time has been enhanced by Michael Goetz as well as the authors. Sonya Black-Williams, administrative assistant in the USC Rossier School of Education, and Jacklyn Cunningham, a student at USC, were always available to help with matters pertaining to this edition of the book.

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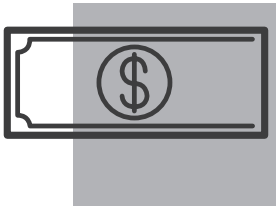

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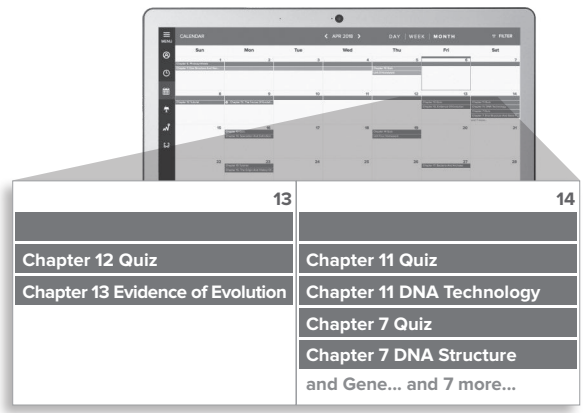

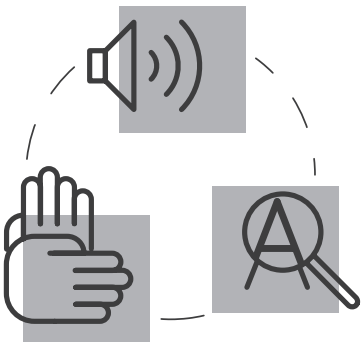

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Chapter 1

Introduction and Overview to School Finance

School finance concerns the distribution and use of money for the purpose of providing educational services and producing student achievement. For most of the 20th century, school finance policy focused on equity—issues related to widely varying education expenditures per pupil across districts within a state caused by the uneven distribution of the property tax base used to raise local education dollars. In the 1990s, new attention began to focus on the adequacy and productivity of the education provided—the linkages among level and use of funds, and linkages to student achievement. As the 1990s ended and the 21st century began, policymakers increasingly wanted to know how much money was needed to educate students to high standards; how those dollars should be distributed effectively and fairly among districts, schools, programs, and students; and how both level and use of dollars affected student performance. In recent years there has been growing emphasis on accountability, reducing the achievement gap, and growing commitment to establishing Common Core State Standards. Additionally, the lingering effects of the great recession of 2008 have placed increasing pressure on funding levels in some states and in 2018 led teachers in Arizona, Kentucky, Oklahoma, North Carolina, and West Virginia to strike and march on their state capitols seeking higher salaries and more money for schools and services for children. All of these factors add to the policy demands that continue to push school finance beyond its traditional emphasis on fiscal equity.

This book follows the movement of school finance into new directions. It addresses traditional equity issues and discusses adequacy, productivity, and accountability issues. The text considers what we currently know about the linkages among dollars, educational strategies, and student performance. The 1980s and 1990s were remarkable not only for the intensity of the school reform movement, but also for the duration of interest in educational reform. In the first decade of the 21st century, starting with the federal No Child Left Behind Act (NCLB) in 2002, accountability issues including standards-based education reform, charter schools, new accountability structures, Race to the Top, and Common Core State Standards have been at the forefront of education reform. Progress in these areas slowed in the years following the recession of 2008, and it is only recently

that inflation-adjusted school funding levels have returned to prerecession levels. The lack of certainty regarding future federal education policy under the Trump administration, combined with continued taxpayer resistance to generating new revenues in many states, leaves the status of funding for schools in a somewhat precarious state—although a growing number of new school finance adequacy lawsuits, as well as the aforementioned teacher strikes, have pushed some states to increase funding for schools in recent years.

How school finance systems are designed can create incentives to improve student performance or hinder local school officials' efforts to teach students to high levels and reduce achievement gaps they identify. In 1998, Odden and Clune (1998) argued that traditional school finance systems were "aging structures in need of renovation." During the 2000s, NCLB and the Race to the Top competition for funding forced states and their respective school districts to rethink school finance systems and increased the emphasis on ensuring that state finance systems can adequately meet the productivity expectations and accountability requirements inspired by these reforms. The new federal Every Student Succeeds Act (ESSA) continues these pressures, including more school finance equity at the school level. Today, states continue to seek ways to fund an education system that can prepare students to do well in college and be ready for work in the knowledge- and information-based global economy of the 21st century.

This book takes a policy approach to school finance analysis. To that end, it emphasizes the actions schools, districts, and states can take—and policies they can enact—to address the equity, adequacy, productivity, and performance issues raised herein. It is important for graduate students in education, as well as educators and education policymakers, to understand both the finance implications of school reform policies and, equally important, how decisions about the distribution of funds to local schools and school districts affect the implementation of those reforms. This sixth edition continues and expands our focus on school finance policy issues related to adequacy and extends that discussion into issues of efficiency as well. In the years since the earlier editions of this book, the coauthors have had extensive experience working in 19 states and multiple school districts to identify the components of an adequate education—that is, the resources needed to ensure all students are able to perform at high levels and meet their state's proficiency standards—and ways to provide those resources in a cost-effective way.

In this chapter, we begin with a discussion of the scope of education finance in the United States, including the nature of school finance disparities linked to local financing of schools. Chapter 2 discusses legal issues surrounding school finance, and Chapter 3 begins a discussion of equity and adequacy.

The second section of the book focuses on linkages between school finance and school improvement with an emphasis on how our Evidence-Based model can be used to determine adequate funding levels and improve productivity. Chapter 4 introduces our Evidence-Based approach to school finance adequacy. We have developed and used this Evidence-Based model with policy groups in a number of states. Today, this general model is the basis for school funding systems in Arkansas and Wyoming and was the basis for determining funding levels in other states including Washington, Arizona, New Jersey, Maine, North Dakota, Vermont, and Wisconsin, and is being used to help develop such estimates in Maryland, Michigan, Nevada, and at the individual district level in Pennsylvania. Chapter 4 shows how the Evidence-Based approach can be used to staff schools to include

all necessary components of an adequate education, including students who are struggling with the current curriculum and strategies for students with special needs. Chapter 5 builds on the resource allocation strategies in the previous chapter, describing our theory of school improvement, showing how the individual elements in the Evidence-Based model can be combined into a powerful School Strategy that dramatically improves student performance and reduces achievement gaps.

The third section of the book moves from discussing our Evidence-Based model and school improvement into showing how these concepts can be incorporated into traditional school finance policy issues with a focus on getting resources to districts and schools and then using those resources efficiently. Chapter 6 focuses on the distribution of state and local resources to school districts, detailing the different methods that states can use to provide funds to school districts. Each of these funding mechanisms can be assessed through the state simulation program designed to accompany this book. By designing their own school finance formulas and simulating the impact on a sample of school districts, students will develop a more realistic sense of how changes in funding formulas influence school districts across a state. The simulation helps students understand the technical, fiscal, and political complexities that result when one attempts to redesign school-funding programs. Chapter 7 provides examples from four states where we have conducted school finance adequacy studies and shows how the process of school finance reform played out in each state. The chapter identifies the major issues and stakeholders in each state, and describes the interrelationships among those groups (i.e., legislatures, state courts, governors, education interest groups, and outside consultants). The chapter also describes the importance of compromise and negotiation to achieve school finance goals, and shows that the process is lengthy—often taking a decade or more, and is never really "complete," as the most successful states have implemented a process to recalibrate their school funding model on a regular basis.

The fourth section of the book looks more closely at the school and district issues associated with the efficient allocation of school resources for the purpose of improving student achievement. Chapter 8 provides a general introduction to school district budgeting, focusing on traditional budget processes and how the Evidence-Based model could be used to budget resources directly to school sites. Chapter 9 offers a framework for the allocation and use of education dollars, updating and expanding on our recent experiences in a number of states. Specifically, we assess the cost pressures that face schools and school districts in allocating resources and provide examples of ways to enhance the efficiency of the resources used by schools and school districts. Chapter 10 builds on the two previous chapters and introduces a strategic District Simulation budgeting tool we have developed to work with individual school districts. The budgeting tool allows school and/or district officials to enter current staffing and dollar allocations for each school in their district and to compare those resource use patterns to both our Evidence-Based model and alternative resource allocations they select for their districts. This model, which is also available on our book's website, allows users to develop a "gap analysis" showing how current resource use differs from alternative allocation models and how currently available resources compare with those desired models. As readers will see, in some instances current resources are not sufficient to meet the alternative designs, but in other instances there are adequate resource levels, but staff and dollars are being used in different ways.

Chapter 11 focuses on the important services all school districts provide to support educational programs in their schools. Using our work in developing and supporting the Evidence-Based Model in a range of states, we describe the resources needed to support central district offices, operate and maintain the school facilities in the district, and provide transportation, school meals, and ensure the safety of school children.

We conclude with Chapter 12, which addresses several issues related to the public finance context of school finance. It has extensive analyses of the basis, yield, burden by income class, elasticity, administrative issues, and economic effects of the income, sales, and property taxes and of lottery revenues.

The balance of this introductory chapter has three sections. The first outlines the scope of school finance within the United States. Funding public schools is big business, and the first section outlines its fiscal magnitude. Section two provides a quick history of school finance developments, beginning in the 17th century. This section shows how schools evolved from privately funded, parent- and church-run entities to the large publicly and governmentally controlled education systems of today. Section three discusses several examples of the "school finance problem" and how it has evolved from the traditional fiscal disparities across districts to the new issue of education adequacy.

1. THE SCOPE OF EDUCATION FINANCE IN THE UNITED STATES

Education is an enormous enterprise in the United States. It constitutes the largest portion of most state and local governmental budgets; engages more than 100,000 local school board members in important policymaking activities; employs millions of individuals as teachers, administrators, and support staff; and educates over 50 million children. The National Center for Education Statistics estimated total revenues for current expenditures in public elementary and secondary schools in the United States in fiscal year 2014–15 amounted to over $664 billion (https://nces.ed.gov/programs/digest/d17/tables/dt17_235.10.asp). By way of comparison, Walmart, the largest company of the Fortune 500, had annual revenues of $485 billion in 2017 (http://fortune.com/fortune500/2015/). Public Pre-K–12 education is a large enterprise, spending billions of dollars and employing millions of Americans.

Enrollment

Table 1.1 provides details on public school enrollment, including numbers of school districts and schools during most of the 20th century. Enrollment was relatively constant during the 1930s and 1940s, but rose quickly after World War II as the postwar baby boom reached school age. After 25 years of rapid growth, public school enrollment declined during the 1970s and then began to grow again in the mid-1980s when the children of the baby boom generation began to enter schools. In 2009–10, public school enrollment was estimated to be 49.4 million students, a figure almost 4 million higher than the previous generation's peak of 45.6 million in 1970. By 2015–16, total public school enrollment was 50.58 million students (https://nces.ed.gov/programs/digest/d17/tables/dt17_203.60.asp).

TABLE 1.1 Historical Data on the Size of the Nation's School Systems, 1919–20 to 2015–16

Year	*Public School Enrollment (in 1,000s)***	*Public School Districts****	*Public Elementary Schools****	*Public Secondary Schools****	*Private Elementary Schools****	*Private Secondary Schools****
1919–20	21,578	–	–	–	–	–
1929–30	25,678	–	238,306	23,930	9,275	3,258
1939–40	25,434	117,108	–	–	11,306	3,568
1949–50	25,111	83,718	128,225	24,542	10,375	3,331
1959–60	35,182	40,520	91,853	25,784	13,574	4,061
1969–70	45,550	17,995[a]	65,800[a]	25,352[a]	14,372[a]	3,770[a]
1979–80	41,651	15,944	61,069[b]	24,362[b]	16,792[b]	5,678[b]
1989–90	40,543	15,367	61,669	23,461	22,223	8,989
1999–2000	46,857	14,928	68,173	26,407	24,685	10,693
2009–10	49,373	13,629	72,870	30,381	30,590	11,941
2010–11	49,522	13,588	73,223	30,681	–	–
2011–12	49,771	13,567	73,000	30,668	28,184	11,165
2012–13	50,045	13,515	73,037	30,623	–	–
2013–14	50,313	13,491	73,223	30,256	30,919	11,110
2014–15*	50,438	13,601	73,420	30,528	–	–
2015–16*	50,580	13,584	73,456	30,828	31,630	12,669

*Estimated.
***Source:* https://nces.ed.gov/programs/digest/d17/tables/dt17_203.60.asp.
****Source:* https://nces.ed.gov/programs/digest/d17/tables/dt17_214.10.asp.
[a]Data for 1970–71
[b]Data for 1980–81

Schools and School Districts

One of the major stories of the 20th century, also displayed in Table 1.1, was the consolidation of school districts into larger entities. In 2015–16, there were 13,584 school districts, a much lower number than was recorded throughout much of the 20th century. In 1940, by contrast, there were 117,108 school districts. The number of school districts dropped by over 33,000 between 1940 and 1950 (i.e., after World War II), and then dropped by another 43,000 districts between 1950 and 1960. By 1970 there were only 17,995 local school districts, and that number continued to fall to today's figure of 13,629. The number of districts varies across the states, however, with Texas having over 1,000 districts and California having almost 1,000 districts in 2016. By contrast, Hawaii is one statewide school district.

It is important to note here that although school district consolidation also entails consolidation of the local property tax base, remaining inequities in local school financing after the bulk of consolidation occurred still led courts to declare finance structures unconstitutional during the late 1960s and early 1970s (see Chapter 2).

Table 1.1 also shows that the number of public schools has dropped over time, while enrollments have risen, indicating that schools have grown in size during the 20th century. There were over 262,000 public schools in 1930, but that number had dropped by almost 60 percent to just over 104,000 schools in 2016. On the other hand, the number of private schools has risen since 1930, from a low of about 12,500 to over 44,000 in 2016.

Impact on the Economy

As hinted at above, funding public schools requires large amounts of dollars. In 2014–15, public school revenues are estimated to total $664 billion—more than triple the 1990 total of $208.5 billion (Table 1.2). The data show that public school revenues more than doubled during each decade from 1940 to 1990, a remarkable fiscal record.

Table 1.2 shows that during the last century, public education consumed an increasing portion of the country's total economic activity (as measured by the gross domestic product and personal income), increasing steadily until 1970, dropping slightly during the enrollment decline of the 1970s and until the great recession, equaling the high reached in 1970. In recent years, education revenues as a percent of GDP have declined slightly, likely the result of the slowness with which public school revenues returned to their prerecession levels (in some states they have yet to do so), and a continuing reluctance to increase tax revenues across most states.

Table 1.2 shows that the pattern that emerges when total public school revenues are measured as a percentage of the country's personal income, which reached 4.8 percent in 1970, declined slightly, then rose to approximately 4.9 percent of personal income in 2010, a likely result of public school resources (buoyed by the federal bailouts) declining more slowly than personal income during the recession. Following that high, education revenues as a percent of personal income have declined and now represent approximately 4.2 percent

School Revenues and Expenditures

The significance of using a sizable portion of personal income for education is supported by the data in Table 1.3. Column 2 shows that real expenditures per pupil (i.e., expenditures adjusted

TABLE 1.2 Educational Revenues, GDP, and Personal Income (Billions), 1929–30 to 2014–15

Year	*Total Educational Revenues*	*Gross Domestic Product (GDP)*	*Revenues as Percent of GDP*	*Personal Income (PI)*	*Revenues as Percent of PI*
1929–30	$ 2.1	$ 103.6	2.0%	$ 85.1	2.5%
1939–40	2.3	92.2	2.5	78.5	2.9
1949–50	5.4	267.2	2.0	228.9	2.4
1959–60	14.7	506.6	2.9	411.3	3.6
1969–70	40.3	984.4	4.1	838.6	4.8
1979–80	96.9	2,562.2	3.8	2,059.5	4.7
1989–90	208.5	5,482.1	3.8	4,557.5	4.6
1999–00	372.9	9,353.5	4.0	7,910.8	4.7
2007–08	584.7	14,718.6	4.0	12,502.2	4.7
2008–09	592.4	14,418.7	4.1	12,094.8	4.7
2009–10	596.4	14,964.4	4.0	12,477.1	4.9
2010–11	604.2	15,517.9	3.9	13,254.5	4.8
2011–12	597.9	16,155.3	3.7	13,915.1	4.6
2012–13	603.8	16,691.5	3.6	14,073.7	4.3
2013–14	623.6	17,427.6	3.6	14,818.2	4.3
2014–15	647.7	18,120.7	3.6	15,553.0	4.2

Sources: https://nces.ed.gov/programs/digest/d17/tables/dt17_235.10.asp, accessed June 29, 2018; https://www.bea.gov/national/index.htm, accessed June 29, 2018.

according to the Consumer Price Index) increased each decade through 2010 at extraordinarily large rates: 100 percent between 1920 and 1930, 67 percent during the 1960s, and 35 percent during the 1970s. Even during the 1980s, a decade of government tax and expenditure limitations, expenditures per pupil increased by 36 percent to a total of $9,883 (in 2016 dollars) for current operating purposes in 1989–90. At the turn of the century, an average of $11,510 was spent on each public school student—an increase of 11.7 percent, and by 2008–09 that figure was $13,816 per student, an increase of another 21 percent. However, in 2009–10 real per pupil expenditures decreased, a trend that continued for four more years until 2013–14. Real per pupil expenditures increased again in 2014–15, but were still some $700 per pupil (adjusted for inflation) below the high of 2008–09. The pertinent question facing educators today is: Will real resources for public school students start to increase on a regular and sustained basis again soon, or does the current pattern represent a change in the way education will be funded for the foreseeable future? If the latter, the identification of the resources needed to educate all students to proficiency and ways to use those resources efficiently will become even more important.

Even with the recent decline, the overall trend over the last 100 years has been a steady increase in per pupil funding, a fact that is at odds with popular perceptions that schools do not get much more money each year. Though real resources might increase only 1 to 3 percent each year, over most 10-year periods it has amounted to nearly a one-third increase in real resources, a substantial increase. As discussed in later chapters, although

TABLE 1.3 Educational Expenditures per Pupil and Revenues by Source, 1919–20 to 2014–15

	Expenditures per Pupil[a]			Percent of Revenues by Source		
Year	*Real (2016–17 dollars)*[b]	*Nominal*	*Total Revenues (in Millions)*	*Federal*	*State*	*Local*
1919–20	$ 609	$40	$ 970	0.3	16.5	83.2
1929–30	1,274	72	2,089	0.4	16.9	82.7
1939–40	1,591	76	2,261	1.8	30.3	68.0
1949–50	2,367	187	5,437	2.9	39.8	57.3
1959–60	3,634	350	14,747	4.4	39.1	56.5
1969–70	5,648	751	40,267	8.0	39.9	52.1
1979–80	7,157	2,088	96,881	9.8	46.8	43.4
1989–90	9,883	4,643	208,548	6.1	47.1	46.8
1999–00	11,510	6,912	372,944	7.3	49.5	43.2
2007–08	13,714	10,298	584,684	8.2	48.3	43.5
2008–09	13,816	10,540	592,422	9.6	46.7	43.7
2009–10	13,584	10,636	596,390	12.7	43.4	43.9
2010–11	13,230	10,663	604,228	12.5	44.2	43.3
2011–12	12,786	10,648	597,885	10.2	45.0	44.8
2012–13	12,621	10,771	603,769	9.3	45.3	45.5
2013–14	12,739	11,066	623,649	8.7	46.3	45.0
2014–15	13,119	11,445	647,679	8.5	46.6	45.0

Source: https://nces.ed.gov/programs/digest/d17/tables/dt17_236.55.asp.
[a]Based on fall enrollment.
[b]Adjusted using the school year CPI.

the trend may have slowed somewhat in the past two decades, spending for education has generally continued to increase, with the exception of the five years between 2009–10 and 2013–14, in real terms each year.

The last columns in Table 1.3 show how the sources of school revenues have changed over the years. Earlier in the last century, local districts provided the bulk of school revenues, and the federal role was almost nonexistent. Beginning in the 1960s, the federal government began to increase its financial role, which reached 9.8 percent in 1980. Following a decline to a low of 6.1 percent a decade later, the share of federal revenue had rebounded to 8.2 percent of total revenues just before the recession. However, the great recession of 2008 led to considerable stimulus spending by the federal government, including some $100 billion for schools, leading to a substantial increase in the federal share for 2008–09. The combination of lower state and local revenues and the federal stimulus led the federal share to grow to 9.6 percent of total expenditures in 2008–09. It increased to 12.7 percent in 2009–10 and declined slightly in 2011–12 to 12.5 percent. By 2014–15, the federal share had dropped back to 8.5 percent of the total.

Until 1978 local sources—mostly property taxes—provided the largest share of funding for schools. Over time, as states took responsibility for equalizing the differences in

revenue capacity of local tax bases, the state share grew, surpassing the local share in 1978 (interestingly, that was the same year California enacted Proposition 13 shifting substantial responsibility for school funding to the state level). Since that time, the relative shares of state and local resources have been about the same, with the states providing a slightly greater share in some years and local resources providing a somewhat greater share in other years. In 2014–15, the states were the largest providers of public school revenues, providing 46.6 percent of total revenue, compared to 45 percent from local sources.

The patterns described above represent national totals, and the distribution of revenue by source varies substantially from state to state. Table 1.4 shows how revenue sources for schools varied from state to state. The national average expenditure per pupil was $10,694 in 2008–09, but expenditures ranged from a low of $6,676 in Utah to a high of $19,889 in New York, a difference of almost three to one. Note that some data in this table are different from those in the previous table because of slightly different data sources.

TABLE 1.4 Educational Expenditures per Pupil and Revenues by Source, by State: 2014–15

		Percent of Total Revenue (%)		
State	*Per Pupil Expenditures ($)*	*Federal*	*State*	*Local*
Alabama	9,378	11.2	55.5	33.2
Alaska	20,701	11.8	69.4	18.7
Arizona	7,782	13.0	44.1	43.0
Arkansas	10,052	11.5	51.5	37.0
California	10,713	9.6	57.2	33.2
Colorado	9,527	7.4	45.6	47.0
Connecticut	19,500	4.2	41.0	54.8
Delaware	14,232	8.7	57.7	33.6
District of Columbia	21,130	9.7	—	90.3
Florida	9,343	11.9	39.8	48.3
Georgia	9,716	10.1	45.2	44.7
Hawaii	13,179	9.6	88.2	2.2
Idaho	7,104	10.7	65.0	24.3
Illinois	14,287	8.3	24.9	66.8
Indiana	9,770	8.2	56.1	35.8
Iowa	11,214	7.4	53.5	39.1
Kansas	10,590	8.9	64.3	26.8
Kentucky	9,801	11.5	54.9	33.6
Louisiana	11,386	14.7	43.4	41.9
Maine	14,330	7.0	39.4	53.6
Maryland	14,795	5.7	43.5	50.8
Massachusetts	16,866	5.3	39.1	55.6
Michigan	11,233	9.2	60.2	30.6
Minnesota	12,226	5.7	66.7	27.5
Mississippi	8,658	14.8	51.1	34.1

(*continued*)

TABLE 1.4 ***(continued)***

State	Per Pupil Expenditures ($)	Percent of Total Revenue (%) Federal	State	Local
Missouri	10,490	9.0	32.5	58.5
Montana	11,358	12.2	47.9	40.0
Nebraska	12,481	8.2	32.4	59.4
Nevada	8,664	9.2	35.9	54.9
New Hampshire	15,347	5.6	33.4	61.0
New Jersey	19,028	4.2	42.1	53.7
New Mexico	9,969	14.0	69.5	16.5
New York	21,268	4.5	41.5	54.0
North Carolina	8,745	12.2	62.4	25.4
North Dakota	13,210	10.1	58.7	31.2
Ohio	12,026	7.5	45.6	46.9
Oklahoma	8,279	11.5	49.4	39.2
Oregon	10,721	8.0	52.0	40.0
Pennsylvania	14,769	6.9	37.1	55.9
Rhode Island	16,196	8.1	40.5	51.3
South Carolina	10,079	9.6	47.2	43.2
South Dakota	9,333	14.9	30.4	54.8
Tennessee	8,998	12.0	45.2	42.9
Texas	9,310	10.8	40.6	48.6
Utah	6,922	8.8	54.6	36.6
Vermont	19,243	6.0	90.1	3.9
Virginia	11,519	6.5	39.9	53.6
Washington	10,953	7.6	61.0	31.4
West Virginia	11,803	10.3	57.5	32.2
Wisconsin	11,829	7.5	45.9	46.6
Wyoming	16,453	6.2	56.9	36.9
United States	12,224	8.5	46.5	45.0

Source: NCES, 2018, https://nces.ed.gov/programs/digest/d17/tables/dt17_235.20.asp.

States also differ in the sources of public school revenues. In 2014–15, over 90 percent of funding came from the state in Vermont, while in Illinois only 24.9 percent of school revenues came from state sources. States provided over 60 percent of school revenues in 10 states, while local districts provided over 50 percent of school revenues in 15 states, with the lowest percentage of local revenue being 2.2 percent in Hawaii and the highest of 90.3 percent in the District of Columbia. Since DC is not technically a state, the state with the second highest share of local revenue was Illinois. Illinois enacted a school finance adequacy reform in 2017 that should increase the state's role over time. This variation reflects differences in local perceptions of appropriate state and local roles, as well as differences in school finance formula structures (Sielke, Dayton, Holmes, & Jefferson, 2001; Verstegen, 2011).

These data document one enduring characteristic of state school finance structures: though there are some similarities, the differences are also dramatic. Students of school finance need to understand both the generic similarities and the factors causing the specific differences.

2. EARLY DEVELOPMENTS IN SCHOOL FINANCE

This country has not always had a system of free, tax-supported schools. Free public education was an idea created in the United States during the 19th century, and the large network of public school systems was formed in a relatively short period, primarily during the latter part of the 19th and early part of the 20th centuries.

Early Actions

American schools began as local entities, largely private and religious, during the 17th, 18th, and even early 19th centuries. As in England, educating children was considered a private rather than a public matter. Providing for education was a mandate for parents and masters, not governments. Eighteenth-century leaders of the new American republic viewed education as a means to enable citizens to participate as equals in affairs of government and thus essential to ensure the liberties guaranteed by the Constitution. Even though Thomas Jefferson proposed creation of free public elementary schools, his proposal was not adopted until the mid-1800s, largely through the efforts of Horace Mann and Henry Barnard, state superintendents of public instruction. Mann spearheaded the development of public-supported "common schools" in Massachusetts, and Barnard did the same in Connecticut.

In the 19th century, as education began to assume significance in economic terms, many compulsory attendance laws were passed. Despite these laws, when school attendance became compulsory beginning in the mid-1800s, government financing of schools was not uniformly required.

In 1647, the General Court of Massachusetts passed the Old Deluder Satan Act. The act required every town to set up a school, or pay a sum of money to a larger town to support education. It required towns with at least 50 families to appoint a teacher of reading and writing, and required towns with more than 100 families to also establish a secondary school. The act required that these schools be supported by masters, parents, or the inhabitants in general, thereby establishing one of the first systems of financing schools through local taxation. Pulliam (1987) states that the first tax on property for local schools was levied in Dedham, Massachusetts, in 1648. By 1693, New Hampshire also required towns to support elementary schools.

The Growing Importance of State Governments

Initially, one-room elementary common schools were established in local communities, often fully supported through a small local tax. Each town functioned as an independent school district since there were no state laws or regulations providing for a statewide public education system. At the same time, several large school systems evolved in the big cities of most states.

Even at this early time, these different education systems reflected differences in local ability to support them. Big cities usually were quite wealthy relative to the smaller, rural, one-room school districts that typically had greater difficulty financing a one-room school.

As the number of these small rural and big-city school systems grew, however, and the importance of education as a unifying force for a developing country became increasingly understood by civic and political leaders, new initiatives were undertaken to create statewide education systems. By 1820, 13 of the then 23 states had constitutional provisions, and 17 had statutory provisions pertaining to public education.

In the mid-18th century, several states began to completely rewrite state constitutions, not only calling for creation of statewide systems of public education, but also formally establishing government responsibility for financing schools. Today, all states have constitutional provisions related to free public education.

Creation of free common schools reflected the importance of education in America. It also shifted control over education from individuals and the church to the state. Control over schools was a problematic aspect in crafting statewide education systems. The resolution to the control issue was the creation of local lay boards of education that, it was argued, would function in the place of parents and the church.

While local boards basically controlled public schools for the first century they existed, the strength of local control has changed substantially in recent years. In the early 20th century, much school control was given to the new breed of educational professionals, as the Progressive Era of education sought to take politics out of education (Tyack & Hansot, 1982). Beginning in the 1960s, both the state and federal government began to exert new initiative and control affecting public schools. States continued this trend by taking the lead in education policy throughout the 1980s education reform period (Doyle & Hartle, 1985; Odden, 1995a). Local boards were for the most part uninvolved in those reforms (Odden, 1995a). In the early 1990s, the president and the nation's governors established nationwide education goals; these were codified into law in 1994 by the U.S. Congress and continue in spirit if not in detail today.

The development of the state-controlled and governmentally financed common school also raised many fundamental issues about school finance. The key issues concerned the level of government (local or state) that would support public education and whether new constitutional phrases such as *general and uniform, thorough and efficient, basic,* or *adequate* meant an equal amount of dollars would be spent for every student in the state, or meant just providing a basic education program for every student, with different amounts of total dollars determined at the local level. As discussed in Chapter 2, this controversy persists today and is resolved in various ways by state legislatures and courts in the 50 states.

Evolution of the State Role in Education Finance

While major differences exist in the specific approaches taken, most states finance public schools primarily through local property taxes. In the mid to late 1800s, most states required local districts to fully finance mandated public schools through local property taxation. In designing locally administered school systems, states generally gave local governments the authority to raise money for schools by levying property taxes. But when states determined school district boundaries, districts ended up with widely varying levels of property wealth

per pupil, and thus large differences in the ability to raise local dollars to support public education. Districts with above-average property tax bases per pupil traditionally were able to spend at above-average levels with below-average tax rates, while districts with below-average tax bases spent at below-average levels even with above-average tax rates. These inequities were noted 100 years ago (Cubberly, 1905).

School finance policy debates throughout the 20th century, including most school finance texts (see, for example, Alexander & Salmon, 1995; Guthrie, Garms, & Pierce, 1988; Guthrie, Springer, Rolle, & Houck, 2006; Odden & Picus, 1992, 2000, 2004, 2008, 2014; Chapter 1; Swanson & King, 1997) and most court cases, focused on these types of fiscal inequities. To be sure, some individuals pointed to spending differences per se, regardless of whether they were related to varying tax bases, and argued that they should be impermissible in a state education system (Wise, 1968). But the bulk of discussion centered on the links between spending differences and local property wealth per pupil (see also Coons, Clune, & Sugarman, 1970).

As discussed at length in Chapter 6, states began to intervene in school financing first through small per pupil "flat grant" programs, in which the state distributed an equal amount of money per pupil to each local school district. The idea was for the state to provide at least some assistance in support of a local basic education program. Over the years, these flat grants became recognized as too small.

In the early 1920s, states began to implement "minimum foundation programs," which provided a much higher level of base financial support and were financed with a combination of state and local revenues (minimum foundation programs and other technical school finance terms used in this chapter are defined and explained more in Chapter 6). These programs were the first in which states explicitly recognized the wide variation in the local property tax base and designed a state aid structure to distribute larger amounts to districts with a small property tax base per pupil and smaller amounts to districts with a large property tax base per pupil.

These "equalization formulas" were designed to equalize differences in local fiscal capacity (i.e., the unequal ability to finance education because of the variation in the size of the local property tax base). But over time, the level of the minimum foundation programs also proved to be inadequate, and additional revenues above the foundation program were raised solely through local taxation. As a result, local educational expenditures per pupil varied widely across local districts in most states, with the differences related primarily to the size of the local property tax base.

Beginning in the late 1960s, the fiscal disparities caused by unequal distribution of the local tax base and inadequate state general equalization programs led to legal challenges to state school finance systems in which plaintiffs, usually from low-wealth and low-spending districts, argued that the disparities not only were unfair but also were unconstitutional (Berke, 1974; Coons, Clune, & Sugarman, 1970). Chapter 2 traces the course of these lawsuits, which spawned a new political channel to improve the ways states financed public education. While successful in many states, other state supreme courts eventually ruled that the education clause of their state's constitution did not require equalization (Oregon and Illinois are examples).

Despite these rulings, by the 1990s virtually all state school funding formulas included resources to equalize the tax capacity of local districts to compensate for disparities in local

property wealth per pupil. Unfortunately, the foundation, or minimum per pupil revenue level that was supported through these state equalization efforts varied, and in many states that funding level did not keep up with the costs of education, leading to continued variations in funding for schools based on local taxpayer capacity.

In the last part of the 20th century, a new school finance litigation strategy emerged. Starting with the growing educational standards movement, school finance plaintiffs argued that it was the state's responsibility to ensure that all students had an "adequate" level of funding to enable all students to meet their state's student proficiency standards. This approach is called school finance adequacy (Clune, 1994). Today, the question facing school finance is how much money is needed to ensure that all students have the opportunity to meet their state's proficiency standards. As described in Chapter 2, many state courts have used adequacy as a standard for holding school finance systems unconstitutional, and there is a growing effort by states to define adequacy in their individual contexts (Aportela, Picus, Odden, & Fermanich, 2014). Much of school finance, as described this book, now focuses on developing an "adequacy" strategy to link the funding structure with an education system that can teach nearly all students to high performance.

3. EVOLUTION OF THE SCHOOL FINANCE PROBLEM

This section discusses how the nature of the school finance problem became much more complicated in the late 20th and early 21st centuries. Though many still define the major school finance problem as differences in spending across school districts caused by varying levels of property wealth per pupil, others (e.g., Clune, 1994, and Odden & Clune, 1998) argue that linking finance to an adequate education is the core school finance issue today. Still others argue that educational productivity—determining how to produce higher levels of educational performance with current education resources—is the primary school finance goal today (Hanushek and Associates, 1994).

Traditional Fiscal Disparities

This section discusses the nature of school finance inequities in several states and shows how the nature of these fiscal inequities has changed over time. Chapter 3 of this volume provides a framework for assessing school finance equity and describes a number of statistical tools school finance analysts rely upon to assess the equity, productivity, and adequacy of state school funding systems. Chapter 6—which introduces our state school finance simulation–provides a discussion of the tools available to state policymakers as they design more equitable and adequate school funding systems,

An early example of the traditional school finance problem can be shown with data presented at one of the first successful school finance cases in the United States, California's *Serrano v. Priest* (Cal. 3d 584, 487 P.2d 1241, 96 Cal. Rptr. 601 [1971]). At the time the case was filed, California had a typical minimum foundation program, and most districts raised additional funds to spend at a higher level. These data (see Table 1.5) represent property value per child, the local school tax rate, and resulting expenditures per pupil for pairs of property-rich and property-poor districts in several counties. In each

TABLE 1.5 Comparison of Selected Tax Rates and Expenditure Levels in Selected California Counties, 1968–69

County	*Pupils*	*Assessed Value per Pupil ($)*	*Tax Rate ($)*	*Expenditure per Pupil ($)*
Alameda				
Emery Unified	586	100,187	2.57	2,223
Newark Unified	8,638	6,048	5.65	616
Fresno				
Colinga Unified	2,640	33,244	2.17	963
Clovis Unified	8,144	6,480	4.28	565
Kern				
Rio Bravo Elementary	121	136,271	1.05	1,545
Lamont Elementary	1,847	5,971	3.06	533
Los Angeles				
Beverly Hills Unified	5,542	50,885	2.38	1,232
Baldwin Park Unified	13,108	3,706	5.48	577

Source: California Supreme Court opinion in *Serrano v. Priest,* August 1971.

county example, the assessed valuation per pupil—the local tax base—varied substantially: by a factor of almost 14 to 1 in Los Angeles County and over 16 to 1 in Alameda County. In each example, moreover, the district with the higher assessed value per child had both the higher expenditures per pupil and the lower tax rate.

These examples were selected to show that the California school finance structure produced a situation—similar to most other states at that time—in which districts with a low property tax base usually spent less than the state average even with above-average tax rates, while districts with a high property tax base usually spent above the state average with below-average tax rates. The wealthy enjoyed the advantages of both high expenditures and low tax rates, while the poor were disadvantaged by both low expenditures and high tax rates. The shortcoming of the data in Table 1.5 is that school finance information for only a few districts is shown. While these districts statistically reflected the trends in the system, trends should be analyzed using all of the districts in a state, not selected pairs of districts from different counties.

The School Finance Problem as Fiscal Adequacy

Improving fiscal equity might not be the most pressing school finance issue today as many states have made substantial improvements in the equity of their funding systems since the 1970s and 1980s. In fact, delineating what the school finance problem is has become a major subject of debate. Some argue that the continued existence of spending disparities and their relationship to local property wealth, whatever the cause, remains a problem. But if the old problem was the unequal ability to raise revenues to support public schools, and that problem is resolved through one of the traditional approaches described in Chapter 6,

some suggest that any remaining spending differences are a matter of local taxpayer choice and reflect neither an inherent inequity nor a school funding problem. Others may argue that since education is a state function, spending differences per se (as a proxy for education quality) are a problem regardless of whether they are caused by the unequal distribution of the property tax base or local taxpayer choice. Still others focus on the spending of the bottom half of districts, arguing it should be higher or at least adequate.

The problem with all three of these arguments, however, is that they deal simply with money and largely with whether base funding is equal or not, and are not related to any other substantive education goal, such as education quality or student achievement. Making this connection is the school finance challenge of today. The driving education issue today is raising the levels of student achievement—that is, setting high and rigorous standards and teaching students to those standards (Fuhrman, 1993; Massell, Hoppe, & Kirst, 1997; Odden, 2003; Odden & Picus, 2014; Smith & O'Day, 1991). Research from cognitive science and multiple cases of schools that have dramatically improved student learning suggests that we know how to produce a much higher level of learning, or at least make substantial progress toward this goal (Bransford, Brown, & Cocking, 1999; Bruer, 1993; Chapter 5 of this book; Siegler, 1998). Given this knowledge, Linda Darling-Hammond (1997) argues that learning to high standards should be considered a right for all children. Moreover, school finance litigation in many states now often stresses adequacy issues over equity issues (Enrich, 1995; Heise, 1995; Minorini & Sugarman, 1999a, 1999b; Chapter 2; Rebell, 2007). The goals, which were created by state standards-based education reform, were reinforced with the federal government's No Child Left Behind Act (NCLB) in 2002. Although in recent years the replacement of NCLB with the Every Student Succeeds Act (ESSA) and growing pressure to rely less on the Common Core Standards has changed the political landscape, there are still a number of state adequacy court cases being decided on the basis of state constitution education clauses.

Reflecting this student achievement goal, and the education policy and program issues, what curriculum, instruction, incentive, capacity development, organization, and management strategies are required to produce this higher level of student performance? The related finance issue is the level of funding that is required for these programmatic strategies.

As many argue, the prime school finance problem today is to link school finance to the strategies needed to accomplish the goal of teaching students to higher standards (Odden, 2012a; Odden & Archibald, 2009; Odden & Clune, 1998; Reschovsky & Imazeki, 1998, 2001). In new school finance parlance, the challenge is to determine an "adequate" level of spending. The task is to identify for each district/school the level of base spending needed to teach the average student to state standards, and then to identify how much extra each district/school requires to teach students with special needs—the learning disabled, those from poverty and thus educationally deficient backgrounds, and those without English proficiency—to the same high and rigorous achievement standards. As Clune (1994) and Odden and Clune (1998) argued, this requires a shift in school finance thinking from "equity" to "adequacy."

Chapter 3 discusses the complexities of determining an adequate spending level and the various methodologies that are being tapped to determine those levels. Chapter 4 summarizes the Evidence-Based approach the authors of this text have developed and used in several states (see, for example, Odden, Picus, et al., 2005, and studies available at www.picusodden.com). Nevertheless, for many, the focus on adequacy constitutes a shift in

defining the basic school finance problem—away from the sole focus on fiscal disparities across districts and toward linking spending to what could be construed as an adequate education program (i.e., a program designed to teach students to high levels of achievement).

Chapter 7 provides a detailed discussion of the evolution of school finance in four states (Arkansas, North Dakota, Washington, and Wyoming) that have addressed the issue of adequacy and where the authors of this book have participated in the development of their school finance formulas. The discussion in Chapter 7 shows how each of the four states evolved from dealing with the traditional school finance problem of equalization and moved to using adequacy as the basis of their funding system—but to varying extents. A brief discussion of how school finance has evolved in each of these states follows, with more detail provided in Chapter 7.

Arkansas. School finance reforms began as early as 1992 when the *Lake View*[1] case was filed. Based initially on equity issues related to variations in per pupil property values, the case evolved over time toward a focus on adequacy. In 2002, the state supreme court concluded that Arkansas's finance system did not meet the constitutional commitment to "maintain a general, suitable and efficient system of free public schools."[2] The court required the state to conduct a school finance adequacy study, pointing out that issues of adequacy had not been addressed, and the need for an adequacy study had been called for in lower court rulings. Arkansas employed the authors of this book to conduct that study, which resulted in an additional $800 million in funding—which also improved the equity of the system by increasing the basic foundation level funded for each school district. Three years later, a second study was conducted to ascertain how school districts were using those funds (Odden, Picus, & Goetz, 2006) and to recalibrate the model. Since that time, the state's Legislative Research Bureau has maintained the responsibility for recalibrating the elements of the state's adequacy model every other year. Today, while funding in Arkansas remains comparatively low compared to other states (see Table 1.4), the state has introduced a number of accountability measures related to student performance and encouraged school districts to implement components of the Evidence-Based adequacy model, leading to substantial improvements in student performance.

North Dakota. At the turn of the century, North Dakota relied on a foundation program to equalize education revenues across school districts. Over time, the level that was equalized represented a very small portion of total school district revenues, leading to substantial inequities in funding. As part of an equity lawsuit, the state and plaintiffs agreed to hold off court proceedings and give the legislature a chance to resolve the issues. A commission in 2006 developed a new funding formula that addressed equity issues, avoiding further litigation (and receiving recognition from the Education Commission of the States for innovative approaches to education policy). The same commission then developed a set of adequacy recommendations in 2007, which the state was able to fund due to the energy boom across

[1]See *Lake View School District No. 25 v. Tucker*, No. 92-5318 (Pulaski County Chancery Court, November 9, 1994, as modified December 21, 1994).

[2]*Lake View School District No. 25 v. Huckabee*, 351 Ark. 31, 91 S.W.3d 472 (2002), cert. den. sub. nom. *Wilson, J. L., et al. v. Huckabee, Gov. of Ark., et al.,* 538 U.S. ___ (2003) (Orders of May 19 at 5).

the western United States—including the Bakken fields in North Dakota—which led to substantial increases in state revenues through gas and oil taxes. In 2014, the state recalibrated the numbers from the 2007 adequacy study, and by that time had dramatically increased school revenues and decreased education property taxes. In 2018, the findings from those adequacy studies form the basis for determining revenues for the state's school districts.

Washington. Washington also displayed the school finance equity problem, with increased revenues generally associated with higher property wealth and lower tax rates. However, the state has also been under court order for over 30 years to fund a basic education—one of the early adequacy states—and consequently variation in revenues is a function of recent permission for school districts to use local property taxes to enhance revenues. Not surprisingly, wealthy districts are able to increase per pupil revenues at lower tax rates than are poor districts—leading to funding disparities. In 2006, a major school finance adequacy study, Washington Learns, recommended substantial increases in funding for schools. Over the next 12 years the state attempted to implement new funding for schools, and during that time wrestled with a series of court rulings that required additional revenues for schools. While the relationship between the Legislature and the state supreme court has been testy (the court held the legislature in contempt and assessed fines pending passage of an acceptable school funding plan), just this year (2018) the legislature put in place funding plans that appear to meet the court's demands. Chapter 7 describes the current status of school finance in Washington and the role the authors of this book played in helping the state reach its current school finance status.

Wyoming. Wyoming, despite its relatively small student enrollment, has been at the forefront of school finance adequacy efforts since a 1997 court ruling that required the state to determine what constitutes a proper education, determine the "basket" of education goods and services needed to provide that education, and then fund the full cost of that basket. Beginning with a professional judgment adequacy study in the late 1990s, and several recalibration efforts using the Evidence-Based model (and recently another professional judgment study), the state has developed a comprehensive model that outlines the basket of educational goods and services that it funds through a combination of required local property taxes and a range of state revenues generated through taxes on oil, gas, and coal extraction. The early court case required that the system be recalibrated at least every five years, and following responses to a court ruling that forced modification of parts of an early funding model, school districts across the state have elected not to file another court case. In 2018, the state faces substantial reduction in revenues traditionally used to fund schools. At the same time, the legislature has generally appropriated more money for schools than called for in the Evidence-Based funding model. How this challenge between adequate funding levels and shrinking revenues will play out is yet to be determined.

The School Finance Problem as Productivity

Despite disparities or any other shortcomings of current state education finance systems, many other analysts argue that the most prominent school finance problem is the low levels of system performance and student achievement produced with the relatively large levels

of funding in the system (Hanushek and Associates, 1994). This is a significant part of the report of the National Research Council on school finance equity and productivity (Ladd & Hansen, 1999). These analysts are convinced that, on balance, there is a substantial amount of revenue in the American public school system, and that the core problem is to determine how best to use those resources, particularly how to use the resources differently to support strategies that dramatically boost student performance. In one sense, much of this book addresses these productivity and adequacy issues. Nearly all chapters address the adequacy issue. Chapter 4 introduces the Evidence-Based adequacy model, and Chapters 9 and 10 address strategies for reallocating resources to produce higher student performance levels—how to use current dollars more effectively.

But it is clear that as greater demands for spending efficiency and for accountability for student performance grow in the next several years, while equity will likely remain an important school finance goal, issues of adequacy and productivity will continue to dominate the education reform discussions. Today, educators need to show how to transform current and new dollars into student achievement results, or the argument that education needs more—or even the current level of—money will be unlikely to attract public or political support.

4. SUMMARY

This chapter showed that public school funding is big business in the United States. Revenues for public schools now exceed $680 billion and consume 3.6 percent of the country's gross domestic product and 4.2 percent of all personal income. Moreover, revenues for public schools grew consistently during the 20th century, and although they dipped for several years beginning in 2009–10, by 2014–15 an average of $11,445 was being spent on each public school student. Unfortunately, those dollars were often distributed unequally across states, districts, schools, and students. In too many instances, districts with higher property wealth per pupil and/or higher household income were able to raise and spend more money per pupil even at lower tax rates than were districts with lower per pupil property tax bases and/or households with lower income. These fiscal disparities translated into differences in class size, teacher salaries, program offerings, and quality of buildings, with the wealthier districts having the advantage in each category, often with lower tax rates. As a result, the equity of the distribution of public school resources was the primary topic of school finance for over 100 years.

Although equity is still an issue, the adequacy of education revenues has assumed an even more prominent place on the school finance agenda. Today the key school finance issue in most states is whether there is a sufficient—adequate—amount of dollars for districts and schools to teach students to new and rigorous performance standards that have been developed during the past 15–20 years of standards-based education reform. This includes the goals of state standards-based education reform, the stiffer accountability requirements of the federal Every Student Succeeds Act (ESSA), and the new Common Core Standards. Assuming student achievement goals are ambitious, many argue that if school finance adequacy is met, remaining inequities are not as problematic, but not everyone agrees with this position. Thus, both the equity and the adequacy of school funding are central school finance issues today.

Chapter 2

Legal Issues in School Finance

William Glenn, Associate Professor in the School of Education at Virginia Tech, wrote the bulk of this chapter.

The goal of school finance Is to provide sufficient resources to schools to enable the schools to provide an equitable and adequate education to each child. More precise definitions of *equity* and *adequacy* are offered in Chapter 3, but simplified versions will suffice for the purposes of this chapter. Fiscal equity can be regarded as a situation in which each child receives substantially equal educational resources, plus additional resources for identifiable needs, such as special education and limited English proficiency. Adequacy requires that each district receive sufficient funding to enable it to provide each child with an education that reaches a certain level of quality.

The inequities in education finance trace back to the use of local property taxes to fund the first public schools. American public schools began as a local enterprise, so using local property taxation as a way to provide revenues to the schools was a natural choice. However, localities differed with regard to their property wealth, which meant that districts with greater property wealth per pupil could provide more resources per pupil to their schools. The variation in per pupil educational expenditures across school districts was identified as a problem as early as 1905 (Cubberly, 1905), but it has become increasingly important as the role of education expanded beyond fulfilling local needs. States, and the federal government to a lesser extent, have taken steps to remedy the funding inequities, but the disparities remain problematic today, since some districts and schools receive far more resources than others.

The issue is complicated by the fact that not all students cost the same amount of money to educate. As mentioned, students with special needs and students for whom English is not the home language are two examples of students for whom additional, often costly, programs are offered to meet their educational needs. Another group of students who tend to have greater educational needs than average includes students from low socioeconomic status families. The federal Title I program is an example of a mechanism through which additional resources are provided to schools that educate a high percentage of such students.

In addition to the equity issues, policy analysts, educators, and other interested parties are increasingly interested in whether schools receive an adequate supply of resources

to provide a high-quality education to their students. A related issue concerns whether districts and schools effectively use the resources they receive. These resource-related issues continue to grow in importance with the escalation of the standards movement, including the recent efforts to develop Common Core/College and Career Ready Standards and the growth of accountability movements in many states. These issues have been exacerbated since the great recession led many states to reduce per pupil funding to their schools.

State legislatures offer the preferred forum in which to address concerns of fiscal equity and adequacy. However, political factors sometimes limit the effectiveness of legislative solutions, especially because the children most often harmed by inequities and inadequacies are members of political minorities that lack clout in the legislature. In school finance, people who cannot achieve their goals in the legislature frequently seek relief through the courts. As a result, in nearly every state, parties have litigated over the level and distribution of educational resources.

School finance litigation initially involved rectifying funding disparities. The goal was to provide schools in areas with little property wealth a level of funding commensurate with that of wealthier districts. Over the past 25–30 years, however, school finance litigation evolved to place greater emphasis on whether each school received adequate resources to educate all students to high standards. The shift in objectives brought to the forefront the relationship between educational inputs and student outcomes, as courts became less concerned with strict numerical equality and more interested in whether schools were receiving the necessary resources.

This chapter addresses the legality of these issues in four sections. The first sets forth the basic legal doctrines necessary to understand school finance legal cases. The second section discusses the early school finance cases, which dealt with equity issues related to the U.S. Constitution. The third section involves equity issues related to state constitutions, while the final section analyzes adequacy litigation.

1. THE LEGAL BACKGROUND OF SCHOOL FINANCE LITIGATION

This section provides an overview of the basic elements of school finance litigation. Understanding the fundamental points facilitates comprehension of the rest of the chapter.

School finance systems consist of a set of statutes passed by the state legislature that governs the distribution of educational resources within the state. The legislature possesses great discretion to fashion these systems in the manner it deems best. However, as with all other state legislation, a state's school finance statutes must not conflict with either the U.S. Constitution or the constitution of the state. If the statutes do conflict, the school finance system, or parts thereof, can be declared unconstitutional, in which case all or part of the system is void. Challenging the constitutionality of the legislation defining the school funding system is the most viable litigation strategy for school finance plaintiffs.

For that reason, plaintiffs in school finance litigation argue that the school finance statutes conflict with various provisions of the federal and/or state constitutions. In defense, the state, of course, contends that its school finance system conforms to both constitutions. Therefore, any analysis of school finance litigation involves considering

(1) *which* constitutional provision(s) the plaintiffs claim has been violated and (2) *how* the school finance system allegedly violates the provision(s).

School finance litigation includes a relatively small number of legal factors. Plaintiffs primarily argue that three types of constitutional provisions have been violated (though some plaintiffs argue based on state-specific provisions in addition to the three main types of provisions). The three constitutional provisions are the Equal Protection Clause of the Fourteenth Amendment to the U.S. Constitution, the equal protection clause of the relevant state constitution, and the education clause of the state constitution. The plaintiffs raise two main arguments to advance their claims: (1) that the state failed to distribute resources equitably and (2) that the state failed to provide an adequate amount of resources to some or all of the schools in the state.

A brief overview of the two types of arguments may provide a big-picture perspective that will be helpful when the details of specific cases are discussed later in the chapter. *School finance equity cases* involve the claim that the school finance laws violate the state and/or federal constitutions by distributing educational resources unfairly. Each of the three constitutional provisions mentioned previously can provide the basis for a constitutional violation in an equity case. Generally, plaintiffs argue that the unconstitutional inequity typically results from property wealthy districts being able to raise more funds per pupil, often with lower tax rates, because of the system's reliance on local property taxes for a significant portion school funding.

School finance adequacy cases involve the education clause in the applicable state constitution. The plaintiffs argue (1) that the education clause requires the state to provide a certain standard of education, (2) that a certain level of resources is required to provide that standard of education, (3) that the state has failed to provide the required level of resources, and (4) therefore, the state has failed to provide the constitutionally required standard of education. The U.S. Constitution lacks an education clause, so adequacy cases arise solely from the constitution of the relevant state.

The Three "Waves" of School Finance Litigation

Scholars categorize the history of school finance litigation into three waves,[1] based on the primary legal theory used in the cases (Brooker, 2006; Rebell, 2006). The waves should not be regarded as rigid divisions, because many cases involve arguments coming from each of the three waves, which makes sense since both an equitable and adequate education should be provided to all children (Weishart, 2014). Instead, they serve as a conceptual device to synthesize the arguments made by the plaintiffs throughout the course of litigation.

The first wave of school finance litigation involved the argument that state school finance systems violated the Equal Protection Clause of the U.S. Constitution. The second wave concerned claims that the finance system violated provisions of state constitutions that guaranteed an equitable resource distribution. The most important constitutional provision in the second wave was the equal protection component of the state constitution, but the

[1]It should be noted that several scholars have posited various ideas regarding a potential fourth wave of litigation. These ideas include federal adequacy (Gillespie, 2010), economic integration (similar to school desegregation, but based on wealth rather than race/ethnicity) (Adams, 2007), and race-conscious litigation. These ideas have not been recognized by the courts, but may point the way for future areas of litigation.

education clause was also prominent during the second wave. The third, and more current, wave centers on issues related to educational adequacy, namely that the finance structure does not provide enough resources to permit the schools to provide the level of education required under the state constitution.

2. THE FIRST WAVE: FEDERAL EQUAL PROTECTION LITIGATION

The first wave of school finance litigation primarily involved plaintiffs arguing that the challenged school finance system violated the Equal Protection Clause of the Fourteenth Amendment to the U.S. Constitution. They also made arguments based on state constitutional provisions, but the primary thrust was based on the Fourteenth Amendment. This strategy provided the simplest option to remedy the funding inequities nationally, because a favorable ruling based on the U.S. Constitution would have applied to the finance system of each state.

The ultimate arbiter of federal equal protection litigation is the U.S. Supreme Court, which has the responsibility and authority for defining the meaning of the rights identified in the U.S. Constitution and its amendments. The Supreme Court also determines whether the president, Congress, state governors, and state legislatures exercise their power in a manner consistent with the U.S. Constitution. Therefore, it was inevitable that cases from the first wave would reach the Supreme Court.

The Equal Protection Clause of the Fourteenth Amendment provides that no state shall "deny to any person within its jurisdiction the equal protection of the laws." This amendment was enacted after the Civil War for the primary purpose of barring states from treating African Americans differently from whites. The impact of the clause was not limited to that purpose, however, so equal protection issues soon arose in a broad spectrum of cases. Over time, the Supreme Court created tests for determining whether, and how, governmental actions might violate the Equal Protection Clause.

The Equal Protection Clause does not mean that states and localities must *always* pass laws that treat every individual equally. For example, perfectly valid laws specify that some individuals with a particular license can drive a car, practice medicine, or teach in public schools, while other people lacking the necessary license cannot legally engage in these functions. In each case, the government rationally determined that individuals need certain skills or expertise to engage in the activity. Therefore, the state provides a license only to those individuals who demonstrate that they have the requisite expertise. However, laws cannot distinguish between people for reasons that do not meet the requirements of the Constitution, as would be the case if a law was passed that would limit voters to citizens from one racial group. Such a law thereby would be rendered invalid.

The courts thus needed to distinguish between laws for which different treatment violates the U.S. Constitution and those for which it is based on acceptable grounds. The Supreme Court uses three main tests to make this determination, two of which apply in school finance litigation: strict scrutiny and rational basis. These two tests differ in terms of the amount of deference the courts give to the legislature that enacted the law.

The Strict Scrutiny Test

Strict scrutiny in plain English means that the courts examine the challenged law extremely carefully when considering whether it is constitutional in order to make sure it is the best possible means of achieving the desired goal. Plaintiffs favor this test because the courts give little deference to the legislature when applying strict scrutiny. Instead, the courts hold the government to a very high standard when it attempts to justify why a law is acceptable even though it treats people differently.

As one might expect, the courts apply the strict scrutiny test when the alleged constitutional violation involves very important issues. Specifically, the court will apply the strict scrutiny test only when a *fundamental right* is involved or when the state law discriminates against people who represent a *suspect classification.* Thus, in order to convince the court to apply strict scrutiny, school finance plaintiffs argue that the state's school finance system impacts one or both of these categories.

Fundamental rights are those rights identified in the Constitution, either explicitly or implicitly. Examples of fundamental rights include the rights of free speech, a free press, assembly, and due process. These rights are valued by the courts because they involve protections at the heart of the republic.

Suspect classifications are groupings of people based on their religion, national origin, race, and/or alienage. Interestingly, certain classifications that are important from an educational perspective are not recognized by the courts as suspect classifications, including gender and wealth. The latter, in particular, has important implications for school finance litigation. The courts will apply strict scrutiny to laws that treat people differently due to their race or religion, because they are skeptical regarding the need for laws that treat individuals differently based on these distinctions.

The state must prove three things if a court applies the strict scrutiny test. First, it must show that the differences caused by the law resulted from the state's pursuit of a compelling state interest. In other words, the state needs to prove that the discriminatory aspect of the law arose as a result of the state pursuing an extremely important objective, not merely run-of-the-mill legislation. Second, the state must show that the law is not overly broad, meaning that it is focused tightly on achieving the state's interest. Third, the state must prove that it had no less discriminatory means by which it could achieve the compelling interest, meaning that the law was the very best way to achieve the vital objective. When a court invokes strict scrutiny, the state usually has difficulty proving any of these points, let alone all three. Indeed, when strict scrutiny is invoked, the state nearly always loses the case, meaning that all or part of the school finance system is ruled unconstitutional.

The Rational Basis Test

The rational basis test is applied when the litigation involves neither a fundamental right nor a suspect classification. The rational basis test simply requires the court to determine whether the government had any rational reason (not necessarily the best reason) for passing a law that seeks to achieve a legitimate state interest under which people are treated differently. The courts defer greatly to the legislature when the rational basis test is applied.

An everyday example will illustrate how the rational basis test operates. Each state restricts people from obtaining a driver's license until they reach a certain age. Since driving

is not a fundamental right, and age is not a suspect classification, the rational basis test would apply. The state would merely have to show that licensing drivers serves a legitimate state interest (such as safety on the roads) and that the age requirement possesses a rational relationship to that state interest (such as drivers under a certain age tend to drive unsafely) in order to prevail against a legal challenge. States virtually always win when courts apply the rational basis test because states can cite some sensible reason to support their laws.

This brief treatment of equal protection law should facilitate understanding of the remainder of this section. A key point to remember is that plaintiffs want the courts to apply strict scrutiny, while the states prefer the rational basis test.

The Early Cases

In the late 1960s, the first two modern school finance cases were filed in the federal courts: *McInnis v. Shapiro*[2] in Illinois and *Burruss v. Wilkerson*[3] in Virginia. These cases challenged the constitutionality of differences in educational expenditures across school districts that arose because of unequal property tax bases. The plaintiffs in each case argued that strict scrutiny should apply because education was a fundamental right. They also claimed that the use of the property tax was not the least discriminatory means of funding education, since the wide discrepancies in expenditures and revenues per pupil across school districts were not related to the educational needs of children. The plaintiffs conceded that differences in per pupil expenditures were not always unconstitutional, but contended that such differences had to be related to educational need, not educationally irrelevant variables such as the local tax base.

The state prevailed in each case. In *McInnis,* the court applied the rational basis test (without saying why) and ruled that the state funding system, which was based on property taxes, furthered the legitimate state interest of ensuring local control over educational funding. The court also determined that the educational need standard proposed by the plaintiffs was *nonjusticiable;* that is, plaintiffs failed to provide a standard by which the court could assess their claims. The two justifications set forth by the court in support of its ruling have subsequently been used by many courts when denying the claims of school finance plaintiffs.

Burruss was decided on the novel ground that the finance system was constitutional because funding was provided according to a uniform and consistent plan, a portion of which required local contributions. In essence, the *Burruss* court found that the finance system was not discriminatory because it required a contribution from each district. The fact that some districts could raise less funds due to their lower property values was immaterial.

McInnis and *Burruss* shared the important similarity that the court in each case deferred to the legislature and subjected the legislation to the rational basis test. In nearly all subsequent school finance cases, one of the defendants' first tactics has been to file a motion asking the court to dismiss the case, citing *McInnis* and *Burruss* as precedents. Clearly, school finance plaintiffs could not prevail unless they could convince the courts that (1) judicially manageable standards exist in the cases (to get around the issue of

[2]*McInnis v. Shapiro,* 293 F. Supp. 327 (N.D. Ill. 1968), affirmed 394 U.S. 322 (1969).
[3]*Burruss v. Wilkerson,* 310 F. Supp. 572 (Virg. 1969), aff'd. 397 U.S. 44 (1970).

nonjusticiability) and (2) the higher standard of strict scrutiny should be applied (see also Levin, 1977; Minorini & Sugarman, 1999a, 1999b; Sparkman, 1990; Underwood, 1995a, 1995b; Underwood & Sparkman, 1991).

Fiscal Neutrality

Plaintiffs' post-*McInnis/Burruss* challenge consisted of framing the equal protection argument in a way that persuaded the courts to subject the actions of legislature to strict scrutiny. The educational need concept devised by Arthur Wise (1968), then a doctoral student at the University of Chicago, relied upon the notions that (1) education was a fundamental right, (2) the Equal Protection Clause required that education be provided equally across all school districts, and (3) the variations in educational expenditures across districts in most states were not related to educational need. Although the first courts rejected the educational need argument, the argument that education is a fundamental right remained viable.

At about the same time, John Coons, then a law professor at Northwestern University, and two then law students, William Clune and Stephen Sugarman, developed the argument that strict scrutiny should apply because education funding adversely impacted a suspect classification defined as students in low-property-wealth-per-pupil districts (Coons, Clune, & Sugarman, 1970). They contended that local school districts were creations of state governments. They also claimed that school finance systems that relied upon local funding gave school districts unequal opportunities to raise educational revenues because property values per child varied widely. Thus, school financing systems needed to be fiscally neutral, which meant that expenditures per pupil could not be related to local district property wealth per pupil. A state could not be required to provide more money than it possessed, but each district should have an equal opportunity to share in the total resource pool, whatever the size of that pool.

Fiscal neutrality added two major arguments for school finance litigation plaintiffs. First, it suggested that district property wealth per pupil was a suspect classification, which supplemented the argument that education is a fundamental right. Second, it created the fiscal-neutrality standard, which required that there be no relationship between educational spending per pupil and local district property wealth per pupil. This standard enabled plaintiffs to avoid the nonjusticiability argument, because the two variables were collected by nearly all state school finance systems, and standard statistical measures could be used to identify the magnitude of their relationship. In addition, fiscal neutrality clearly identified boundaries that a school finance system could not cross, yet allowed for legislative discretion in designing school finance structures that could pass constitutional muster.

Even armed with the fiscal-neutrality arguments, plaintiffs still faced several challenges. First, they were asking the courts to recognize both a new fundamental right (education) and a new suspect classification (property wealth per pupil). Second, the new suspect class was also different in kind from all previous suspect classes, which involved characteristics traceable to the individual, such as race and national origin. District property wealth per pupil related to a group characteristic—the wealth of the area in which people lived. Third, the Supreme Court had never indicated that even individual property wealth was a suspect classification. The court had appeared sympathetic to claims of discrimination based on individual income but had not (and still has not) recognized income as a suspect classification.

***Serrano v. Priest,* Part I.** The first case filed using the fiscal-neutrality concept was the 1968 *Serrano v. Priest*[4] in California. Plaintiffs argued that strict scrutiny should apply because education was a fundamental right and because the plaintiffs were members of a suspect class—property wealth per pupil. The trial court immediately dismissed the case, arguing that the case was nonjusticiable. This meant that the judge ruled that the plaintiffs could not prevail at trial no matter what facts they could prove, because the law was against them. This decision was appealed to the California Supreme Court.

In August 1972, the California Supreme Court issued an opinion that reversed that ruling and permitted the case to proceed to trial. The Court held that the trial court should have applied the strict scrutiny standard finding that education was a fundamental right under the U.S. Constitution and the plaintiffs were members of a suspect class under the Fourteenth Amendment.[5] The court also held that the case was justiciable using the fiscal-neutrality standard. *Serrano I* was a vital opinion that gained nationwide media, policy, and legal attention. It immediately spawned a series of similar court cases in other states.[6]

It is important to understand that in *Serrano* (and in subsequent school finance court cases) the courts did not find that the use of property taxes to finance schools was unconstitutional per se. States could use local property taxes to help finance schools within a constitutionally acceptable system. But finance systems that relied too heavily on local property taxation face an increased risk of being held unconstitutional, largely because such systems produce greater inequities than do systems that *equalize access to* school resources.

Rodriguez v. San Antonio. Eighteen months after the *Serrano* opinion, the U.S. Supreme Court decided *San Antonio School District v. Rodriguez,*[7] a case that originated in Texas. The trial court had applied the strict scrutiny standard after determining that education was a fundamental right and that property wealth per pupil was a suspect classification. The trial court held that the Texas school finance system violated the Equal Protection Clause of the U.S. Constitution and ordered the legislature to devise a constitutional system.

The state of Texas appealed to a three-judge federal panel, which quickly sent the case to the U.S. Supreme Court. In March 1973, just seven months after *Serrano I*, the Supreme Court issued the definitive ruling with regard to the federal Equal Protection Clause and school finance litigation. The crucial decision in the case occurred when the Court declined to apply the strict scrutiny test. The Court determined that education was not a fundamental right under the U.S. Constitution because education was not mentioned in the Constitution, either implicitly or explicitly. It also determined that low property wealth was not a suspect class. Therefore, neither issue that would trigger strict scrutiny analysis applied, so the court used the rational basis test. Texas argued that funding education by local property taxes reflected the principle of local control of education, a justification that

[4]*Serrano v. Priest,* 5 Cal. 3d 584, 96 Cal. Rptr. 601, 487 P.2d 1241 (1971).

[5]The court stated that its ruling applied under the California constitution as well, because it thought that the terms of those constitutions led to identical results. It analyzed the case using Fourteenth Amendment language, however.

[6]Arizona *(Shofstall v. Hollins,* 1973); Connecticut *(Horton v. Meskill,* 1977); Idaho *(Thompson v. Engleking,* 1975); Illinois *(Blase v. Illinois,* 1973); Kansas *(Knowles v. Kansas,* 1981); Minnesota *(Van Dusartz v. Hatfield, 1971);* New Jersey *(Robinson v. Cahill,* 1973); Oregon *(Olsen v. State,* 1976); Texas *(Rodriguez v. San Antonio, 1973);* Washington *(North Shore School District No. 417 v. Kinnear,* 1974); Wisconsin *(Buse v. Smith,* 1976).

[7]San *Antonio Independent School District v. Rodriguez,* 411 U.S. 1 (1973).

the court accepted. Therefore, the court held that the Texas finance system did not violate the U.S. Constitution.

The *Rodriguez* decision eliminated the plaintiffs' ability to rely on the Equal Protection Clause of the U.S. Constitution because the court ruled that the rational basis test must be applied to school finance litigation under that provision. Recall that under the rational basis test, a state merely has to show that funding schools via the property tax bears a rational relationship to some legitimate state interest. Every state followed the lead of Texas in arguing that their funding system promoted the goal of local control of education. However, one of the dissenting opinions in the *Rodriquez* case hinted that education could be considered a fundamental right under state education clauses. The *Rodriguez* decision, therefore, required plaintiffs to argue their cases by alleging violations of state constitutional provisions. This had the effect of requiring school finance litigation to be argued state by state on the basis of state equal protection and education clauses.

3. THE SECOND WAVE: STATE LAW EQUITY CASES

The *Rodriguez* decision led plaintiffs to turn to the state constitutions to seek school finance reform, in the second wave of school finance litigation. Plaintiffs raised essentially the same arguments as in the first wave, except they argued that the inequities in school funding violated state constitutional provisions, rather than the Fourteenth Amendment of the U.S. Constitution. Fortunately for the plaintiffs, each state constitution contains an equal protection clause, some of which are identical in language to the federal provision (Minorini & Sugarman, 1999a, 1999b; Underwood, 1995a). In addition, the education clauses of some states have been interpreted as containing an equal protection component.

Before proceeding, it is important to understand why different results can be reached under different constitutions. The amendments to the U.S. Constitution grant certain rights to citizens that the states cannot take away. However, the states remain free to grant people additional rights above and beyond those set forth by the federal government. For example, the U.S. Supreme Court ruled that education is not a fundamental right under the U.S. Constitution, but a state constitution can define education as a fundamental right within that state. Therefore, school finance plaintiffs turned to the state courts to seek legal redress beyond that offered by the federal government.

Many cases arose during the second wave of school finance litigation, which provided the primary legal theory for the plaintiffs from 1973 until 1989. The states tended to be more successful than the plaintiffs in these cases, prevailing well over half the time. However, the two most important cases of the second wave involved victories for the plaintiffs.

Robinson v. Cahill. The New Jersey Supreme Court decided *Robinson v. Cahill*[8] in April 1973, just one month after *Rodriguez.* A loss in *Robinson,* while It would not have eliminated litigation in other states, would have been a further blow for plaintiffs, especially following so closely in the wake of *Rodriguez.* The New Jersey court initially decided whether to invoke strict scrutiny or the rational basis test under the *state* equal protection clause.

[8]*Robinson v. Cahill,* 303 A.2d 273 (N.J. 1973).

Although the court acknowledged that education was mentioned in the state constitution, it still ruled that education was not a fundamental right in New Jersey. Similarly, the court held that property wealth per pupil was not a suspect class even though rich and poor school districts had above- and below-average spending per pupil, respectively. Thus, the *Robinson* court applied the rational basis test and held that the New Jersey school finance system did not violate the New Jersey *equal protection clause*.

However, the court reached a different conclusion under the state constitution's *education clause*, which required the state to create a "thorough and efficient" public education system. The court held that a school finance structure that allowed for wide disparities in spending per pupil that were strongly linked to local property wealth per pupil was not a "thorough and efficient" system. The court ordered the state legislature to design a new system that would allow schools to provide "educational opportunities that will prepare [the student] for his role as citizen and as competitor in the labor market" *(Robinson I,* 1973, at 293), a statement that foreshadowed the subsequent adequacy cases that constitute the third wave of litigation. Nevertheless, the court ruled the system unconstitutional largely on the basis of spending differences, which were the only criteria available to determine whether the system was thorough and efficient.

The *Robinson* case was important for three reasons. First, it kept school finance litigation alive after *Rodriguez* seemed to doom it. Second, it paved the way for challenges to school finance systems on the basis of state education clauses, a substantively different strategy than invoking the federal Equal Protection clause. Third, it hinted at a new standard, which subsequently evolved into adequacy litigation.

As would be the case in many states, the New Jersey legislature procrastinated in response to *Robinson.* The *Robinson* decision required the state to play an enhanced role in education funding in New Jersey. The state did not have an income tax, so each year the state budget was short of the level of funds needed for a constitutionally permissible school finance structure. In July 1976, the New Jersey Supreme Court, in a dramatic but largely symbolic action, shut down the entire New Jersey school system.[9] In response, the legislature designed a new school finance structure, enacted a new tax system including a new state income tax to fund it, and provided local property tax relief as well.

***Serrano v. Priest,* Part II.** A few years later, the *Serrano* case returned to the California Supreme Court after a trial in which the plaintiffs prevailed on state law equal protection grounds.[10] The state predictably argued that the verdict should be overturned because of the ruling in *Rodriguez.* The California Supreme Court ruled that the state constitution granted rights beyond those specified in the U.S. Constitution, which meant that the *Rodriguez* case was not determinative of the outcome in *Serrano II.* The court held that education was a fundamental right under the California constitution and that per pupil property wealth was a suspect classification. Therefore, the court applied strict scrutiny to the state's school finance system, determined that the system was unconstitutional, and ordered the state to create a new, fiscally neutral system in which per pupil funding was nearly equal across

[9]Since this occurred during the summer break, only summer schools were affected. The action, however, indicated the serious posture of the Supreme Court and was highly symbolic.
[10]*Serrano v. Priest,* 18 Cal. 3d 728, 135 Cal. Rptr. 345, 557 P.2d 929 (1976).

California, although relatively minor discrepancies would be deemed acceptable. The state restructured its funding system to accommodate the court's ruling, intending in part to "recapture"[11] property taxes from wealthy districts and distribute them more equitably across the state. The voters of California, however, sent their own message by passing Proposition 13, which placed a constitutional limit on the property tax rate and the rate at which property taxes could increase. In the end, the state developed a fairly equitable, but relatively poorly funded, school finance system.

The second wave was moderately effective from the point of view of plaintiffs, although the state prevailed in slightly more than half the cases. However, the successful suits, and even the threat of lawsuits, forced the states to focus on improving equity in funding the schools. The result was improved equity in many states, with the bonus that in most states equity was accompanied by increases in funding for all schools (Evans, Murray, & Schwab, 1997; Ladd, Chalk, & Hansen, 1999). Perhaps more important, the reliance of the *Robinson* court on the New Jersey education clause paved the way for a new type of lawsuit.

4. THE THIRD WAVE: ADEQUACY

Challenging state school finance structures under the state education clause opened the way for legal strategies beyond those used in equal protection litigation. Some plaintiffs used the education clause to frame equal protection arguments. Others used the education clause to buttress arguments about the fundamentality of education made under the equal protection clause. Cases in both Arkansas[12] and Wyoming[13] in the early 1980s were largely based on these arguments, as were the Texas[14] cases that were litigated between 1985 and 1995. Nevertheless, the most important use of the education clause consisted of arguing that it required the state to provide a certain quality of education to children. This approach is at the heart of adequacy arguments.

Giving Meaning to the Education Clause

A court must consider three important points when ruling on a challenge to the school finance system on the basis of the state education clause:

1. Whether the education clause requires not just an education system but some level of quality.
2. The historical meaning of the education clause.
3. The substantive demands of the education clause—adequacy arguments.

Each factor is discussed in more depth below.

[11]Recapture entails determining the amount of funding required by a district, determining the amount of funding a district can raise, taking any excess funding away from districts that can raise more than they need, and redistributing the excess funding to districts that cannot raise enough money on their own.

[12]*Dupree v. Alma School District No. 30,* 651 S.W.2d 90 (Ark. 1983).

[13]*Washakie County School District No. 1 v. Herschler,* 606 P.2d 310 (Wyo. 1980).

[14]*Edgewood Independent School District v. Kirby,* 777 S.W.2d 391 (Tex. 1989); *Edgewood v. Meno,* 893 S.W.2d 450 (Tex. 1995).