

DOCUMENT RESUME

ED 292 184

EA 019 876

AUTHOR Sedlak, Michael; Schlossman, Steven
TITLE Who Will Teach? Historical Perspectives on the Changing Appeal of Teaching as a Profession.
INSTITUTION Rand Corp., Santa Monica, Calif.
REPORT NO ISBN-0-8330-0771-8; RAND/R-3472-CSTP
PUB DATE Nov 86
NOTE 6lp.
AVAILABLE FROM Publication Sales, The Rand Corporation, 1700 Main Street, P.O. Box 2138, Santa Monica, CA 90406-2138 (\$4.00).
PUB TYPE Information Analyses (070)
EDRS PRICE MF01 Plus Postage. PC Not Available from EDRS.
DESCRIPTORS *Educational History; Educational Trends; Elementary Secondary Education; Feminism; Futures (of Society); Public Schools; Social Background; Social Class; Socioeconomic Status; *Standards; Tables (Data); Teacher Characteristics; Teacher Education; *Teacher Qualifications; *Teacher Salaries; Teacher Shortage; *Teaching (Occupation)
IDENTIFIERS *Professionalism

ABSTRACT

This report examines, from a historical perspective, the desirability of teaching as a career. It focuses first on the reward structure in teaching, and second on the social origins and composition of the teaching force. The goals of the study are to lay out the rough chronological boundaries of several notable long-term trends and to isolate vital information and apparent major historical transition points to guide future case-study research. Section I introduces and provides an overview of key issues raised in the study. Section II examines the evolution of financial incentives for teachers, from approximately 1910 to the present, focusing particularly on the appeal of economic rewards to different constituencies. Section III analyzes changes in the social origins and composition of the teaching force, focusing on gender, social class, and academic preparation and qualifications. Finally, section IV selectively reviews recent developments and elaborates on some of their policy implications for raising professional standards and overcoming the developing teacher shortage. The report concludes that the women's movement appears to have opened up new prospects for the professionalization of teaching. Eight pages of references are appended. (MLF)

 * Reproductions supplied by EDRS are the best that can be made *
 * from the original document. *

SCCPE OF INTEREST NOTICE

The ERIC Facility has assigned this document for processing to:

EA

In our judgment, this document is also of interest to the Clearinghouses noted to the right. Indexing should reflect their special points of view

ED

Who Will Teach?

Historical Perspectives on the Changing Appeal of Teaching as a Profession

Michael Sedlak, Steven Schlossman

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

This document has been reproduced as received from the person or organization originating it.

Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

"PERMISSION TO REPRODUCE THIS MATERIAL IN MICROFICHE ONLY HAS BEEN GRANTED BY

Maria Allen

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

RAND

ED 292184

EA 019 876

The research described in this report was conducted in RAND's Center for the Study of the Teaching Profession. The Center's sponsors in 1985-86 were the Metropolitan Life Foundation, the James S. McDonnell Foundation, the Conrad N. Hilton Foundation, and the Aetna Life and Casualty Foundation.

Library of Congress Cataloging in Publication Data

Sedlak, Michael W.

Who will teach?

"Prepared by the Center for the Study of the Teaching Profession."

"November 1986."

"R-3472-CSTP."

Bibliography: p.

1. Teaching. 2. Teaching—History. 3. Teachers' socio-economic status—United States. 4. Teachers—Training of—United States. I. Schlossman, Steven L. II. Rand Corporation. III. Rand Corporation. Center for the Study of the Teaching Profession.

IV. Title.

LB1775.S42 1986

371.1'02

86-27969

ISBN 0-8330-0771-8

The RAND Publication Series: The Report is the principal publication documenting and transmitting RAND's major research findings and final research results. The RAND Note reports other outputs of sponsored research for general distribution. Publications of The RAND Corporation do not necessarily reflect the opinions or policies of the sponsors of RAND research.

Published by The RAND Corporation
1700 Main Street, P.O. Box 2138, Santa Monica, CA 90406-2138

R-3472-CSTP

Who Will Teach?

Historical Perspectives on the Changing Appeal of Teaching as a Profession

Michael Sedlak, Steven Schlossman

November 1986

RAND

Center for the Study of
the Teaching Profession

FOREWORD

As the nation faces a growing imbalance between the demand for teachers and the supply, and various reforms of the teaching profession are being considered, it is important to examine historical trends to see what can be learned from the past. In this brief historical review of American education in the twentieth century, Michael Sedlak and Steven Schlossman help us to anticipate the possible consequences of raising the educational standards for entry to teaching:

- In absolute terms, teaching has indisputably become a more desirable occupation. Real salaries have increased and working conditions have generally improved. However, in comparative terms, teachers' salaries have lost ground relative to those of other college-educated workers. And many working conditions have not kept pace with the rising expectations engendered by the demands of teaching and by comparisons with other college-educated personnel.
- The recent decade of teacher surplus is an aberration. Throughout most of the twentieth century, there has been a shortage of teachers. Nevertheless, educational standards for entry to the teaching profession have increased; whereas the norm for teachers at one time was high school graduation, it is now college graduation. (Most teachers today have master's degrees, acquired within the first few years of teaching.)
- The analysis suggests that major teacher shortages, such as that of the 1950s, were accompanied by (if not solved by) particularly large increases in salaries and increases in the educational standards for entry to teaching.
- Wage discrimination has resulted in teaching being more attractive to women than to men, but the women's rights movement and the expansion of occupational opportunities have freed women from being a captive labor force for teaching.
- Although the civil rights and women's rights movements have begun to affect school staffing, their full effects have not yet been felt because schools have done relatively little hiring since these movements began to affect the career choices of women and members of minority groups.
- As the extrinsic rewards of teaching have become less attractive, so have the intrinsic satisfactions. The bureaucratization

of teaching and the lowering of the skill level of teaching have made the job less satisfying. Teaching may have to be changed fundamentally if it is to attract a significant fraction of the college-educated work force.

One positive change may be the professionalization of teaching, a movement that began in the early 1980s. Reformers and teachers, frustrated with growing bureaucratic control over teaching and the impediments to effective teaching that resulted, have sought to substitute a professional model of control. It is too early to know precisely what that model will be, or whether it will be implemented, or, if it is implemented, whether it will attract enough talented people to teaching. However, a consensus about the education, certification, and learning components of the model has begun to develop.¹

- A prospective teacher should first be a graduate of a liberal arts college to ensure that he or she is a "liberally educated" person, as conventionally defined in this country. The college major should ensure that the prospective teacher has an adequate level of mastery of his or her teaching specialty.
- The prospective teacher should complete a one-year university-based program of teacher preparation to acquire professional and pedagogical knowledge.
- Novice teachers should teach for one year under the direct supervision of mentor teachers.
- National and state professional standards boards should develop and enforce standards for entry to teaching.
- At appropriate stages, prospective teachers should be tested for subject-matter knowledge, professional knowledge, pedagogical knowledge, and performance.
- Full certification by the state standards board and/or licensing by the state should be granted only after the teacher has satisfactorily demonstrated subject-matter knowledge, professional knowledge, and pedagogical knowledge. A school district should award tenure only after the teacher has proved that he or she can teach according to the district's expectations.

¹*Tomorrow's Teachers: A Report of the Holmes Group*, East Lansing, Mich.: The Holmes Group, Inc., April 1986; *A Nation Prepared: Teachers for the 21st Century*, Report of the Task Force on Teaching as a Profession, New York: Carnegie Forum on Education and the Economy, May 1986; *Who Will Teach Our Children? A Strategy for Improving California's Schools*, Report of the California Commission on the Teaching Profession, 1985; *Teachers for Today & Tomorrow*, Hartford, Conn.: The Report of the Governor's Commission on Equity and Excellence in Education, June 1985; and *A Call for Change in Teacher Education*, Washington, D.C.: National Commission for Excellence in Teacher Education, 1985.

Of course, not everyone supports every feature of the education, certification, and licensing components. And there is no consensus about how schools should be restructured to accommodate the professional model of teaching. That model implies changes in the practices of the teacher, both inside and outside the classroom: It means that within the classroom, teachers will be expected to teach academic subjects in intellectually honest and practical ways and to make appropriate instructional decisions on behalf of their students and classes. Outside the classroom, teachers will participate in regulating access to the teaching profession and in setting standards for working conditions. Redesigning schools and the roles of administrators to accommodate the professional model of teaching will not be easy.

From a historical perspective, the professionalization of teaching can be seen as an evolution in educational standards for entry to teaching. Where high school graduation (and the level of knowledge and pedagogical skill it implies) once sufficed, the demands of the twenty-first century will be greater. The historical review presented in this report suggests that unless standards for entry are raised, the job redefined, and salaries increased, America will continue to have difficulty staffing its schools with adequately trained, skilled teachers.

Arthur E. Wise
Director, Center for the Study of the Teaching Profession

SUMMARY

The achievement of reforms in public schooling in the United States will depend on the ability of communities to recruit and retain talented teachers. If teaching is widely perceived as an undesirable occupation, the talented, dedicated individuals essential to implementing and sustaining needed educational reforms will seek other outlets for their professional aspirations. This report examines the desirability of teaching as a career, from a historical perspective. Focusing particularly on the profession's economic reward structure and social composition, the study attempts to provide a chronological, conceptual, and empirical framework to guide future case-study research. Only with such research will it be possible to analyze the causes and processes of change in the teaching profession at different time periods and in different types of communities.

Teaching has become a far more desirable occupation during the twentieth century. Teachers today enjoy more freedom and autonomy than did their nineteenth-century predecessors, and they are saddled with fewer arduous physical burdens in their daily work. Nevertheless, it has always been difficult to recruit talented teachers and to retain those willing to give teaching a try. Despite brief periods of surplus, there has usually been a shortage of willing and qualified teachers, as well as specific shortages in different types of communities, at different organizational levels, or in specific subjects.

Until recently, recurrent shortages were eased by the availability of relatively well-qualified talented women and minorities who had few alternatives if they wanted respectable middle-class work. The presence of qualified women in particular provided a cushion that allowed most districts to keep financial incentives low and to ignore requests for improved working conditions. But as women have begun to exploit career opportunities in other fields, they no longer constitute a captive labor pool for the teaching profession. This change may fundamentally shape the developing teacher shortage. The desirability of teaching as an occupation may soon be put to its most serious test, as school districts compete for female as well as male labor in an increasingly open market.

The desirability of teaching, like most occupations, has been shaped largely by economic incentives. Teaching salaries have increased steadily in purchasing power since the early twentieth century, with the exception of a brief contraction around World War I and a

declining return on teaching caused by high inflation during the 1970s. Nevertheless, employees in other occupations that require roughly similar investments in training and credentials have gradually improved their earning power relative to that of teachers.

The long-term pattern, moreover, masks several important variations in the economic return on teaching. Male teachers have outearned their female colleagues in general, as well as within each level of the organization. Despite this discrepancy, the limited employment opportunities traditionally available to females have made teaching relatively more valuable to women than to men; similarly, teaching has been a more appealing alternative for minorities, although white teachers have traditionally outearned them. Teachers in the larger cities and privileged suburbs have also earned more than their counterparts in rural and smaller districts. However, earnings have been converging since World War II, as uniform salary schedules have been widely adopted, the professional credentials of elementary and secondary teachers have approached parity, and states have made deliberate efforts to equalize salaries between wealthy and impoverished districts.

The disproportionately high percentage of women in the teaching force since the mid-nineteenth century has affected the occupation's image, status, and desirability in a number of ways. Scholars have increasingly argued that the prevalence of women in classrooms has contributed to pressure to strengthen bureaucratic controls over teaching and has given teaching the image of a lower-skilled profession. Thus, the unstaged career structure that served the interests of women who wished to integrate work, household, and childrearing responsibilities through intermittent employment or through employment that did not require traditional forms of professional commitment has been seen as one of the legacies of feminization.

The social origins of the teaching force have changed substantially over the course of the twentieth century. The expansion of schools after 1900, particularly at the secondary level, led to a demand for teachers that could not be met by relying primarily on middle-class women from rural, small-town backgrounds and women of independent means. Males were increasingly recruited into teaching after 1920, through higher salaries, improved benefits, the promise of career advancement into administration, and expanded access to relatively inexpensive public higher education. Over the next 40 years, men from urban, working-class families earned educational credentials and accepted teaching positions. Simultaneously, teaching continued to attract a large share of high-status females whose career alternatives were limited and/or who were committed to education as a missionary

venture. Expanded access to desirable alternative careers for women may make the teaching force increasingly socially homogeneous.

Several findings emerged from this study that may be particularly relevant to the current reform movement in public education:

1. *Reform movements in education (as in many other fields) are notorious for their tendencies toward presentism—for painting the past in the darkest possible light in order to stress the urgent need for rapid and major transformation of the status quo.* In fact, teaching has become an indisputably more desirable occupation during the twentieth century, and history provides much reason for optimism that substantial improvements in the status of teaching as a profession are possible, although they may not necessarily occur as rapidly or be as closely modeled on other professions as many reformers might like.

2. *Contrary to what many modern-day educators tend to assume, teacher shortages have been commonplace throughout the twentieth century.* But it has proved possible, time and again, to raise certification standards. Not only has the raising of standards not exacerbated teacher shortages, it may even—at least where accompanied by significant increases in teachers' salaries—have helped to alleviate them (and, at the same time, enhanced popular respect for teaching as a profession). This recurring pattern suggests that there is little historical reason to believe that proposed innovations such as teacher-testing and shifting the professional education of teachers entirely to the graduate level are, by themselves, likely to significantly diminish the attractions of the profession to potentially desirable recruits.

3. *No single subject is more central to the history of the teaching profession than the changing role of women in American society.* While recent developments may have created difficulties by drawing talented women away from teaching, they may also have created opportunities to make teaching more like other professions. The work schedule of the modern teacher/mother is not nearly as constrained by social pressures as was that of her predecessors: She is less compelled to rush home by 3:00 p.m. because few other mothers are likely to be at home to scorn her if she is not. Moreover, child care options (though still limited in many communities) are far more plentiful today than they used to be. Of course, making teaching more like other professions—including expanding the workday to 8 hours and the work year to 12 months—may decrease its attractiveness to some women. But in unsettling the traditional assumptions linking women to teaching, the women's movement appears to have opened up new prospects for the professionalization of teaching that might never otherwise have developed.

ACKNOWLEDGMENTS

For cogent criticisms of earlier drafts of this report, we extend thanks to Linda Darling-Hammond, Harriet Tyson-Bernstein, Donald Warren, and Arthur Wise. Verla Ensign and Alyce Raphael provided expert technical assistance. We accept full responsibility for any errors of fact or interpretation.

CONTENTS

FOREWORD	iii
SUMMARY	vii
ACKNOWLEDGMENTS	xi
Section	
I. INTRODUCTION	1
Scope of the Study	1
Overview	2
II. ECONOMIC REWARD STRUCTURE	5
Average Salaries	5
Minimum and Maximum Salaries	11
Comparative Salaries	13
Summary	24
III. SOCIAL ORIGINS AND COMPOSITION OF THE TEACHING FORCE	26
Gender	26
Social Origins	29
Preparation and Academic Ability	35
IV. CONCLUSION	39
REFERENCES	41

I. INTRODUCTION

SCOPE OF THE STUDY

The current reform movement in American education is jeopardized by a possible decline in the academic qualifications of the teaching force. The ability to improve education in American public schools will depend in large measure on the ability of those schools to recruit and retain talented teachers. If teaching is widely viewed as an undesirable occupation, the talented personnel needed to implement and sustain the recent educational reforms are likely to seek other outlets for their professional aspirations.

This report examines the desirability of teaching as a career from a historical perspective. It focuses first on the reward structure in teaching, and second on the social origins and composition of the teaching force. How has the reward structure affected the social composition of the teaching force, and vice versa? Who was and is attracted to teaching? How have both the reward structure and the social composition of the teaching force changed over time? Were the reward structure and social composition central in shaping the public image of teaching as a desirable or undesirable career?

We do not pretend to be able to answer these questions with precision. While we examine the apparent interplay and reciprocity among reward structures, social composition, certification standards, and other key analytic variables, we do not attempt to establish clear causal linkages among them. Our goals, rather, are to lay out the rough chronological boundaries of several notable long-term trends and to isolate vital information and apparent major historical transition points to guide future case-study research. Without intensive, in-depth analyses of the broad trends that we describe, historians' and policymakers' understanding of why and how major changes in the teaching force have come about will inevitably remain superficial.

Section I introduces and provides an overview of key issues raised in the study. Section II examines the evolution of financial incentives for teachers from approximately 1910 to the present. Section III analyzes changes in the social origins and composition of the teaching force, focusing on gender, social class, and academic preparation and qualifications. Finally, Section IV selectively reviews recent developments and elaborates some of their policy implications for raising professional standards and overcoming the developing teacher shortage.

OVERVIEW

Teaching has indisputably become a more desirable occupation during the twentieth century. Teachers today enjoy far more freedom and autonomy than did their nineteenth-century predecessors, and they are saddled with fewer arduous physical burdens in their daily work.

The expansion of personal freedoms for teachers is especially notable. Teachers today are far less constrained by contract or custom regarding personal behavior, political activity, and moral beliefs. A century ago, inflexible and exacting conduct codes, enforced by administrators, school-board members, private citizens, and even students themselves, compelled teachers to live very restricted lives. They were commonly berated for drinking, lascivious conduct, and other personal activities. The lives of female teachers were regulated even more closely than those of their male colleagues.

The elaborate conduct codes for teachers began to weaken in the 1920s, when the nation was suffering a severe teacher shortage. Most of the codes were eliminated during the 1930s and 1940s, particularly as organized teachers (most of them employed in urban districts) began to negotiate formal, uniform contracts. Some restrictions persisted, especially limitations on displays of political behavior and beliefs in the classroom. But most constraints—even traditional prohibitions against marriage and motherhood for women teachers—gradually disappeared. Polls of job satisfaction during the 1960s revealed that few teachers felt uncomfortable with the degree of freedom and privacy their positions allowed them. (Some small and rural communities, however, continued to impose as many proscriptions as they thought they could get away with, largely by recruiting “safe” teachers from nearby towns.)

In addition to the expansion of personal and academic freedom, improvements in other working conditions made teaching more desirable. Class size, for example, has steadily decreased since the early twentieth century, when dramatic increases in enrollment resulted in class sizes averaging 40 to 50 students. By 1950, efforts to improve student-teacher ratios had lowered the average class size to fewer than 30. Additional hiring and the student enrollment decline of the 1970s reduced the theoretical average class size to 17 in 1980. Of course, few teachers actually worked with only 17 students at a time, and in some districts student-teacher ratios have recently begun creeping upward. But on average, the downward trend in class size since the 1920s has been pronounced. To the extent that class size affects teachers' perception of their own ability to do their work, working conditions have definitely improved.

Various other benefits have also made teaching more secure. Tenure provisions, for example, have effectively protected many teachers against the efforts of administrators and school boards to dismiss them. Other benefits such as retirement plans, professional leaves of absence, workers' compensation, and contractually regulated working conditions have become so common that we tend to forget that at one time few teachers enjoyed any protection against illness and infirmities, or against the prejudices and whims of employers and voters.

It took little time for these improvements in working conditions to become expected rather than cherished, however. Even as conditions improved in the 1930s and afterward, educators routinely found fault with their positions and their opportunities. This does not imply that teachers are ingrates. Rather, as the population has become more affluent and educated, societal expectations for schools have increased. Teachers have responded to these increased expectations by pointing up and protesting the constraints under which they work. Furthermore, as teachers themselves have become more highly educated, they have also come to demand the treatment and autonomy they associate with "professional" status. Teachers have regularly criticized not only their inadequate salaries (explored later in detail), but a wide range of working conditions. Large class sizes and inadequate supplies, in particular, they argue, make it difficult to attend individually to students' needs. In addition, teachers (particularly males) have long complained about their lack of promotional opportunities. The "careerless" nature of teaching has led many talented teachers to abandon the classroom for successive administrative positions in their schools or for jobs outside of education.

Potential earnings and working conditions are not the only factors that have influenced the career decisions of potential teachers. Some individuals in the prospective pool have many alternatives; others have few. As Weaver (1983) indicated, "Talent follows opportunity." The labor market for teaching has been sensitive to the ebb and flow of opportunities across scores of occupations.

The general rule of talent following opportunity has not applied, however, to women, who were traditionally denied entry to many male-dominated occupations. Popular attitudes and civic customs regarding the role of women have strongly affected the composition of the teaching force: Teaching has been relatively easy to reconcile with the socially approved roles of wife and mother. A similar situation has prevailed for minorities. Schools have frequently been staffed by highly educated minority men and women who were denied admission to other professions, even after earning advanced degrees in those fields.

It has always been difficult to recruit talented teachers and to retain those who give teaching a try. Staffing all of the nation's classrooms with talented teachers who hold legitimate and appropriate credentials has been impossible because of perennially rising public expectations for formal training and smaller class sizes. Despite brief periods of surplus, there has usually been a general shortage of willing and qualified teachers, as well as specific shortages in different types of communities, at different organizational levels, or in specific subjects.

Until recently, recurrent shortages were eased by the availability of relatively well-qualified, talented women who had few alternatives if they wanted respectable middle-class work. Their presence provided a cushion that allowed most school districts to keep financial incentives low and to ignore requests for improved working conditions. In recent years, these women have increasingly exploited expanding opportunities in other fields; they no longer constitute a captive labor pool for the teaching profession. This change may fundamentally shape the developing teacher shortage of the late 1980s. The desirability of teaching as an occupation may soon be put to its most serious test, as school districts compete for female as well as male labor in an increasingly open market.

II. ECONOMIC REWARD STRUCTURE

The desirability of teaching, like that of all other occupations, has been shaped to a large degree by economic incentives. Defectors from teaching consistently cite the limited financial rewards as one of the most important factors in their decision to leave. This section examines the evolution of the economic reward structure, focusing particularly on the appeal of economic rewards to different constituencies.

AVERAGE SALARIES

Tables 1 and 2 show several important patterns in the evolution of teachers' average annual salaries. Despite steady, even dramatic growth in salaries since the 1870s, the erosion of the dollar's value through inflation resulted in (and masked) an actual decline in teachers' purchasing power in the years surrounding World War I. High inflation undermined real purchasing power by at least 20 percent between 1914 and 1922. This decline was widely understood as contributing to the teacher shortage in the postwar era and to the loss of many male teachers from the profession. To compensate, many districts paid teachers relatively handsomely during the 1920s. In this period of economic stability and even slight deflation, teachers' salaries increased by two-thirds, from an annual median of \$871 in 1921 to \$1,420 by 1930. Real salaries improved by nearly 100 percent during the 1920s, from a base (in 1983 dollars) of \$4,331 in 1920 to \$8,475 in 1930.

During the early years of the Great Depression of the 1930s, however, teachers' salaries declined sharply, albeit temporarily. Some teachers lost their jobs or were paid in municipally issued scrip redeemable at less than par value. Districts cut many salaries across the board by 10 percent a year for several years after 1931 (when municipalities were having a particularly difficult time collecting delinquent property taxes).

The Depression hit small districts the hardest and hurt secondary more than elementary school teachers (although elementary teachers customarily earned less than their secondary counterparts). The elementary teachers in the nation's largest communities suffered an average salary decline of 9.2 percent between 1931 and 1935; their counterparts at the secondary level faced a decline of nearly 11 percent. In contrast, in smaller communities, both elementary and secondary

Table 1

**MEAN ANNUAL SALARY OF TOTAL INSTRUCTIONAL STAFF
IN U.S. PUBLIC SCHOOLS: 1869-1870 TO 1979-1980**

Academic Year	Unadjusted Dollars	Adjusted to 1983 Dollars
1869-1870	189	1,484
1879-1880	195	2,007
1889-1890	252	2,785
1899-1900	325	3,879
1909-1910	485	5,169
1919-1920	871	4,331
1929-1930	1,429	8,475
1939-1940	1,441	10,238
1949-1950	3,010	12,458
1959-1960	5,174	17,405
1969-1970	8,840	22,686
1979-1980	16,773	20,279

SOURCE: National Center for Education Statistics.

Table 2

**MEAN ANNUAL SALARY OF CLASSROOM TEACHERS IN
U.S. PUBLIC ELEMENTARY AND SECONDARY SCHOOLS:
1959-1960 TO 1981-1982**

Academic Year	Unadjusted Dollars	Adjusted to 1983 Dollars
1959-1960	4,995	16,803
1961-1962	5,515	18,166
1963-1964	5,995	19,256
1965-1966	6,486	19,912
1967-1968	7,423	21,259
1969-1970	8,635	22,157
1970-1971	9,269	22,802
1971-1972	9,705	23,108
1972-1973	10,176	22,815
1973-1974	10,778	21,772
1974-1975	11,690	21,638
1975-1976	12,591	22,034
1976-1977	13,352	21,951
1977-1978	14,207	21,694
1978-1979	15,022	20,625
1979-1980	15,951	19,285
1980-1981	17,597	19,269
1981-1982	19,142	19,755

SOURCE: National Education Association (NEA).

teachers encountered reductions of nearly 20 percent (from a much lower base).

Salaries rebounded quickly after 1935. In mid-sized cities, for example, average salaries increased 14 percent between 1935 and 1941. During the 1940s, teachers' salaries increased sharply, often doubling. Between 1940 and 1950, teachers improved their purchasing power by more than 21 percent. Median salaries rose from \$10,238 (in constant 1983 dollars) in 1940 to \$12,458 in 1950.¹

Teachers' salaries continued to improve dramatically during the 1950s and 1960s as districts sought to attract enough teachers to serve the baby-boom generation. Districts raised salaries and carried on enormous building expansion and improvement campaigns. The flourishing economy and expanding property tax bases characteristic of growing suburban communities underwrote this investment. Average teachers' salaries increased beyond the inflation rate, by nearly 40 percent during the 1950s and by another 30 percent during the 1960s. In other words, average salaries almost doubled in purchasing power between 1950 and 1970, from \$12,458 (in constant 1983 dollars) to \$22,683.

A second period of declining real earnings for teachers occurred during the 1970s, particularly between 1973 and 1981, when the purchasing power of teachers' salaries fell roughly 12 percent. The purchasing power of an average teacher's salary in 1981 roughly equalled that in 1966. From a long-term perspective, this decline in real earnings was exceptional.²

Averaging annual salaries distorts the actual profile of teachers' wages in several ways. Therefore, variations within the overall pattern are instructive.

First, *males* have traditionally received higher salaries than *females*. Women were initially recruited into teaching in the mid-nineteenth century because they were willing to work for one-third to one-half the salaries of men (Kaestle, 1983). The disparity gradually lessened,

¹By this time, uniform salary schedules were widely used, so median salaries reflected the prior experience and educational levels of the teaching force (which clearly changed over time), as well as actual changes in real salaries. We are uncomfortable with comparing average salary levels over time without taking into account other factors that also shape teaching's average earnings. To assess the precise impact of these associated factors, however, would require research that could establish the linkages across many variables at the individual institutional or district level. Such research would contribute significantly to our understanding of the economic return on teaching but is far beyond the scope of this report.

²At this stage of research, it is difficult to establish precise causes behind these changes in the economic return on teaching. Our evidence tentatively suggests that increases and decreases in average salaries are closely linked to surpluses and shortages of available teachers.

however, and by 1940 the salaries of women teachers were approximately two-thirds those of men. The salary ratio between male and female teachers has fluctuated erratically since the 1950s, but females have generally earned between 75 and 85 percent of male salaries.³

Gender and employment at specific organizational levels are strongly correlated. Part of the earnings disparity between men and women derives from the tradition of paying high school teachers more than elementary teachers, as is apparent from Table 3. However, teaching assignment alone does not explain the disparity: The earnings ratio between female and male elementary teachers is about the same as that

Table 3
MEAN ANNUAL SALARY OF ELEMENTARY AND
SECONDARY TEACHERS: 1959-1960 TO 1981-1982
(In unadjusted dollars)

Academic Year	Elementary Teachers	Secondary Teachers
1959-1960	4,815	5,276
1961-1962	5,340	5,775
1963-1964	5,805	6,266
1965-1966	6,279	6,761
1967-1968	7,208	7,692
1969-1970	8,412	8,891
1970-1971	9,021	9,568
1971-1972	9,424	10,031
1972-1973	9,893	10,507
1973-1974	10,507	11,077
1974-1975	11,334	12,000
1975-1976	12,282	12,947
1976-1977	12,988	13,776
1977-1978	13,860	14,611
1978-1979	14,664	15,441
1979-1980	15,556	16,434
1980-1981	17,204	18,071
1981-1982	18,679	19,712

NOTE: Data for some recent years have been revised slightly since they were originally published.

SOURCE: NEA, *Annual Estimates of School Statistics*, 1982-83.

³The introduction and evolution of uniform single salary schedules in 1920 to 1940 was in part a response to such inequities. Current disparities appear to reflect differences in educational levels which, in turn, are related to the preponderance of male high school teachers, since secondary teachers have consistently earned more advanced credentials.

between female and male secondary teachers. In California, for example, women who taught in both elementary and high schools in 1950 earned only 83 percent as much as their male colleagues.

Second, as noted above, the salaries available to teachers at *different levels in the organization* have varied substantially. Elementary school teachers have traditionally earned less than secondary school teachers. However, these disparities began to lessen in the 1940s as uniform salary schedules—which allocated salary by level of educational attainment and years of experience—came into wide use.

Just as gender and teaching assignment have affected teachers' income, so have types of *school systems*. For generations, rural teachers earned far less than urban teachers, partly because (at least until 1950) rural teachers were generally younger and less well trained. Although substantial salary disparities remain across districts in many states, equalization has proceeded steadily since the 1930s. Professional preparation of rural and urban teachers has become more uniform, and school authorities have attempted to stabilize wages within states in order to decrease the distressing turnover rates that are characteristic of rural schools.

Social class structure and levels of community wealth have also affected salary schedules. Affluent suburbs have usually offered higher salaries than towns of comparable size but with lower assessed property valuation.⁴

Finally, *regional location* has been an important determinant of salaries, as is evident in Table 4. Regional salary traditions have consistently rewarded teachers in the Northeast and West with the highest salaries and those in the South with the lowest. While regional patterns partly reflect rural-urban differences, teachers in small towns and rural areas in the West generally outearned those in other regions and occasionally outearned urban teachers in other areas. Low salaries paid to southern teachers also reflected differentials in school funding by race, which were most visible in the South.

Although salary differentials have been reduced somewhat over the past 40 years, equalization still has a long way to go. Recently collected evidence reveals substantial disparities across districts and states (Feistritzer, 1983, p. 47). Rural teachers in many southern states earn less than one-half as much as their counterparts in the Northeast and West, and black teachers continue to earn less than whites with comparable credentials and years of experience. As indicated above, apparent changes in the economic return to teaching at the national

⁴The NEA has occasionally collected data on the districts that offered the highest salaries. Along with the largest urban centers, prominent affluent suburbs appeared conspicuously on those lists.

Table 4
MEAN ANNUAL TEACHERS' SALARIES, BY STATES: 1940, 1960, 1982

1940		1960		1982*	
State	Salary	State	Salary	State	Salary
Lowest Salaries					
Mississippi	559	Arkansas	3,295	Vermont	14,343
Arkansas	584	Mississippi	3,314	Mississippi	14,623
South Carolina	743	Kentucky	3,327	Arkansas	14,961
Alabama	744	S. Carolina	3,450	New Hampshire	15,000
Ncrth Dakota	745	Maine	3,694	South Dakota	15,503
Average	675	Average	3,416	Average	14,886
Highest Salaries					
New York	2,604	Alaska	6,859	California	26,191
California	2,351	California	6,600	Nevada	24,820
New Jersey	2,093	New York	6,537	Washington	23,990
Massachusetts	2,037	Connecticut	6,008	New York	23,900
Connecticut	1,861	New Jersey	5,871	Hawaii	23,112
Average	2,189	Average	6,375	Average	24,403
Ratio of highest					
to lowest					
	2,189/675 = 3.24		6,375/3416 = 1.87		24,403/14,886 = 1.64

*Alaska, where the average annual salary in 1982 was \$33,200, is omitted.

level mask significant local variations by gender, race, region, district size, and community type. These variations surely affect perceptions of teaching's relative desirability to different populations of prospective and practicing teachers.

MINIMUM AND MAXIMUM SALARIES

Many students who contemplate careers in teaching hear more about entering salaries than about career averages. School administrators have traditionally focused attention on beginning salaries, which tend to be "front-loaded": A larger proportion of the resources has gone into making salary levels relatively high early in teachers' careers, and less is allocated to providing for increases later. By attracting people into the profession through the incentive of relatively high entry-level salaries, administrators have planned on retaining a reasonable share of entrants for at least six or seven years. After that, they assume that many teachers will leave (because of diminished earning potential or other reasons, including motherhood); those who remain will be the ones who are too strongly committed to abandon their classrooms or are vested in the retirement system, or they will be individuals who have few realistic alternatives. Furthermore, district policies that do not allow incoming candidates credit for more than five years of prior experience have reduced teachers' mobility among districts and have undermined pressure for upgrading later career salaries. Consequently, school authorities have operated under the assumption that for the most part it is not necessary to shift financial resources toward teachers with long tenure. And until very recently, teacher organizations rarely protested this pattern of salary allocation.

Entering salaries for teachers increased steadily and substantially between 1950 and 1970, apparently in response to the continuing postwar teacher shortage (see Table 5).⁵ Between the 1951-1952 and 1956-1957 academic years, teachers' average beginning salaries increased by 27.2 percent; over the next five academic years, the pace of growth slowed, but beginning salaries exceeded the rate of inflation by 15.1 percent. During the 1960s, entry-level salaries continued to climb faster than the Consumer Price Index, but at a slower rate than they had earlier. Between 1961-1962 and 1966-1967, the growth rate was 8.1 percent; between 1966-1967 and 1970-1971, it was 9.6 percent.

⁵It appears that, as in the 1920s, teaching salaries improved in response to a shortage of teachers; however, conclusive generalizations about the relationship between the two variables await further research.

Table 5
MEAN BEGINNING SALARIES FOR TEACHERS WITH
BACHELOR'S DEGREES: 1950-1951 TO 1970-1971*

Academic Year	Unadjusted	
	Current Dollars	Adjusted to 1983 Dollars
1950-1951	2,603	9,983
1952-1953	2,993	11,149
1953-1954	3,146	11,662
1954-1955	3,252	12,101
1955-1956	3,455	12,666
1956-1957	3,649	12,917
1957-1958	3,834	13,212
1958-1959	3,994	13,651
1959-1960	4,145	13,944
1960-1961	4,325	14,402
1961-1962	4,518	14,882
1962-1963	4,628	15,060
1963-1964	4,793	15,395
1964-1965	4,894	15,455
1965-1966	5,166	15,860
1966-1967	5,390	16,084
1967-1968	5,876	16,824
1968-1969	6,302	17,129
1969-1970	6,875	17,641
1970-1971	7,165	17,626

SOURCE: NEA.

*Only during the 1930s and 1940s were uniform schedules widely dispersed; therefore, 1950 appears an appropriate starting point.

Over the two decades, the purchasing power of beginning teachers' salaries increased 73.6 percent.

As the average age of the teaching force began to increase slightly during the late 1970s and early 1980s, teacher organizations sought to restructure salary schedules so that older teachers—many of whom already receive the highest salaries their districts offer—would receive a larger proportionate share, a policy called “back-loading” (Monk and Jacobson, 1985). Indeed, some school boards today accuse teacher unions of not bargaining hard enough for higher beginning salaries.

COMPARATIVE SALARIES

Another way to examine economic rewards in teaching is to compare teachers' salaries with the salary structures of other occupations. Because of salary increases during the teacher shortage of the 1920s and the opportunity for relatively steady employment during the Great Depression, teachers' earnings during the 1930s contrasted favorably with those in other occupations, particularly manufacturing and other blue-collar jobs, as shown in Tables 6 and 7. World War II, with its unprecedented demand for production, stimulated the economy and drove civilian wages upward, especially in heavy industry. As a consequence, teachers' salaries—which also increased, but only gradually—lost ground to other occupations, particularly in manufacturing. Other professions that had suffered during the Depression also prospered relative to teaching. Physicians, for example, increased their average annual earnings ratio over teachers from 2.29 in 1933 to 4.37 in 1942, and to 5.78 only three years later.

This period of comparative disadvantage probably contributed to the teacher shortage of the 1950s, as returning veterans were discouraged by the relatively low salary scales of the teaching profession. With access to the G.I. Bill, many veterans could secure the training and credentials necessary for careers in more prestigious, higher-paying professions.

Between 1950 and 1972, salary increases helped teachers recover their income advantage over most other employees, and to regain some ground lost to other professionals. Since the mid-1970s, however, teachers have been less successful than other workers in protecting their earnings from inflation. Earnings of teachers fell more dramatically than those of other workers between 1973 and 1980. Preliminary evidence hints that this trend may be reversing, as teachers' salaries edged up slightly against those of other workers between 1981 and 1982.

Educators seeking to improve teachers' salaries have long highlighted the earnings advantages of other workers. During the teacher shortage of the 1920s, professional education associations blamed the limited income potential of teachers for the nation's inability to staff its classrooms. At a time when most teachers were not college graduates, the professional educators' associations contrasted teachers' salaries with those of other workers whose employment did not require university credentials, avoiding the temptation to juxtapose teachers' salaries with those of physicians and lawyers. Indeed, the contrast with other clerical and skilled laborers was itself disturbing enough; a comparison with doctors and lawyers would have been

Table 6

RATIOS OF MEAN ANNUAL EARNINGS OF PERSONS IN SELECTED OCCUPATIONS
TO SALARIES OF TEACHERS: 1929 TO 1953

Year	Teachers	All Salaried Employees	Employees in Manufacturing	Civilian Fed. Govt. Employees	Dentists	Lawyers	Physicians	Non-salaried Professionals
1929	100.0	100.4	110.2	138.1	301.8	395.3	373.1	368.0
1930	100.0	96.0	104.4	124.1	282.1	364.5	341.8	338.8
1931	100.0	89.2	95.7	132.5	239.3	355.9	292.2	308.9
1932	100.0	80.9	83.0	131.7	179.0	300.1	229.5	249.7
1933	100.0	81.6	84.5	130.2	170.3	301.0	229.4	248.2
1934	100.0	88.3	93.4	139.0	193.6	341.5	273.8	286.3
1935	100.0	90.6	96.9	140.2	198.0	340.4	294.4	293.7
1936	100.0	91.1	99.0	145.8	209.7	338.0	323.4	305.0
1937	100.0	93.5	102.3	133.6	214.3	333.3	318.6	302.4
1938	100.0	88.8	93.6	132.3	207.2	308.5	295.5	282.0
1939	100.0	89.0	96.0	129.8	218.0	309.2	297.8	295.4
1940	100.0	89.7	98.8	150.6	228.6	310.8	306.3	291.3
1941	100.0	97.5	111.7	133.1	255.5	323.9	341.0	314.8
1942	100.0	111.0	131.4	144.5	300.3	358.9	437.3	372.7
1943	100.0	119.0	143.2	160.2	348.5	362.5	510.4	409.5
1944	100.0	119.4	142.6	151.7	376.7	368.5	555.4	433.5
1945	100.0	115.2	134.5	139.3	364.3	361.1	577.6	435.1
1946	100.0	113.3	121.0	131.5	306.8	334.2	490.5	381.1
1947	100.0	168.8	117.4	129.2	277.7	312.5	450.7	351.7
1948	100.0	103.1	112.2	116.9	259.7	299.7	418.0	331.0
1949	100.0	98.3	106.6	115.9	246.4	278.7	405.0	314.4
1950	100.0	98.6	108.2	113.9	243.8	280.0	404.1	314.1
1951	100.0	101.3	112.7	117.9	244.0	272.4	419.1	315.9
1952	100.0	99.9	111.8	115.9	—	—	—	310.1
1953	100.0	99.3	112.1	113.5	—	—	—	307.0

SOURCE: NEA, Research Division, *Economic Status of Teachers in 1954-55*, p. 115.

Table 7

AVERAGE ANNUAL SALARY OF INSTRUCTIONAL STAFF IN U.S. PUBLIC ELEMENTARY AND SECONDARY SCHOOLS VS. ANNUAL EARNINGS OF FULL-TIME EMPLOYEES IN ALL U.S. INDUSTRIES: 1929-1930 TO 1981-1982

Academic Year	Instructional Staff		Full-Time Employees ^a		Earnings Ratio, Instructional Staff to Employees
	Unadjusted Dollars	Adjusted Dollars ^b	Unadjusted Dollars	Adjusted Dollars ^b	
1929-1930	1,420	7,808	1,386	7,621	1.02
1931-1932	1,417	9,252	1,198	7,822	1.18
1933-1934	1,227	8,719	1,070	7,604	1.15
1935-1936	1,283	8,792	1,160	7,949	1.11
1937-1938	1,374	9,037	1,244	8,182	1.10
1939-1940	1,444	9,704	1,282	8,633	1.12
1941-1942	1,507	9,105	1,576	9,522	0.96
1943-1944	1,728	9,342	2,030	10,975	0.85
1945-1946	1,995	10,300	1,272	11,730	0.88
1947-1948	2,639	10,656	2,692	10,870	0.98
1949-1950	3,010	11,963	2,930	11,645	1.03
1951-1952	3,450	12,351	3,322	11,892	1.04
1953-1954	3,825	13,381	3,628	12,692	1.05
1955-1956	4,156	14,550	3,924	13,738	1.06
1957-1958	4,702	15,483	4,276	14,080	1.10
1959-1960	5,174	16,574	4,632	14,838	1.12
1961-1962	5,700	17,842	4,928	15,425	1.16
1963-1964	6,240	19,031	5,373	16,387	1.16
1965-1966	6,935	20,440	5,838	17,207	1.19
1967-1968	7,630	21,109	6,444	17,828	1.18
1969-1970	8,840	22,028	7,334	18,278	1.21
1971-1972	10,100	23,101	8,334	19,062	1.21
1973-1974	11,185	22,571	9,647	19,468	1.16
1975-1976	13,120 ^c	22,261	11,218	19,034	1.17
1977-1978	14,697 ^c	22,087	12,852	19,314	1.14
1979-1980	16,773 ^c	20,336	15,094	18,300	1.11
1981-1982	20,114 ^c	20,114	17,620 ^d	17,620	1.14

SOURCES: U.S. Department of Education, National Center for Education Statistics, *Statistics of State School Systems*; NEA, *Estimates of School Statistics, 1982-83*; U.S. Department of Commerce, *Survey of Current Business*, July issues.

^aCalendar-year data from the U.S. Department of Commerce, converted to a school-year basis by averaging the two appropriate calendar years in each case.

^bAdjusted to 1981-1982 purchasing power, based on Consumer Price Index, prepared by the Bureau of Labor Statistics, U.S. Department of Labor.

^cEstimated by the NEA.

^dPreliminary data.

humiliating. The NEA reported, for example, that the average annual salary of teachers, principals, and superintendents in U.S. public schools was \$1,275 in 1926, while that of trade union members was \$2,402, "high-grade clerical workers" earned \$1,908, federal employees earned \$1,809, and "routine clerical employees working under supervision" received an average of \$1,200 (NEA, 1927a, p. 211).

After it became common for teachers to possess bachelor's degrees, the teachers themselves began to complain about the differences between their salaries and those of the other established professions. Teachers voiced their displeasure consistently throughout the 1930s and 1940s, even though this was a period of relative occupational stability and salary growth for teachers. During the 1950s and 1960s, teachers' complaints became more empirically grounded, as typified by a report from the NEA's Research Division in 1959. Teaching was "priced too low," the NEA researchers argued. "Other employment for college-trained people offers greater financial rewards. A substantial number of trained, qualified teachers are drawn off yearly for other occupational pursuits" (NEA, 1959, p. 48).

Starting salaries in teaching averaged \$3,650 for the 1958-1959 academic year, whereas starting salaries for engineers and chemists—whose training is similar to that of teachers—were \$5,850 and \$5,160, respectively. Supporting evidence from Northwestern University's Endicott Survey of entering salaries projected that, on average, graduates with bachelor's degrees in fields other than teaching received \$5,268 when they began work in June 1959, nearly 45 percent more than those with teaching certificates. Teachers earned, on average, \$4,019 in 1955, as contrasted with \$12,480 for dentists, \$14,817 for self-employed physicians in general practice, and \$18,010 for self-employed specialists (NEA, 1959, p. 49). The NEA researchers also displayed graphically the demoralizing fact that other professionals and white-collar technical workers can double their initial salaries within about 10 years, whereas teachers can expect only modest increases over the same time period. Even as teachers' salaries improved during the 1950s and 1960s, and especially as they worsened in the 1970s, researchers continued to call attention to the abiding disparities (see Tables 8 and 9).

To supplement and compensate for limitations in the historical data generated by professional associations, we examined U.S. Census data for the nation, for four states, and for four cities within each of those states to reconstruct comparative earnings in a variety of occupations. We have used these data to compare earnings by gender and teaching assignment level.

Table 8

**AVERAGE STARTING SALARIES FOR TEACHERS AND EMPLOYEES IN PRIVATE INDUSTRY:
 MALES AND FEMALES, 1965-1966 TO 1971-1972**

Group	Average Starting Salary (unadjusted dollars)						
	1965-1966	1966-1967	1967-1968	1968-1969	1969-1970	1970-1971	1971-1972
Beginning teachers with bachelor's degree*	4,925	5,142	5,519	5,941	6,383	6,850	7,230
Men with bachelor's degree							
Engineering	7,584	8,112	8,772	9,312	9,960	10,476	10,620
Accounting	6,732	7,128	7,776	8,424	9,396	10,080	10,140
Sales/marketing	6,276	6,774	7,044	7,620	8,088	8,580	8,904
Business admin.	6,240	6,576	7,140	7,560	8,100	8,124	8,340
Liberal arts	6,216	6,432	6,780	7,368	7,980	8,184	8,280
Production mgmt.	6,816	7,176	7,584	7,980	8,736	9,048	9,312
Chemistry	7,032	7,500	8,064	8,520	9,276	9,708	9,912
Physics	7,164	7,740	8,448	8,916	9,348	10,080	10,224
Math/statistics	6,672	7,230	7,944	8,412	8,952	9,468	9,672
Economics/finance	6,600	6,732	7,416	7,800	8,304	8,880	9,216
Other fields	6,360	7,044	7,644	7,656	8,796	9,264	9,492
Total, all fields (weighted average)	6,792	7,248	7,836	8,391	8,985	9,361	9,484
Women with bachelor's degree							
Math/statistics	—	6,324	7,104	7,776	8,484	8,952	9,312
Economics/finance	—	6,000	6,636	6,984	7,224	8,400	8,400
General business	—	5,520	6,000	6,840	7,104	8,184	8,016
Chemistry	—	7,056	7,452	8,280	8,532	9,180	9,744
Accounting	—	6,768	6,984	7,716	8,304	8,952	9,516
Home economics	—	5,664	6,276	6,660	7,056	7,380	7,932
Engr./tech. research	—	7,260	8,208	8,904	9,672	10,128	10,608
Secretary	—	4,620	5,088	5,460	5,820	6,624	NA

SOURCES: NEA Research Division and Annual Reports of Frank S. Endicott, Director of Placement, Northwestern University; *NEA Research Bulletin*, No. 48, March 1970, pp. 6, 10; No. 49, October 1971, p. 75.

school systems with enrollments of 6,000 or more.

Table 9
MEAN STARTING SALARIES OF PUBLIC SCHOOL TEACHERS
AND WORKERS IN PRIVATE INDUSTRY:
1973-1974, 1980-1981, 1981-1982

Position/Field	Annual Salary (\$)			Percentage Change,	Percentage Change,
	1973-74	1980-81	1981-82	1981-82 over 1980-81	1981-82 over 1973-74
Teachers with bachelor's degrees	7,720	11,769	12,769	8.6	65.4
College graduates with bachelor's degrees					
Engineering	11,220	20,136	23,368	11.1	99.3
Accounting	10,632	15,720	16,980	8.0	59.7
Sales marketing	9,660	15,936	17,200	8.1	78.3
Business administration	8,796	14,100	16,200	14.9	94.2
Liberal arts	8,808	13,296	15,444	16.2	75.3
Chemistry	10,308	17,124	19,536	14.1	89.5
Math/statistics	10,020	17,604	18,600	5.7	85.6
Economics/finance	9,624	14,472	16,884	16.7	75.4
Computer science	NA	17,712	20,364	15.0	NA
Other fields	9,696	17,544	20,028	14.2	106.6

SOURCES: Selected data from NEA, *Prices, Budgets, Salaries, and Income*, Washington, D.C., 1983, p. 22; and Feistritzer, 1983, p. 73.

As demonstrated in Table 10 and Figs. 1 through 4, the median earnings from teaching relative to civilian jobs in general—and professional and comparable positions in particular—have been consistently differentiated by gender. Teaching has been more valuable to women than to men, when compared to other available occupations. Female teachers have customarily earned from 150 to 200 percent more than the female civilian labor force in general. Women who have taught school have earned between 100 and 130 percent of median salaries earned by all female professional workers. If the length of the working year were factored in, the relative advantages of teaching for women would appear even more attractive.

In sharp contrast, men who have taught school have earned only 70 to 90 percent of the median salaries earned by all male professional and related workers. Teaching salaries for men have failed to achieve

Table 10

**MEDIAN ANNUAL EARNINGS OF TEACHERS AS A PERCENTAGE OF
MEDIAN ANNUAL EARNINGS OF CIVILIAN EMPLOYEES AND
PROFESSIONAL AND KINDRED WORKERS: 1950-1980**

State	1950	1960	1970	1980
Secondary Male Teachers/Male Civilian Labor Force				
Alabama	158	138	112	111
California	127	127	131	129
Connecticut	134	123	114	104
Ohio	120	115	105	100
United States	130	126	118	112
Secondary Male Teachers/Male Professional and Kindred Workers				
Alabama	80	78	71	78
California	95	94	94	93
Connecticut	94	93	85	78
Ohio	89	87	83	81
United States	87	88	84	81
Elementary Female Teachers/Female Civilian Labor Force				
Alabama	198	220	177	169
California	171	185	178	157
Connecticut	173	182	162	153
Ohio	150	174	176	160
United States	152	179	176	158
Elementary Female Teachers/Female Professional and Kindred Workers				
Alabama	99	102	102	101
California	119	121	109	104
Connecticut	128	129	110	106
Ohio	109	114	110	105
United States	106	111	107	102

SOURCE: U.S. Census, 1950, 1960, 1970, 1980.

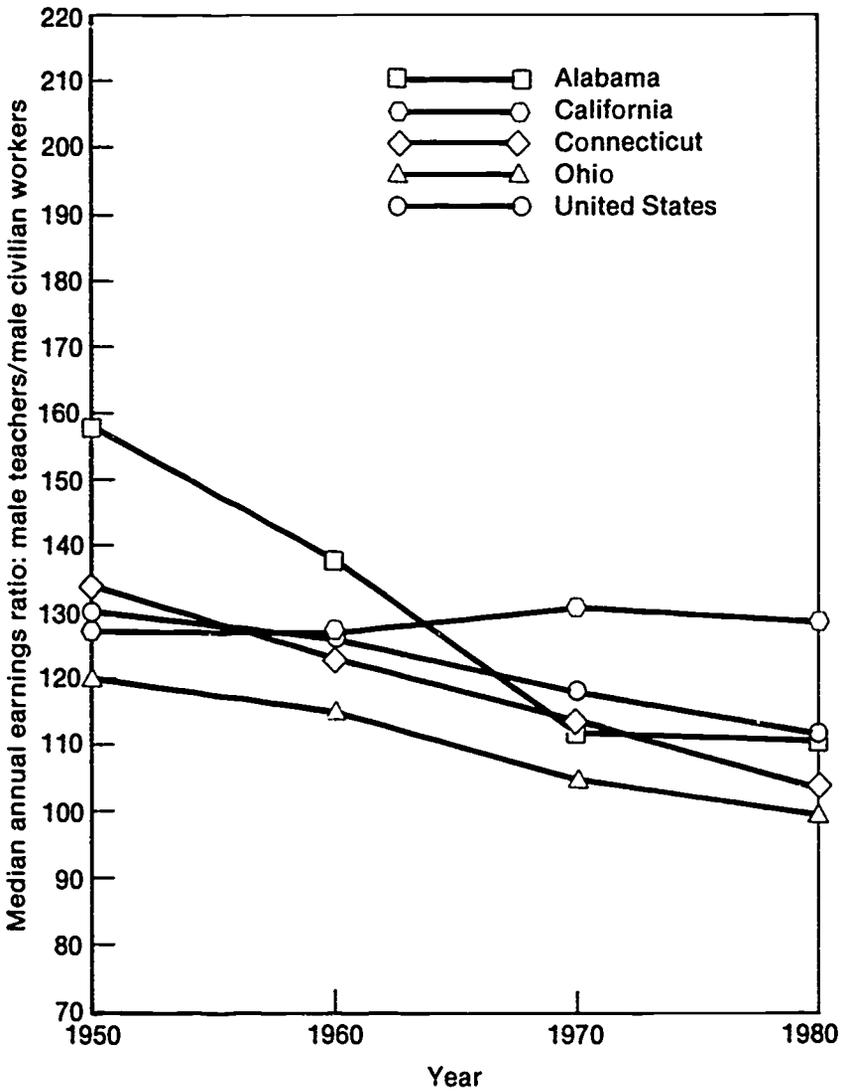


Fig. 1—Median annual earnings of male teachers as a percentage of median annual earnings of all male civilian workers (selected states and nationwide)

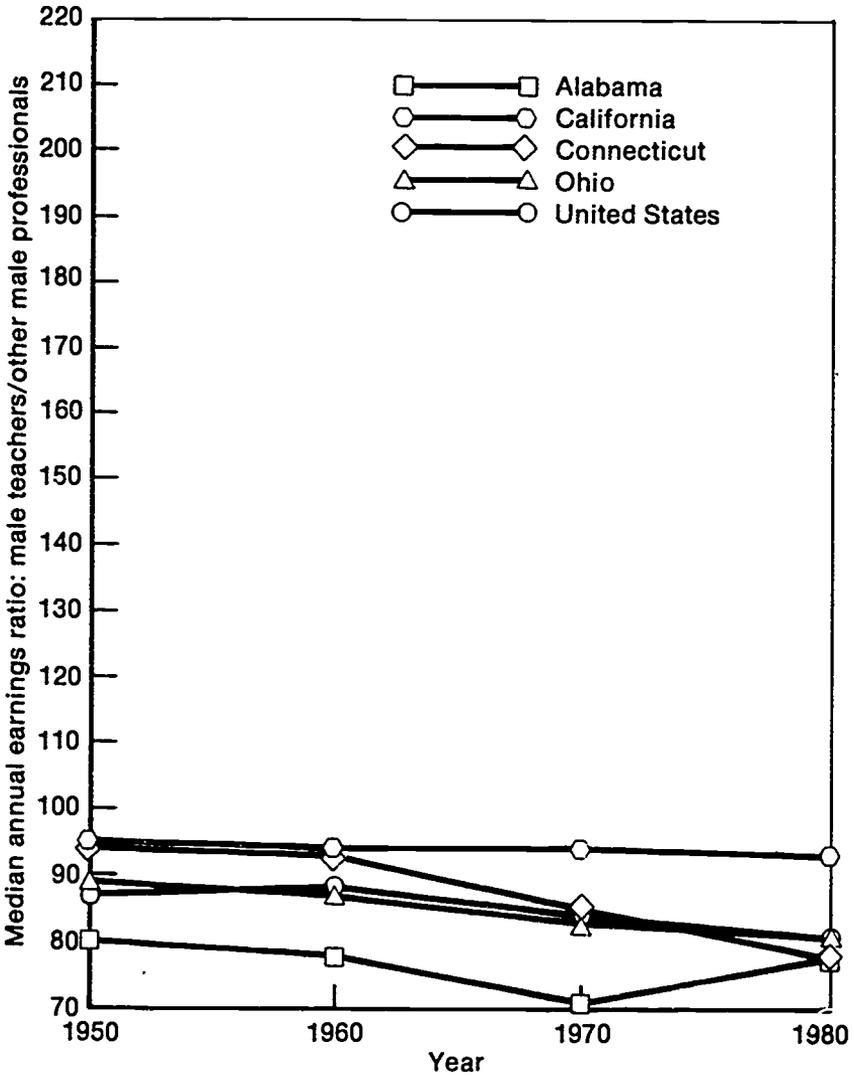


Fig. 2—Median annual earnings of male teachers as a percentage of median annual earnings of other male professionals (selected states and nationwide)

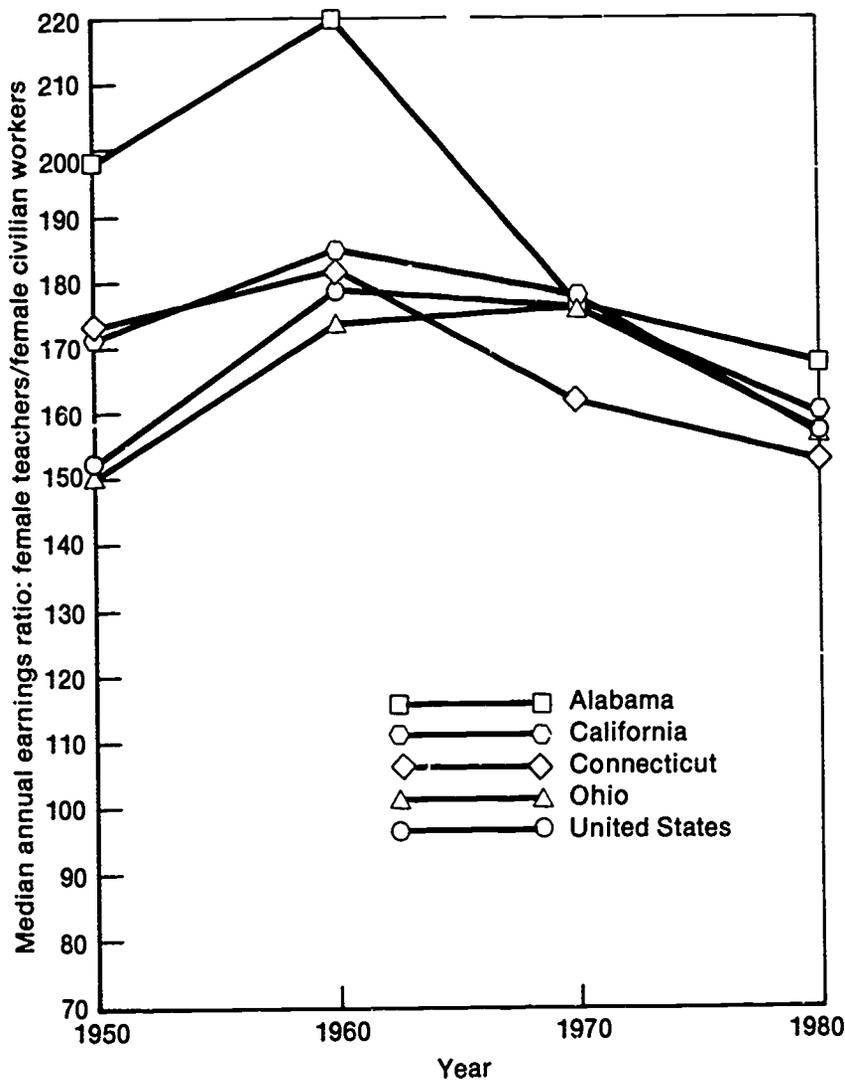


Fig. 3—Median annual earnings of female teachers as a percentage of median annual earnings of all female civilian workers (selected states and nationwide)

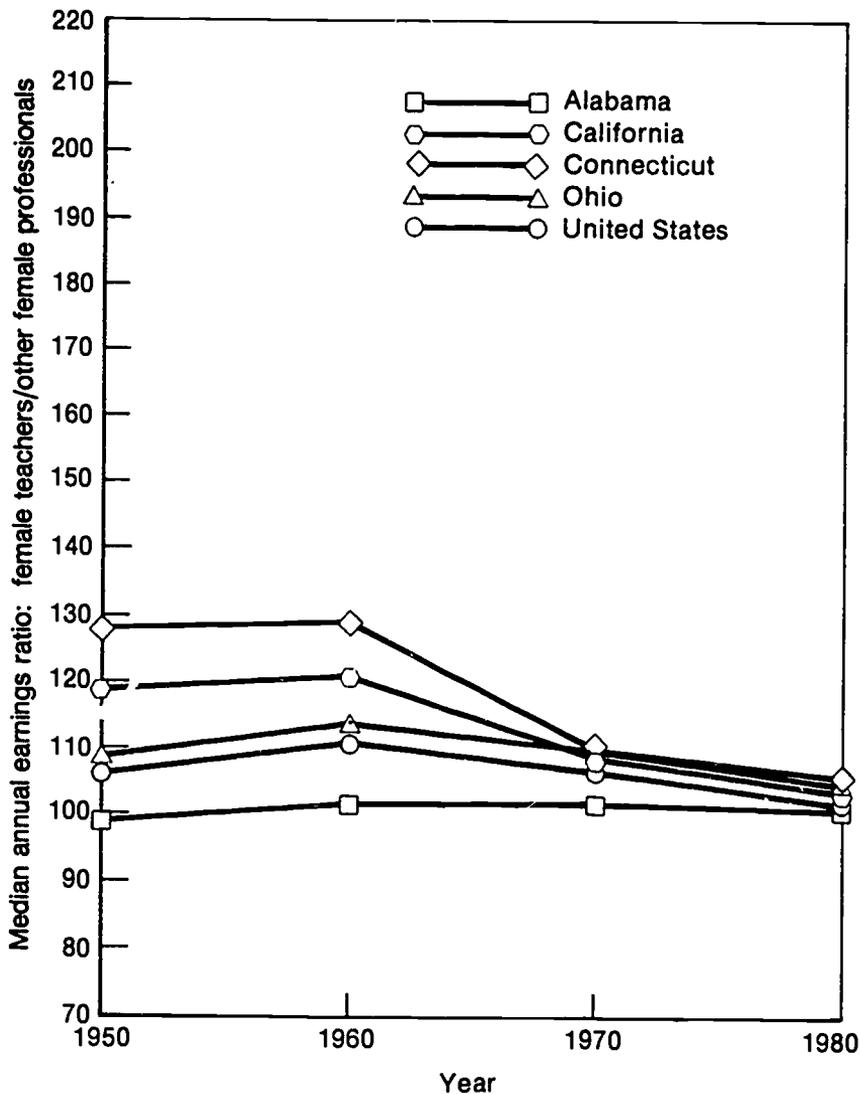


Fig. 4—Median annual earnings of female teachers as a percentage of median annual earnings of other female professionals (selected states and nationwide)

parity with those in the skilled trades and in other public sector service jobs.

When we compare specific jobs, the trends are the same. For example, since 1950, female elementary school teachers have consistently earned two-thirds to three-fourths as much as female physicians and lawyers. In contrast, male teachers have usually earned only from one-third to one-half as much as male physicians and lawyers.⁶ In short, the historical tradition of a less dramatic gender-based earnings differential in teaching has contributed to the attractiveness of teaching as a career for women.

SUMMARY

With two exceptions, teaching salaries have increased steadily in absolute terms since the early twentieth century. The declining return on teaching caused by high inflation during the 1970s was a sharp departure from the long-term pattern of increasing purchasing power. Despite continually rising salaries in education, however, employees in other occupations that require roughly comparable training and credentials have earned substantially more than teachers. The main exception occurred during the 1950s, when a severe teacher shortage significantly boosted teachers' salaries.

The long-term pattern, however, masks several important variations in the economic return on teaching. Male teachers have outearned their female colleagues in general, as well as within each level of teaching. Yet, given the limited employment choices traditionally open to women, teaching has been relatively more valuable to women than to men. Whites have earned more than blacks, particularly in the South but in the North and West as well. Teachers in larger cities and privileged suburbs have earned more than their counterparts in rural and smaller districts. However, earnings have been converging since World War II as uniform salary schedules have been widely adopted, as the professional credentials of elementary and secondary teachers have approached parity, and as states have made deliberate efforts to equalize salaries between urban and rural areas.

Although gross salary differentials have been largely eliminated, teachers with different origins and characteristics have different

⁶This differential can be explained largely by the gross disparity in median incomes between males and females in the nonteaching professions. Over the past three decades, for example, female attorneys have earned, on average, less than one-half as much as their male counterparts, and female physicians have earned less than one-third as much as their male counterparts.

reference groups and compare their earnings potential with different occupations. Teaching opportunities have been valued differently by men and women and by blacks and whites. Because of exclusion from other desirable professional and white collar employment, women and black teachers have earned high salaries relative to other workers of their sex or race. This differential return on investment in a teaching career has had an enormous impact on the social origins of those recruited into teaching and/or those willing to remain in the classroom. Men and women, blacks and whites, have responded to teaching opportunities differently and have found teaching more or less desirable relative to their occupational options. We now turn to the origins and composition of the pool of prospective and practicing teachers.

III. SOCIAL ORIGINS AND COMPOSITION OF THE TEACHING FORCE

Millions of young men and women have responded positively to the varied incentives—extrinsic, ancillary, and intrinsic—to become teachers. This section examines the types of people who have become teachers and how the composition of the teaching force has changed over time.¹ The focus is on teachers' gender, social origins, preparation, and academic ability.

GENDER

In the early 1800s, the vast majority of teachers in the United States were men. Since the mid-nineteenth century, however, the teaching force has been disproportionately composed of women (see Table 11). Ideology and economics combined to encourage local school authorities to employ young, single women as teachers. The personalities and dispositions of women were assumed to be particularly suited to performing education's nurturing functions. Female teachers could also be paid salaries much lower than those customarily offered men (roughly one-third to one-half). The financial subsidy provided by women seeking respectable work at a time when they had few alternatives to jobs in mills, farms, or as domestic servants helped sustain the expansion of schooling for the remainder of the nineteenth century.

The growing feminization of the teaching force was counterbalanced by a teacher shortage between 1905 and 1925. During these years, modest salary increases and improved working conditions made teaching more attractive to men, especially when potential earnings in teaching were compared to depressed salaries in other occupations. To staff classrooms filled by children of the "new immigrants" and to

¹This study does not systematically consider issues of race and ethnicity, not because we think them unimportant, but because, given the scope and duration of this project, relevant data proved to be inaccessible, too scattered, or insufficiently comparable to our primary databases. The fragmentary, usable data that we located did prove quite interesting, however, and suggest that the subject requires more detailed investigation. It would appear, for example, that relative to other work ordinarily available, a teaching career has been far more valuable economically to blacks than it has been to whites, even to white females. The relatively high incentives for blacks to enter and remain in teaching may enable districts to earn a high rate of return on a relatively small additional investment in teachers' salaries, despite the recent expansion of white-collar and professional opportunities for blacks.

Table 11
GENDER RATIOS AMONG U.S. TEACHERS: 1870 TO 1980

Year	1939 Survey ^a		1920-1980 ^b		Public Schools ^c	
	Total Teachers	% Male	Total Teachers	% Male	Total Teachers	% Male
1870	—	41.0	—	—	201,000	38.7
1880	286,593	42.8	—	—	287,000	42.8
1890	363,922	34.5	—	—	364,000	34.5
1900	423,062	29.9	—	—	423,000	29.9
1910	523,210	21.1	—	—	523,000	21.1
1920	679,533	14.4	761,766	16.1	657,000	14.1
1925	777,945	16.9	—	—	—	—
1930	854,263	16.5	1,062,615	19.0	843,000	16.6
1934	847,120	19.1	—	—	—	—
1940	—	—	1,030,001	24.6	875,000	22.2
1950	—	—	1,126,016	25.5	914,000	21.3
1960	—	—	1,779,755	27.4	1,387,000	29.0 ^d
1970	—	—	2,746,066	29.7	2,131,000	32.4 ^d
1980	—	—	3,658,074	29.3	2,300,000	34.0 ^d

^aElsbree, 1939, p. 554.

^bU.S. Census, 1920-1980.

^cNational Center for Educational Statistics.

^dEstimated.

facilitate rapid expansion of high schools, districts began to raise salaries and take other steps to improve working conditions, introducing tenure and various benefit programs. Following these improvements, the percentage of male teachers increased quickly, climbing to 25 percent by 1940, leveling off through the 1960s, and reaching nearly 30 percent in 1970, a percentage higher than at any time since 1900.²

Gender differences in the teaching profession have varied considerably by organizational level. In elementary schools, women have generally remained dominant since the mid-nineteenth century, occupying at least 80 percent of the elementary teaching positions. Men have been more attracted to secondary schools, where salaries have been higher, and opportunities for promotion and earning additional income through coaching have been greater. Men have commonly held between 40 and 60 percent of high school teaching positions.

²Again, it is impossible to determine from our research whether the appearance of male teachers drove salaries upward or the increase in salaries attracted males to teaching.

From the 1850s to the 1920s, most U.S. communities hired only single females and usually forced them to quit teaching once they married. This pattern was rooted in colonial-era social policy, which made every effort to distribute scarce public resources—including jobs as teachers, bell ringers, and the like—among potential social dependents. Authorities were reluctant to provide publicly financed opportunities to individuals who were otherwise economically independent, and married women presumably had husbands to support them. In order to teach, women either remained single (postponing or forgoing marriage altogether) or hid their marriages as best they could. Some of the earliest historical evidence available regarding teacher “resistance” to managerial authority involved collusion by women teachers to keep marriages by colleagues secret in order to protect their careers.

These constraints on women teachers' personal lives began to break down after World War I. In 1923, 75 percent of urban school districts refused to appoint married women; rural districts were even more conservative. This figure dropped to 58 percent of urban districts in 1941, and to only 8 percent in 1951 (NEA 1952, pp. 12–13; Morris, 1957, p. 254). The widespread adoption of tenure policies after 1925 also contributed to a sharp decline between 1940 and 1950 in the proportion of female teachers who had never been married (Morris, 1957, p. 254).

The dominance of women in teaching, despite the large minority of males, has affected the occupation's image, status, and desirability in a number of ways. Several scholars have suggested that the prevalence of women in teaching has contributed to pressure to strengthen bureaucratic controls over teacher behavior and to “deskill” the profession (Apple, 1985; Strober and Tyack, 1980). Male administrators, according to this interpretation, have tried to exploit their prerogatives over an accommodating, deferential, and pliable female teaching force accustomed to relative subservience. From this perspective, the diffusion of Individually Guided Education (IGE) programs and various forms of “teacherproof” curricula have been part of the “deskilling” process (Gitlin, 1983; Bullough, Gitlin, and Goldstein, 1984). Feminization—according to the “deskilling” hypothesis—appears to have degraded the attractiveness of teaching to those who wish to exercise greater independence and professional discretion in their careers.

In addition, several currently prominent features of teaching that many find objectionable can reasonably be interpreted as legacies of feminization, e.g., the unstaged career structure that served the interests of women hoping to integrate work, household, and childrearing responsibilities through intermittent employment, or through employment that did not require traditional forms of professional commitment. Women have historically been willing to make tradeoffs

within the reward and working-conditions matrix to make the best lives they could for themselves as women, wives, and mothers. Potential recruits to teaching with different perspectives on the incentives structure—women as well as men—understandably feel constrained by the preferences of their female predecessors³

SOCIAL ORIGINS

The social origins of prospective and practicing teachers have intrigued scholars for nearly a century. Coffman's early study (1911) established a view of the social background of teachers that persisted well into the mid-twentieth century. Like virtually all commentators who followed, Coffman associated the concept of talented teachers with urbane and affluent social origins, an elitist assumption unsupported by evidence. Coffman maintained that one-half of all teachers were raised in rural farm families, and that only one-fourth came from professional and independent or proprietary business backgrounds. Later studies confirmed that the majority of teachers came from "provincial" backgrounds. For example, one of the largest surveys of prospective teachers contrasted students in "liberal arts colleges" with students in "teachers' colleges" in Pennsylvania (Learned and Wood, 1938). While teachers' college students tended to come from farms, ranches, and "villages," liberal arts students came from "urban communities" (Learned and Wood, 1938, p. 129). One-third of the fathers of teachers' college students were farmers, and one-fourth held professional or proprietary jobs. In contrast, the liberal arts students came largely from professional, managerial, and proprietary households; relatively few came from farms. Fewer than 3 percent of either kind of student came from laborers' families, although around 20 percent of the prospective teachers' fathers worked in the skilled trades (Learned and Wood, 1938, pp. 134-138; corroborated in Greenhoe, 1941).

This profile began to change somewhat after World War II. Best (1948) reported that 25 percent of the fathers of seniors majoring in education at the University of Michigan owned businesses; another 17 percent were professionals, and a like percentage were farmers. Twenty percent of the males and 10 percent of the females had fathers who were skilled laborers. Several additional studies at other universi-

³These preferences were, of course, supported and expanded by the male-dominated administrator cadre for their own organizational reasons.

ties revealed similar patterns (Richey and Fox, 1948; Wattenberg and Havighurst, 1957; Blum, 1947; Seagoe, 1942).⁴

The expansion of enrollment occasioned by increased attendance rates (especially among minorities) and the arrival of the "baby-boom" children in the early 1950s strained the tradition of recruiting teachers primarily from the independent farming, proprietary, and professional classes. An increasing share of the nation's teachers began to come from working-class families (Armstrong, 1957, p. 277). Rising real wages for laborers and unprecedented opportunities for advanced training provided by the G.I. Bill made it possible for the children (particularly the sons) of relatively poor families to secure teaching positions. Salaries also rose during the teacher shortage after 1945. These new incentives altered the composition and social origins of all teachers, but especially of males.

Occupational expansion in teaching in the 1950s, consequently, resulted primarily from more male working-class students using their (or their parents') increased access to discretionary income and opportunity to improve their social position. They took advantage of opportunities to earn disciplinary-based credentials necessary to teach at the higher-status high school level. In addition to paying slightly more than elementary school teaching, high school teaching opened up access to more prestigious careers in administration.

Carlson's (1961) careful analysis of the social origins and mobility patterns of teachers in the San Francisco Bay area in the 1950s clarified the interplay of gender, class, and social mobility in teaching. His study was unique in that he examined the subject from the perspective of practicing (rather than exclusively prospective) teachers. This is important and suggests the need for caution in using studies that deal only with students in teacher-training institutions.

Carlson found that a "narrowing" process occurred as students moved from the teachers' colleges into the classroom: The group became more homogeneous in their social origins. Carlson's data do not address why this occurred; it may be that students from affluent backgrounds trained as teachers simply had more options than did students from the middle class (and therefore ultimately chose not to teach), and that students from poorer backgrounds lacked the cultural capital necessary to win an appointment during the recruiting, interviewing, and hiring stages.

⁴Because most studies focused on larger institutions, they slightly understated the proportion of teachers drawn from rural communities; students with agricultural backgrounds were more likely to attend local or regional teachers' colleges than research-oriented universities.

Regardless of the reasons, women teachers have come from backgrounds of significantly higher status than those of men teachers (Carlson, 1961, p. 110). Differences also existed by organizational level. Elementary school teachers were generally from higher social backgrounds than secondary school teachers (either male or female). In Carlson's sample, male secondary teachers were from distinctly lower backgrounds than were female elementary teachers. Teaching attracted proportionately four times as many affluent females as males, and approximately two-and-one-half times as many lower-class males as females (Carlson, 1961, p. 113).

Carlson's research also indicated "a general upward social mobility" among teachers. When class of origin was contrasted with class of attainment, it was clear that males who taught at either level, as well as female secondary school teachers, gained in social status. Male high school teachers made the greatest social class gain, significantly improving their adult position over their class of origin. In contrast, female elementary school teachers actually lost social status, although that loss was slight (Carlson, 1961, p. 117; Lanier's 1986 review of the literature confirms this argument).

Pavalko's (1970) analysis of young female teachers in Wisconsin further clarified how class and gender shaped the composition of the teaching force in the 1950s and early 1960s. "*Socioeconomic background* clearly operates as a selective factor in the recruitment of teachers," he argued. Women of low socioeconomic background were underrepresented, just as women of high socioeconomic background were overrepresented. Pavalko's study illuminated another important facet of the recruitment process: He gathered data both on female high school seniors who planned to enter a teacher-training program and eventually teach and on female high school seniors who did not intend to teach but who, five years later, actually held teaching positions. Over one-half of those who had intended to teach abandoned those aspirations. Of this group, nearly 50 percent were working in clerical and sales positions; another 36 percent had not worked outside the home at all; and about 12 percent had entered a "professional" occupation roughly comparable to teaching in status, e.g., nursing, librarianship, dental and medical technology (Pavalko, 1970, p. 349). The decision of these young women was related slightly to social origins: Those who had intended to teach but never taught were disproportionately from the lower and lower-middle class.

In contrast, the young women who had not intended to teach but who were actually doing so (the "late recruits") were drawn disproportionately from the most affluent families. Two-thirds came from the highest socioeconomic classes (Pavalko, 1970, p. 345). These young

women appear to have abandoned other possible careers, perhaps in the face of discouragement or discrimination or other obstacles. While in college, they probably earned teaching credentials or perhaps earned degrees in other fields, but were allowed, under the emergency certificate policies common during the teacher shortage of the 1950s, to secure employment. They appear to have been the sort of talented (i.e., high-I.Q.), affluent young women drawn to teaching who in recent years have increasingly been lost to other professional careers.

To this point, we have focused on the social backgrounds of those who intended to teach and those who did so. We now shift perspective somewhat and consider the matter of turnover: Who abandoned teaching as a career?

No satisfactory studies of teacher longevity were conducted before World War II. The NEA and other professional organizations complained about disastrous turnover rates caused by low salaries and insecure appointments, but not until the late 1940s was the sort of analysis conducted that would shed light on how teachers' social origins and ability levels were related to the decision to leave the profession.

Wolfe (1954) and Morris (1957) surveyed the occupational distribution of "living college graduates" in education and other fields in 1953 and found that only 36 percent of the education graduates (men and women) remained employed in education. Nearly one-half of the women were not in the civilian labor force at all; they either worked at home or had retired. Nine out of ten males, however, were employed. One-and-one-half times as many graduates in education were working outside as inside the field. Education retained more women than did other fields, but lost more men. Home economics retained only 16 percent, social work 24 percent, and nursing 40 percent of the female graduates in those fields. Of the males, 64 percent remained in engineering, 96 percent in medicine and dentistry, 74 percent in law, 51 percent in business, and 48 percent in agriculture—all substantially larger proportions than in education.⁵

Pavalko's previously mentioned study also examined the social backgrounds of those who left teaching. He found that within two years of graduation, 40 percent of the young Wisconsin women who became teachers between 1959 and 1962 were not employed as teachers (Pavalko, 1970, p. 349). There was a "slight tendency" for females

⁵Teaching might have done better if the analysis had not been restricted exclusively to college graduates, since teachers who were trained in normal schools probably remained in teaching more routinely. Other scholars reported annual turnover rates in teaching of between 20 and 30 percent during this same period (Morris, 1957, pp. 250-251).

from higher-status backgrounds to leave teaching, but other factors were generally more influential than social origins. Level of education was important: Those who had either begun or completed graduate school (master's level)—symbolic of strong commitment—defected from classroom teaching at less than half the rate of those who had earned only a four-year bachelor's degree or a two-year county normal school diploma (17 percent and 43 percent, respectively). Marital status, however, was related "more strongly to attrition from teaching" than any other variable. Ninety percent of the single women were still teaching, as contrasted to 46 percent of those who had married. Finally, levels of measured intelligence were clearly associated with defection from teaching (a point examined below). In brief, Pavalko found that those who defected were mainly wealthier, smarter, and more often married than those who continued to teach.

A study by Gottlieb (1964) was particularly valuable and unique in clarifying the racial dimension of occupational "desirability" in teaching in the 1950s. Black teachers' fathers were more often concentrated in manual occupations than white teachers' fathers, who had usually worked in professional or managerial fields. Gottlieb demonstrated that blacks were more satisfied with teaching as a career than whites, and that job satisfaction correlated positively with both race and years of experience.

The correlation between satisfaction and race, however, requires some examination. The sampled teachers tended to work in urban classrooms with high percentages of black students. If we acknowledge, first, that white teachers would be more likely to be uncomfortable with black children than black teachers, and second, that a higher proportion of the black teachers originated in urban areas (two-thirds of blacks vs. one-fourth of whites), these two factors probably explain much of the difference in job satisfaction. White teachers who taught in black classrooms in 1960 appear to have experienced a form of "culture shock" and to have expressed it in lower measures of job satisfaction. Black teachers apparently had fewer adjustment problems. Gottlieb noted, for example, that the reasons for job dissatisfaction differed sharply by race. White teachers cited behavioral/discipline problems (46 percent) and lack of parental interest (25 percent) as their most common grievances, whereas black teachers complained mainly about crowded classrooms (38 percent) and inadequate materials and poor facilities (33 percent). Black teachers cited behavior problems only 19 percent of the time, and lack of parental interest only 6 percent (Gottlieb, 1964, p. 351). Whites, Gottlieb concluded, blamed the "clientele," whereas blacks blamed the "institutions."

Blacks were more likely to remain committed to teaching than whites, for other obvious reasons. Black teachers generally came from lower-income homes than whites. They would have had a harder time finding resources to earn a college degree or secure a teaching certificate, hence their investment in job training was higher. Blacks also had fewer occupational alternatives, particularly alternatives that promised relatively high social status. Thus black (as well as white) teachers from humble origins acquired status through teaching, and more consistently achieved a degree of intergenerational mobility than did more affluent whites, who commonly faced horizontal or even slightly downward mobility if they became teachers (Dworkin, 1980, p. 69).

What generalizations are possible about teachers' social origins during the twentieth century? To some degree, the distribution of teachers by social class and status has paralleled the nation as a whole. The proportion of teachers raised on farms or in rural communities has fallen sharply. Rural teachers have been replaced primarily by teachers from blue-collar/working-class families. This change largely accounts for the expanding proportion of teachers born and raised in sizable urban communities.

In several important ways, the backgrounds of teachers have deviated from those of the nation as a whole. Teachers from farms and rural communities have traditionally been highly overrepresented in the profession and remained so until fairly recently. Teaching has also attracted a disproportionate share of high-status females. Because they have lacked a wide range of suitable alternatives and/or were committed to teaching as a missionary venture, these young women have provided a substantial hidden subsidy to education for the past century. Over the past generation, as new career opportunities have opened up, many high-status women have abandoned teaching for more money, more prestige, or more visibility, discretion, and/or autonomy. This trend is too recent to assess its full impact, but it appears that the hidden subsidy that high-status women have long provided teaching is gradually being withdrawn (Darling-Hammond, 1984).

Correspondingly, males from working-class backgrounds began to enter teaching after 1920. The enrollment expansion that occurred after World War I could not be accommodated by the limited number of middle- and upper-middle-class women available and willing to teach. Attracting males (and some females) from more humble circumstances was essential to expand the teaching force rapidly.

Higher salaries and improved working conditions in the 1920s helped attract men from blue-collar families to teaching, especially after teaching salaries were increased to equal those in industry, and

tenure and other benefits were introduced to provide job security. Although teachers initially were hurt by the Depression economy of the 1930s, most school systems recovered by mid-decade. At a time when many private-sector, "fee for service" professions were starving for clients, a publicly supported teaching position had many attractions. Public-sector employees in general did reasonably well during the Depression; most were able to retain their jobs and count on regular paychecks. Working-class youths with access to inexpensive professional schools took advantage of the relatively short-term training requirements of teaching to improve their social status and to secure their economic positions. This trend, which continued into the 1960s, dramatically transformed the gender and social composition of the teaching force, particularly at the secondary level, which offered potential access to prestigious, high-paying administrative careers.

PREPARATION AND ACADEMIC ABILITY

The professional preparation and academic ability of prospective and practicing teachers have also shaped the public's perception of, and respect for, teaching. Teachers have been burdened for centuries with a schizophrenic image of their talent and qualifications. Two competing stereotypes emerged, each grounded in traditions of recruitment. One portrayed teachers as unqualified, ill-suited ne'er-do-wells; the other, as members of a learned intelligentsia.

The colonial custom of placing social dependents in charge of classrooms left teaching with a difficult legacy. Historian Richard Hofstadter (1962) has provided a compelling analysis of the tradition of intellectual incompetence, arguing that "popular attitudes did not call for the development of" a strong, intellectually respected teaching profession, "but even if they had, the conditions of American life made it difficult to recruit and train a first-rate professional corps" (Hofstadter, 1962, p. 309). Communities preferred to employ transient schoolteachers or to combine teaching with other "public" responsibilities, like bell ringing and grave digging, or to hire a minister willing to keep school on the side. This pattern did not appeal to talented individuals, who may have taught school briefly but only as a stepping stone to more prestigious careers. Those who chose teaching as a more-or-less permanent career were of "indifferent quality and extraordinarily ill-suited for the job," Hofstadter concluded (p. 313).

The mid-nineteenth century arrival of large numbers of women from middle-class backgrounds, some with high school diplomas or degrees from fledgling normal schools, was widely viewed as having raised both

the academic quality and the moral character of the teaching force. Undoubtedly the caliber of teachers improved, but the vast majority still possessed meager formal preparation. Only after World War I was there notable improvement. Still, by 1935, only 10 percent of the elementary teachers, 56 percent of the junior high school teachers, and 85 percent of the senior high school teachers possessed bachelor's degrees. When contrasted with the total U.S. adult population, which had completed an average of only 8.6 years of school in 1940, however, teachers were relatively well educated.

Over the ensuing decades, the level of training received by teachers improved steadily, a change reflected in rising state certification requirements. In 1946, for example, only 15 states required four or more years of college in order to teach. A decade later, the number of states was 31, with three more about to implement this certification requirement (Armstrong, 1957, p. 281). Intriguingly, certification standards were raised during a period of teacher shortage and appear to have had an immediate impact. By 1955, approximately 70 percent of the elementary school teachers had earned bachelor's degrees, and 97 percent of the high school teachers had graduated from college (Armstrong, 1957, p. 280; Maul, 1956).

In addition, the locus of teacher training was beginning to shift. The proportion of elementary teachers trained in regular colleges and universities increased from roughly 29 to 77 percent between 1931 and 1955; among secondary teachers, the comparable proportion rose only slightly, from 70 to 81 percent, since few high school teachers had formerly been trained in normal schools and teachers' colleges (Armstrong, 1957, p. 281; Maul, 1956). These shifting patterns indicate that the highly differentiated formal training expected of teachers at different organizational levels had almost disappeared by the 1950s. The vast majority of states required teachers at both the elementary and secondary levels to possess college degrees.

In addition, this shift indicates that it *was* possible to raise preparation standards during a period of teacher shortage, although it is important to recognize also that salaries and working conditions were improving steadily. School authorities found out that "raising requirements does not necessarily create scarcity." In fact, according to one observer, demanding higher preparation standards may actually have made teaching appear more exclusive and may have made "the profession more attractive to many" (Armstrong, 1957, p. 280).⁶

⁶It should also be recognized that national standards can rise while local standards fall. Because shortages of qualified teachers occur at different paces in different regions or districts or fields, for example, it has been possible for nationwide standards to improve at the same time that emergency certificates and other efforts to compensate for

During the 1960s and 1970s, the trend of enforcing higher certification standards,⁷ combined with salary schedules that rewarded advanced educational attainment, continued to improve the professional qualifications of the teaching force. In 1961, about 85 percent of all teachers had bachelor's degrees; by 1971, more than 96 percent did (99 percent in 1976). By 1981, roughly half of all teachers held master's degrees (Grant and Snyder, 1984, p. 51).⁸

In contrast with the historical stereotype of inept, inadequately trained teachers stands the image of teachers as symbols of culture and learning. Regardless of criticisms levied against their preparation or ability, teachers have customarily possessed superior educational credentials and higher measured intelligence than the national average. Even the young women who entered the classrooms in the nineteenth century had educational attainments far higher than those of the adult population in general. Ordinarily, teachers could read and write fluently and were expected to pass examinations on basic knowledge in most content areas. In most communities, teachers with high school diplomas or a year or two of normal school were respected as representatives of an intellectual elite.

As the national average level of educational attainment increased, so did the level of teachers' professional preparation. The relative gap between the average attainment of adults and that of the teaching force has remained fairly constant during the twentieth century. A

insufficient supply have temporarily reduced the average credentials of the teaching force in a number of communities.

⁷Of course, raising statistical standards is not the same as actually improving the effectiveness of the teaching force. Although everyone hopes that improving the teaching force's educational qualifications will have a positive impact on instruction and learning, there is reason for skepticism. Recent reports by the Holmes Group (1986) and the Carnegie Forum on Education and the Economy (1986), for example, raise questions about the impact of earlier standards-raising efforts on the quality of teaching. The Holmes Group, in particular, warns against the temptation, common among occupations engaged in the process of professionalization, to raise credential standards independently of improving practice. From our research—and the problem has persisted since the work of Evenden, Gamble, and Blue (1935)—it is impossible to determine the actual impact on student learning of increasing the percentage of certified teachers or of employing a higher percentage of teachers who have bachelor's degrees or advanced graduate credentials.

⁸Although the teaching profession congratulated itself for self-improvement, some critics raised serious doubts by unfavorably contrasting the measured intelligence of prospective teachers with that of students aspiring to the established professions and the burgeoning technical fields. Especially notable was a book completed for the Carnegie Foundation for the Advancement of Teaching by William Learned and Ben Wood, which surveyed students in institutions of higher education in Pennsylvania and concluded that teachers "have inferior mind:" (Learned and Wood, 1938, p. 351). Local studies of academic talent corroborated these national surveys, at least through the 1950s (Koerner, 1963; Handlin, 1957).

it became customary for adults to graduate from high school, it became customary for teachers to earn college degrees. As youth in general began to attend institutions of higher education, teachers increasingly earned graduate degrees. The tradition of secondary school teachers earning master's degrees in their subject specialties broadened to include an increasing percentage of elementary school teachers earning advanced degrees in education. The appearance of Master of Arts in Teaching programs during the 1960s, designed to relieve the teacher shortage by easing the entry of liberal arts graduates into the profession, also helped to elevate the educational credentials of the entire teaching force.

Since World War II, however, a new trend has partially eroded the basis for the traditional image of teachers as members of a local intelligentsia. Homogeneous suburban communities began to develop in the 1940s and early 1950s that were populated almost entirely by adults holding graduate and professional degrees. Many of these new suburbanites felt that their degrees were in disciplines or programs far more demanding and rigorous than education. Adults in such communities generally viewed teachers as intellectual equals or even inferiors. Much of the harsh criticism of teacher quality after World War II originated in these communities (Church and Sedlak, 1976; Lynd, 1953).

IV. CONCLUSION

This report has attempted to sketch the basic historical contours of the teaching force in twentieth-century America. Focusing particularly on the profession's economic reward structure and social composition, our main goal has been to provide a chronological, conceptual, and empirical framework to guide future case-study research. Only with such research will it be possible to analyze the causes and processes of change at different time periods and in different types of communities.

Despite the limited aims of our study, several findings bear emphasis and brief elaboration for the light they may shed on the current reform movement in public education:

1. *Reform movements in education (and other fields, as well) are notorious for their tendencies toward presentism—for painting the past in the darkest possible light in order to stress the urgent need for rapid and major transformation of the status quo.* Lawrence Cremin has incisively described the process with regard to the early twentieth-century Progressives (in *The Wonderful World of Ellwood Patterson Cubberley*), but the point applies equally to most other groups of reformers, from Horace Mann to Jonathan Kozol to William Honig. Given this tendency, it is well to repeat a point that may appear counterintuitive to those afflicted with presentism: Teaching has become an indisputably more desirable occupation during the twentieth century. To grant this, of course, is not to rationalize the status quo, but simply to acknowledge that teaching is far more of a profession today than it was several decades ago. Indeed, history provides much reason for optimism that substantial improvements in the status of teaching as a profession are possible, although they may not necessarily occur as rapidly or be as closely modeled on other professions as many reformers might like.

2. *Contrary to what many modern-day educators tend to assume, teacher shortages have been commonplace throughout the twentieth century.* Nonetheless, it has proved possible, time and again, to raise certification standards during periods of protracted shortage. Not only has the raising of standards not exacerbated teacher shortages, it may even—at least where accompanied by significant increases in teachers' salaries—have helped to alleviate them (and, at the same time, enhanced popular respect for teaching as a profession). This recurring pattern suggests that there is little historical reason to believe that such recently proposed innovations as teacher-testing and shifting the

professional education of teachers entirely to the graduate level are, by themselves, likely to significantly diminish the attractions of the profession to potentially desirable recruits.

3. *No single subject is more central to the history of the teaching profession than the changing role of women in American society.* How the contemporary women's movement has already shaped, is presently shaping, and will continue to shape the image and practice of teaching merits far more systematic analysis than we have attempted, but a few observations seem appropriate.

First, the full effects of the women's movement on the attractiveness of teaching have yet to be felt, because school systems have not done much hiring since the early 1970s, when the movement first began to penetrate all segments of American society.

Second, one key reason that teaching has historically been more valuable to women than to men is the tradition of wage discrimination by gender. Recent evidence suggests that wage discrimination throughout the work force has declined significantly and is likely to continue to decline in the future. The end of wage discrimination *could* shape how potential recruits view teaching compared to other occupations more fundamentally than anything that reformers are likely to achieve in enhancing the status of teaching as a profession.

Third, and finally, while the changing role of women may have created difficulties by drawing talented women away from teaching, it may also have created opportunities to make teaching more like other professions. The work schedule of the modern teacher/mother is not nearly as constrained by social pressures as that of her predecessors: She is less compelled to rush home by 3:00 p.m. because few other mothers are likely to be at home to scorn her if she is not. Moreover, child care options (though still limited in many communities) are far more plentiful today than they used to be. Of course, making teaching more like other professions—including expanding the workday to 8 hours and the work year to 12 months—may decrease its attractiveness to some women. But in unsettling the traditional assumptions linking women to teaching, the women's movement appears to have opened up new prospects for the professionalization of teaching that might never otherwise have developed.¹

¹Whether it will be possible to capitalize on these prospects without more fundamental change in bureaucratic controls over teacher behavior (as suggested by the "deskilling" hypothesis) remains to be seen.

REFERENCES

- American Federation of Teachers, *Survey of Teachers' Salaries, 1966-1974*, Washington, D.C.: American Federation of Teachers, 1974.
- Anderson, W. F., "Attitudes of Parents of Differing Socioeconomic Status Toward the Teaching Profession," *Journal of Educational Psychology*, Vol. 45, 1954.
- Anyon, Jean, "Social Class and School Knowledge," *Curriculum Inquiry*, Vol. 11, Spring 1981.
- Apple, Michael W., "Teaching and 'Women's Work': A Comparative Historical and Ideological Analysis," *Teachers College Record*, Vol. 86, Spring 1985.
- Armstrong, W. Earl, "The Teaching Profession: Retrospect and Prospect," in Lindley J. Styles (ed.), *The Teacher's Role in American Society*, New York: Harper and Brothers, 1957.
- Becker, Howard S., "The Career of the Chicago School Teacher," *American Journal of Sociology*, Vol. 57, March 1952.
- Best, John Wesley, "A Study of Certain Selected Factors Underlying the Choice of Teaching as a Profession," *Journal of Experimental Education*, Vol. 17, 1948.
- Betz, Michael, and James Garland, "Intergenerational Mobility Rates of Urban School Teachers," *Sociology of Education*, Vol. 47, Fall 1974.
- Bicknell, John E., *The Prediction of Effectiveness in Secondary School Teaching: A Summary Report*, Albany, N.Y.: New York State Education Department, June 1959.
- Blum, Lawrence F., "A Comparative Study of Students Preparing for Five Selected Professions Including Teaching," *Journal of Experimental Education*, Vol. 16, 1947.
- Bullough, Robert V., Jr., Andrew D. Gitlin, and Stanley L. Goldstein, "Ideology, Teacher Role, and Resistance," *Teachers College Record*, Vol. 86, Winter 1984.
- Carlson, Richard O., "Variation and Myth in the Social Status of Teachers," *Journal of Educational Sociology*, Vol. 35, November 1961.
- Carnegie Forum on Education and the Economy, Task Force on Teaching as a Profession, *A Nation Prepared: Teachers for the 21st Century*, New York: Carnegie Forum on Education and the Economy, 1986.

- Charters, W. W., Jr., "The Social Background of Teaching," in N. L. Gage (ed.), *Handbook of Research on Teaching*, Chicago: Rand McNally & Co., 1963.
- Church, Robert L., and Michael W. Sedlak, *Education in the United States: An Interpretive History*, New York: The Free Press, 1976.
- Coffman, Lotus D., *The Social Composition of the Teaching Population*, Contributions to Education, No. 41, New York: Teachers College, Columbia University, 1911.
- Cohen, David K., and Barbara Neufeld, "The Failure of High School and the Progress of Education," *Daedalus*, No. 110, Summer 1981.
- Cusick, Philip A., *The Egalitarian Ideal and the American High School*, New York: Longman, 1983.
- Darling-Hammond, Linda, *Beyond the Commission Reports: The Coming Crisis in Teaching*, The RAND Corporation, R-3177-RC, July 1984.
- Donovan, Frances R., *The Schoolma'am*, New York: Frederick A. Stokes Co., 1938.
- Doyle, Denis P., "Window of Opportunity," *The Wilson Quarterly*, Vol. 8, New Year's 1984.
- Doyle, Walter, "Are Students Behaving Worse than They Used to Behave?" *Journal of Research and Development in Education*, Vol. II, Summer 1978.
- Duke, Daniel L., *Teaching: The Imperiled Profession*, Albany, N.Y.: State University of New York Press, 1984.
- Dworkin, Anthony Gary, "The Changing Demography of Public School Teachers: Some Implications for Faculty Turnover in Urban Areas," *Sociology of Education*, Vol. 53, April 1980.
- Elsbree, Willard S., *The American Teacher: Evolution of a Profession in a Democracy*, New York: American Book Company, 1939.
- Evenden, Edward S., Guy C. Gamble, and Harold G. Blue, *Teacher Personnel in the United States*, Vol. II of *National Survey of the Education of Teachers*, U.S. Department of the Interior, Bulletin 1933, No. 10, Washington, D.C.: Government Printing Office, 1935.
- Farber, Barry A., "Stress and Burnout in Suburban Teachers," *Journal of Educational Research*, Vol. 77, July/August 1984a.
- , "Teacher Burnout: Assumptions, Myths, and Issues," *Teachers College Record*, Vol. 86, Winter 1984b.
- Feistritzer, C. Emily, *The Condition of Teaching: A State by State Analysis*, Princeton, N.J.: The Carnegie Foundation for the Advancement of Teaching, 1983.
- Foster, Richard A., *The School in American Literature*, Baltimore: Warwick and York, 1930.

- Gallup, Alec, "The Gallup Poll of Teachers' Attitudes Toward the Public Schools," *Phi Delta Kappan*, Vol. 66, October 1984.
- , "The Gallup Poll of Teachers' Attitudes Toward the Public Schools: Part 2," *Phi Delta Kappan*, Vol. 66, January 1985.
- Gallup, George H., "The 14th Annual Gallup Poll of the Public's Attitudes Toward the Public Schools," *Phi Delta Kappan*, Vol. 64, September 1982.
- Gitlin, Andrew, "School Structure and Teachers' Work," in Michael Apple and Lois Weis (eds.), *Ideology and Practice in Schooling*, Philadelphia: Temple University Press, 1983.
- Gottlieb, David, "Teaching and Students: The Views of Negro and White Teachers," *Sociology of Education*, Vol. 37, Summer 1964.
- Graham, Patricia Albjerg, "Schools: Cacophony About Practice, Silence About Purpose," *Daedalus*, Winter 1984a.
- , "Wanting It All," *The Wilson Quarterly*, Vol. 8, New Year's 1984b.
- Grant, W. Vance, and Thomas D. Snyder, *Digest of Education Statistics, 1983-1984*, Washington, D.C.: National Center for Education Statistics, 1984.
- Greenhoe, Florence, "Community Contacts and Participation of Teachers," Washington, D.C.: American Council on Public Affairs, 1941.
- Guthrie, James W., and Ami Zusman, "Teacher Supply and Demand in Mathematics and Science," *Phi Delta Kappan*, Vol. 64, September 1982.
- Handlin, Oscar, et al., *Report of the Harvard University Committee on Teaching*, Cambridge, Mass.: Harvard University Printing Office, May 15, 1957.
- Hartman, G. W., "Occupational Preferences of American Secondary School Teachers," *Educational Administration and Supervision*, Vol. 23, November 23.
- Hofstadter, Richard, *Anti-Intellectualism in American Life*, New York: Knopf, 1962.
- Holmes Group, The, *Tomorrow's Teachers*, East Lansing, Mich.: The Holmes Group, 1986.
- Kaestle, Carl F., *Pillars of the Republic: Common Schools and American Society, 1780-1860*, New York: Hill and Wang, 1983.
- Kerr, Donna H., "Teaching Competence and Teacher Education in the United States," *Teachers College Record*, Vol. 84, Spring 1983.
- Kerr, Steven T., "Teacher Specialization and the Growth of a Bureaucratic Profession," *Teachers College Record*, Vol. 84, Spring 1983.
- Koerner, James D., *The Miseducation of American Teachers*, Boston: Houghton Mifflin, 1963.

- Labaree, David F., "Curriculum, Credentials, and the Middle Class: A Case Study of a Nineteenth Century High School," *Sociology of Education*, Vol. 59, January 1986.
- , "Setting the Standard: Alternative Policies for Student Promotion," *Harvard Educational Review*, Vol. 54, February 1984.
- Lanier, Judith E., "Research on Teacher Education," in Merlin C. Witrock (ed.), *Handbook of Research on Teaching*, New York: Macmillan, 1986.
- Learned, William S., and Ben D. Wood, *The Student and His Knowledge: A Report to the Carnegie Foundation on the Results of High School and College Examinations of 1928, 1930, and 1932*, Bulletin No. 29, New York: The Carnegie Foundation for the Advancement of Teaching, 1938.
- Levin, Henry M., "A Cost-Effective Analysis of Teacher Selection," *Journal of Human Resources*, Vol. 5, 1970.
- Lieberman, Myron, *Education as a Profession*, Englewood Cliffs, N.J.: Prentice-Hall, 1956.
- Lloyd-Jones, Esther, "Why People Become Teachers," in Lindley J. Stiles (ed.), *The Teacher's Role in American Society*, New York: Harper and Brothers, 1957.
- Lortie, Dan C., *Schoolteachers: A Sociological Study*, Chicago: University of Chicago Press, 1975.
- Lynd, Albert, *Quackery in the Public Schools*, Boston: Little, Brown and Co., 1953.
- Mattingly, Paul H., *The Classless Profession*, New York: New York University Press, 1975.
- Maul, Ray C., "How Many Teachers Do We Need?" *Journal of Teacher Education*, Vol. 3, June 1952.
- , "The 1956 Teacher Supply and Demand Report," *Journal of Teacher Education*, Vol. 7, March 1956.
- McGuire, Carson, and George D. White, "Social Origins of Teachers—In Texas," in Lindley J. Stiles (ed.), *The Teacher's Role in American Society*, New York: Harper and Brothers, 1957.
- Moffett, Mary L., *The Social Background and Activities of Teachers College Students*, New York: Teachers College, Columbia University, Contributions to Education, 1929.
- Monk, David H., and Stephen L. Jacobson, "Reforming Teacher Education," *Education and Urban Society*, Vol. 17, February 1985.
- Morris, Charles N., "Career Patterns of Teachers," in Lindley J. Stiles (ed.), *The Teacher's Role in American Society*, New York: Harper and Brothers, 1957.
- Muraskin, Lana D., "The Interests of the Teachers' Union, 1913-1935," in Diane Ravitch and Ronald K. Goodenow (eds.),

- Educating an Urban People: The New York City Experience*, New York: Teachers College Press, 1981.
- National Education Association, "Are Teachers Happy?" *Research Bulletin*, Vol. 46, May 1968.
- , "Are Teachers Satisfied with Their Working Conditions?" *Research Bulletin*, Vol. 47, March 1969.
- , "Beginning Salaries for Teachers in Big Districts, 1950-51 to 1970-71," *Research Bulletin*, Vol. 48, October 1970.
- , "Characteristics of Teachers, 1956, 1961, 1966," *Research Bulletin*, Vol. 45, October 1967.
- , "Economic Rewards of Teaching," *Research Bulletin*, Vol. 41, May 1963.
- , *Economic Status of Teachers in 1954-55*, Washington, D.C.: National Education Association, 1954.
- , "Financial Incentives for Teachers," *Research Bulletin*, vol. 37, April 1959.
- , "First-Year Teachers in 1954-55," *Research Bulletin*, Vol. 34, February 1956.
- , "Five Questions for American Education Week," *Research Bulletin*, Vol. 1, September 1923.
- , "Handbook of Major Educational Issues," *Research Bulletin*, Vol. 4, September 1926.
- , "Highest Degrees Held by Teachers," *Research Bulletin*, Vol. 49, May 1971.
- , "Leaves of Absence for Teachers," *Research Bulletin*, Vol. 44, October 1966.
- , "Practices Affecting Teacher Personnel," *Research Bulletin*, Vol. 6, September 1928.
- , "Public School Retirement at the Half Century," *Research Bulletin*, Vol. 28, December 1950.
- , "Public School Salaries in 1924-25," *Research Bulletin*, Vol. 3, January-March 1925.
- , "Salaries and Salary Schedules of Urban School Employees, 1956-57," *Research Bulletin*, Vol. 35, April 1957.
- , "Salaries in Teaching and Business," *Research Bulletin*, Vol. 40, February 1962.
- , "Salaries of School Employees, 1936-37," *Research Bulletin*, Vol. 15, March 1937.
- , "School Statistics, 1964-65," *Research Bulletin*, Vol. 43, February 1965.
- , "Some of the Highest Scheduled Salaries for Teachers, 1971-72," *Research Bulletin*, Vol. 50, March 1972.

- , "State Tenure Laws and the Public School," *Research Bulletin*, Vol. 1, January 1923.
- , "Teacher Opinion on Pupil Behavior, 1955-56," *Research Bulletin*, Vol. 34, April 1956.
- , "Teacher Personnel Practices, 1950-51," *Research Bulletin*, Vol. 30, February 1952.
- , "Teacher Personnel Procedures: Selection and Appointment," *Research Bulletin*, Vol. 20, March 1942.
- , "Teacher Shortage Continues," *Research Bulletin*, Vol. 41, October 1963.
- , "Teachers' Problems," *Research Bulletin*, Vol. 46, December 1968.
- , "Teachers in the Public Schools," *Research Bulletin*, Vol. 27, December 1949.
- , "Teachers in the Public Schools," *Research Bulletin*, Vol. 41, February 1963.
- , "Teachers' Retirement Allowances," *Research Bulletin*, Vol. 2, May 1942.
- , "The Advance of the American School System," *Research Bulletin*, Vol. 5, September 1927a.
- , "The Advance of the Teacher Retirement Movement," *Research Bulletin*, Vol. 6, May 1928.
- , "The American Public School Teacher, 1970-71," *Research Bulletin*, Vol. 49, December 1971.
- , "The American Public School Teacher, 1970-71," *Research Bulletin*, Vol. 50, March 1972.
- , "The Financial Rewards of Teaching," *Research Bulletin*, Vol. 38, May 1960.
- , "The Postwar Struggle to Provide Competent Teachers," *Research Bulletin*, Vol. 35, October 1957.
- , "The Problem of Teacher Tenure," *Research Bulletin*, Vol. 2, November 1924.
- , "The Scheduling of Teachers' Salaries," *Research Bulletin*, Vol. 5, May 1927b.
- , "The Status of the American Public School Teacher," *Research Bulletin*, Vol. 35, February 1957.
- , "The Status of the Teaching Profession," *Research Bulletin*, Vol. 18, March 1940.
- , "Would You Teach Again?" *Research Bulletin*, Vol. 50, May 1972.

Nelson, F. Howard, "New Perspectives on the Teacher Quality Debate: Empirical Evidence from the National Longitudinal Survey," *Journal of Educational Research*, Vol. 78, January/February 1985.

- Oakes, Jeannie, *Keeping Track: How Schools Structure Inequality*, New Haven: Yale University Press, 1985.
- Ornstein, Allan C., "Teacher Salaries: Past, Present, Future," *Phi Delta Kappan*, Vol. 61, June 1980.
- Pavalko, Ronald M., "Recruitment to Teaching: Patterns of Selection and Retention," *Sociology of Education*, Vol. 43, 1970.
- Powell, Arthur G., *The Uncertain Profession*, Cambridge, Mass.: Harvard University Press, 1980.
- Richey, Robert W., and William H. Fox, *An Analysis of Various Factors Associated with the Selection of Teaching as a Vocation*, Bloomington: Indiana University Division of Research and Field Services, 1948.
- Rosenholtz, Susan J., "Political Myths About Education Reform: Lessons from Research on Teaching," *Phi Delta Kappan*, Vol. 66, January 1985.
- Ruml, Beardsley, and Sidney G. Tickton, "Teaching Salaries Then and Now," *The Fund for the Advancement of Education*, Bulletin 1, New York: The Fund, 1955.
- Schlechty, Philip C., and Victor S. Vance, "Recruitment, Selection, and Retention: The Shape of the Teaching Force," *Elementary School Journal*, Vol. 83, March 1983.
- Schwartzweller, Harry K., and Thomas A. Lyson, "Some Plan to Become Teachers: Determinants of Career Specification Among Rural Youth in Norway, Germany, and the United States," *Sociology of Education*, Vol. 51, January 1978.
- Seagoe, May V., "Some Origins of Interest in Teaching," *Teaching of Educational Research*, Vol. 35, May 1942.
- Sedlak, Michael, C. Wheeler, D. Pullin, and P. Cusick, *Selling Students Short: Classroom Bargains and Academic Reform in the American High School*, New York: Teachers College Press, 1986.
- Shanker, Albert, "The Revolution That's Overdue," *Phi Delta Kappan*, Vol. 66, January 1985.
- Stiles, Lindley J. (ed.), *The Teacher's Role in American Society*, New York: Harper and Brothers, 1957.
- Strober, Myra H., and David B. Tyack, "Who Do Women Teach and Men Manage? A Report on Research in Schools," *Signs*, Vol. 5, Spring 1980.
- Sweet, James A., and Linda A. Jacobsen, "Demographic Aspects of the Supply and Demand for Teachers," in Lee Shulman and Gary Sykes (eds.), *Handbook of Teaching and Policy*, New York: Longman, Inc., 1983.
- Sykes, Gary, "Public Policy and the Problem of Teacher Quality: The Need for Screens and Magnets," in Lee Shulman and Gary Sykes

- (eds.), *Handbook of Teaching and Policy*, New York: Longman, Inc., 1983.
- Vance, Victor S., and Philip C. Schlechty, "The Distribution of Academic Ability in the Teaching Force: Policy Implications," *Phi Delta Kappan*, Vol. 64, September 1982.
- Waller, Willard S., *The Sociology of Teaching*, New York: Wiley, 1932.
- Wangbert, Elaine G., D. Metzger, and Justin E. Levitov, "Working Conditions and Career Options Lead to Female Elementary Teacher Job Dissatisfaction," *Journal of Teacher Education*, Vol. 33, September-October 1982.
- Warner, W. Lloyd, Robert J. Havighurst, and Martin B. Loeb, *Who Shall Be Educated? The Challenge of Unequal Opportunities*, New York: Harper and Row, 1944.
- Warren, Donald, "Learning from Experience: History and Teacher Education," *Educational Researcher*, Vol. 14, December 1985.
- Wattenberg, William, and Robert J. Havighurst, "The American Teacher—Then and Now," in Lindley J. Stiles (ed.), *The Teacher's Role in American Society*, New York: Harper and Brothers, 1957.
- Wattenberg, William, et al., "Social Origin and Teaching Role—Some Typical Patterns," in Lindley J. Stiles (ed.), *The Teacher's Role in American Society*, New York: Harper and Brothers, 1957.
- , "Social Origins and Teachers—A Northern Industrial City," in Lindley J. Stiles (ed.), *The Teacher's Role in American Society*, New York: Harper and Brothers, 1957.
- , "Social Origins of Teachers and American Education," in Lindley J. Stiles (ed.), *The Teacher's Role in American Society*, New York: Harper and Brothers, 1957.
- Weaver, W. Timothy, "Solving the Problem of Teacher Quality, Part I," *Phi Delta Kappan*, Vol. 66, October 1984.
- , "Solving the Problem of Teacher Quality, Part II," *Phi Delta Kappan*, Vol. 66, November 1984.
- , *America's Teacher Quality Problem: Alternatives for Reform*, New York: Praeger, 1983.
- Whitney, Frederick L., "The Social and Economic Background of Teachers College and University Students," *Education*, April 1927.
- Wolfe, Dael L., *America's Resources of Specialized Talent*, The Report of the Commission on Human Resources and Advanced Training, New York: Harpers, 1954.
- Wynn, Richard, "The Relationship of Collective Bargaining and Teacher Salaries, 1960 to 1980," *Phi Delta Kappan*, Vol. 63, December 1981.

RAND/R-3472-CSTP