"EQUALLY IN VIEW" The University of California, Its Women, and the Schools



Geraldine Jonçich Clifford

Chapters in the History of the University of California Number Four Carroll Brentano, Sheldon Rothblatt, Editors

Max Max ma 2 ha

"EQUALLY IN VIEW" The University of California, Its Women, and the Schools



Frontispiece: Women of the 1912 Senior Pilgrimage, University of California.

"EQUALLY IN VIEW" The University of California, Its Women, and the Schools

Geraldine Jonçich Clifford



Chapters in the History of the University of California Number Four

Center for Studies in Higher Education and Institute of Governmental Studies University of California, Berkeley 1995

©1995 by the Regents of the University of California. All rights reserved. Printed in the United States of America.

Library of Congress Cataloging-In-Publication Data

Clifford, Geraldine Jonçich.

"Equally in view" : the University of California, its women, and the schools / Geraldine Jonçich Clifford.

p. cm. -- (Chapters in the history of the University of California ; no. 4)

Includes bibliographical references.

ISBN 0-87772-364-8

1. University of California (System)--Students--History. 2. Women college students --California--History. I. Title. II. Series.

LD729.8.C54 1995

378.794--dc20

95-14666 CIP

DEDICATION

To the memory of William Francis Clifford ... and all those for whom Cal was a very special place.



Figure 1: "Pelicans" purchasing the campus humor magazine, *The Pelican*, South Hall, 1912.

In honor of the 125th anniversary of the founding of the University of California, the Center for Studies in Higher Education at Berkeley, in cooperation with the Institute of Governmental Studies, takes pleasure in publishing a series of "chapters" in the history of the University. These are designed to illuminate particular problems and periods in the history of U.C., especially its oldest and original campus at Berkeley, and to identify special turning points or features in the "long century" of the University's evolution. Histories are stories meant to be read and enjoyed in their own right, but the editors cannot conceal the hope that readers of these chapters will notice facts and ideas pertinent to the decade that closes our own century and millennium.

Carroll Brentano and Sheldon Rothblatt, editors



Figure 2: Rediviva Club residents, 1906. Elsa Schluckebier (with glasses) and Florentine Schage (far right, rear) were among the future teachers in this Class of 1908 living group.

PREFACE

In a celebrated example published in 1776, the Scottish philosopher Adam Smith described 18 distinct factory operations required to make straight pins. "One man draws out the wire," he wrote, "another straights it; a third cuts it; a fourth points it; a fifth grinds it at the top," and so on.¹ Thus was born the economic concept of the division of labor and, some might add, the origins of our consciousness about particular aspects of the modern world.

In a similar illustration, but from the much earlier period of the fifteenth and sixteenth centuries, historians describe the gradual division of English royal income into two streams, one personal to the crown, the other intended for the running of the state. Its monetary sources hitherto confused, but now grounded in a clear basis of support, bureaucracy could grow.

The essential point contained in these historical examples also appears in Geraldine Jonçich Clifford's contribution to this series on the University's history. The complexity of social and institutional life, the need for societies to address discrete issues at appropriate times, lead inevitably to some form of highly differentiated organization. Accuracy, quickness, efficiency, productivity—whatever words we use to describe the reasons for minutely separating tasks and processes—have also defined the world of education in general.

The concept of a division of intellectual labor underlies the very idea of a twentieth-century university. A university, especially one that emphasizes professional and graduate education, contains countless fields of knowledge and academic specialties. These grow almost by the year. History is only one of many examples. Historians specialize by nation, by chronology, by issues (labor relations, war,

¹Paul Mantoux, *The Industrial Revolution in the Eighteenth Century* (New York, 1961), 36-37.

women's emancipation, religious change) or by broad areas of interest (foreign policy, the history of social classes, the history of printing, science, popular culture). Furthermore, all levels of education have more or less separated from one another. Research universities are different spheres of activity from liberal arts colleges, schools are different from higher education, elementary, middle, and high schools have their own concerns and constituencies and tend also, if in lesser degree, to be separated from one another.

It is true that in several American states the lower and higher (if those are the appropriate terms) forms of education are joined together in a single state-financed system, but the separation of teachers and professors by career and peer group remains the rule. In California, as Professor Clifford reminds us, much stronger linkages and acknowledged mutual dependencies once existed. Indeed, in the discussions surrounding the earliest years of the University of California's evolution, many academic and political leaders regarded Berkeley as the educational crown of an ambitious system of public instruction. UC would lend its knowledge and status to the common task of preparing the state's population for citizenship and occupations.

Women, as Clifford explains, were especially important for this task, for schoolteaching in California, as virtually everywhere in the United States or Europe, was primarily a woman's occupation. Mass education propelled the entry of women into schoolteaching. Several moved into administrative posts and became prominent and visible. Women faculty and administrators were important in the internal affairs of the University. Women students were an essential ingredient in the University's success as a teaching institution—indeed, no single category of student was more important. Without their numbers, a remarkable percentage of the total student body, it is possible to speculate that the liberal arts would have languished. Today noted for its balance and comprehensiveness, Berkeley could have remained what Europeans call a "technical university," perhaps confined to the basic land-grant university functions of agriculture, mining, and engineering.

But such speculation aside, we are being asked in this Chapter to consider again what the role of a great state university should be in

Geraldine Jonçich Clifford

strengthening the now differentiated layers of education. The University's present-day role in training teachers is actually limited since this important function is mainly performed by the California State University and College (CSUC) system, and the state monopolizes the credentialling process. In fact, the CSU system trains approximately one-eleventh of the nation's schoolteachers. Yet obviously what is learned at school influences how classroom teaching is carried out at the University. The attitude of professors towards the schools is an important element in how teachers are regarded by the public. "Bridging programs" for students whose upbringing makes them hesitant about university attendance, special writing workshops, the research of the Lawrence Hall of Science on the development of new mathematics and science curricula as well as other campus-based efforts to help schools must be counted among the University's successes. But the problems are formidable. California's schools are struggling with economic and social issues that at the moment appear insoluble. The schools of the state cannot have too many good friends

This Chapter recounts the monumental role of California's women in building the state's provision for education at all levels. We were especially pleased to announce its publication in conjunction with the special celebration of "Women at Cal," a conference sponsored by our Center for Studies in Higher Education in cooperation with other campus participants. The conference was held during the days of April 28 and 29, 1995, when the University also remembered its day of chartering.

Sheldon Rothblatt

ACKNOWLEDGEMENTS

The primary origins of this book are two. One was the University History Project and its continuing seminars, and I thank its organizers, Carroll Brentano and Sheldon Rothblatt, and participants for drawing me into the history of the University of California in its first Second was my several grants from the Spencer half-century. Foundation which, by a somewhat circuitous route, launched my current work in women as students and teachers; its funding and that of the University of California at Berkeley's Committee on Research have been indispensable, as have been the archivists and library staffs from around this nation who have helped me. For his guidance into manuscript and published materials on the history of the University of California, I am greatly indebted to University Archivist William M. Roberts. He also steered me to Anne Shaw, Assistant Secretary of the Regents. I especially wish to thank the staff of the Bancroft Library on the Berkeley campus and the Office of the Secretary of the Regents at the University of California statewide headquarters in Oakland for their generous help, and for their permission to reproduce most of the photographs illustrating this book. Thanks also to the Calaveras County Historical Society and the Paradise Historical Society for allowing me to use photographs from their collections. My late husband, Bill Clifford, traced names through biographical directories, computed percentages, and performed other useful tasks-including delivering me to and from the Bancroft Library daily over an entire summer, including Saturdays!

ILLUSTRATIONS

Cover	"The 1910 Girl: And so farewell, and may the years now bring Health, wealth, and happiness, (with perhaps a diamond ring)." <i>The Pelican</i> , vol. 8, no. 4 (1910).	
Frontispiece	Women of the 1912 Senior Pilgrimage, University of California.	ii
Figure 1	"Pelicans" purchasing the campus humor magazine, The Pelican, South Hall, 1912.	vi
Figure 2	Rediviva Club residents, 1906.	viii
Figure 3	Women teachers in Paradise, California, 1912.	xxii
Figure 4	San Francisco High School graduates ready to face the world.	7
Figure 5	Graduating seniors, Salinas High School, 1905.	11
Figure 6	Vice-Principal Fannie McLean ('85) and the Berkeley High School 1896 graduating class.	18
Figure 7	Calaveras County Teachers' Examination, 1893.	33
Figure 8	May L. (Shepard) Cheney ('83) as a teacher.	51

Figure 9	May Cheney, c. 1920.	51
Figure 10	The first University of California field trip with geologist Andrew C. Lawson, Carmel, 1892.	57
Figure 11	"My first high school class in Chemistry," with teacher Lillie Belle Bridgman (M.S. '93), San Diego High School, 1896.	71
Figure 12	Ernest Carroll Moore, Instructor in philosophy and pedagogy at the University of California, 1899.	78
Figure 13	Students in the entomology classroom, Budd Hall, 1900.	96

All illustrations (except Figure 3, courtesy of Paradise Historical Society, and Figure 7, courtesy of the Calaveras County Historical Society, and Figures 2, 8, 9, 12, and 13 from the University Archives) are courtesy of the Bancroft Library.

CHRONOLOGY

- 1849 A Constitutional Convention creates a state system of public schools a year before California is admitted to statehood.
- 1851 San Francisco creates the state's first local school board, "for the establishment and regulation of free common schools in the City."
- 1855 The private College of California is chartered, building on an Oakland academy; it opens in 1860 with eight freshmen.
- 1862 The State Normal School opens in San Francisco with a class of "one gentleman and five ladies"; to escape the "moral dangers" of the City it is soon moved to San Jose, with new branches opened in Los Angeles (1882) and Chico (1889).
- 1868 The University of California's Organic Act creates the seminary of higher learning called for in the state constitution, combined with the federal land grants due California under the Morrill Act (1862) and the ceded Berkeley property of the College of California.
- 1870 By order of the regents women are admitted on "equal terms in all respects with young men."
- 1873 The Superintendent of Public Instruction, University President Gilman, the President of the State Normal School, and five University professors meet with 13 high school representatives to discuss academic matters of shared interest.

- 1873 The State Board of Education directs county school boards not to issue or renew teachers' certificates to persons under age 18.
- 1876 The University graduates its first women: one future housewife, one future physician, and Hattie Josephine Hodgdon, future high school teacher and principal.
- 1876 A Normal Class is organized at Girls' High School in San Francisco to prepare young women to teach in the city's primary schools.
- 1879 The Constitutional Convention removes the power of school boards to use their share of the State School Fund to support high schools.
- 1880 The Academic Senate discusses the merits of visiting high schools, inviting local high schools to request inspection by University faculty.
- 1883 The California Teachers Association reiterates teacher organizations' requests for a chair of Pedagogics at the University.
- 1884 The regents accept the Academic Senate's plan for visitation and accreditation of high schools, so that approved high schools may send their recommended graduates to the University without their having to pass an entrance examination; the privilege is extended to private schools in 1888.
- 1889 The regents announce their intention to create "a course of instruction in the science and art of teaching" as soon as possible.
- 1892 A professor of the science and art of teaching, Elmer Ellsworth Brown, is appointed, beginning the staffing of a pedagogy department at the University of California.

- 1893 California becomes the nation's first state to require college graduation as a condition for a high school teacher's certificate.
- 1895 The California Branch of the Association of Collegiate Alumnae secures the governor's agreement to appoint a woman regent; Phoebe Hearst is nominated and approved in 1897.
- 1897 May Shepard Cheney ('83) assumes the position of Appointments Secretary of the University, to coordinate faculty recommendations and otherwise assist the placement of University graduates as schoolteachers.
- 1898 Millicent Shinn, becomes the first woman to earn a Ph.D. at Berkeley, for a dissertation on child study.
- 1901 A single set of entrance requirements is adopted to apply to applicants for all of the University's undergraduate programs.
- 1903 The position of Examiner of Schools is created, removing the Academic Senate's direct responsibility for schools visitation.
- 1905 The State Board of Education mandates supervised "practice teaching" as a requirement for issuing a teacher's certificate.
- 1906 The Department of Education enrolls more graduate students than any other unit at the University.
- 1911 The Woman Suffrage Amendment to the California Constitution is passed, with the vocal support of University women students, graduates, and the state's teachers' organizations.
- 1913 The School of Education is created, encompassing the Department of Education and affiliated faculty from aca-

demic departments whose subject is represented in the high school curriculum.

- 1914 By agreement with the regents, the Oakland Board of Education establishes University High School as a demonstration and practice school operated by the School of Education.
- 1919 The regents accept the proposal of Ernest Carroll Moore, Principal of the Los Angeles State Normal School to acquire it as the nucleus of a southern branch of the University of California and to become UCLA.
- 1921 A "laboratory school"—University Elementary School—is created jointly by the University and the Berkeley Unified School District, to further professional training and research.
- 1923 California's State Normal School campuses become State Teachers Colleges, with power to grant academic degrees with completion of a four-year teacher preparation program.



Figure 3: Women teachers and friends in Paradise, California, 1912. Despite formal restrictions on teachers' private lives, the reality was often at variance with the policy. Teachers Hattie Cape and Laura Carman (later Mrs. Bowles) on a day trip to Sterling near Paradise, Butte County.

THE CONTEXT

In its first constitution (1849), California committed itself to "effectuate a complete and coherent system of education. . . . It held equally in view the school and the University."¹ When the University actually opened its doors in September 1869, it had a good charter, a small but experienced faculty, a beautiful future site in Berkeley, and a few students—*very few*, 40 in all—and with limited prospects of more. High schools were almost nonexistent in the state, and neither public high schools nor the few private academies in existence could guarantee that their graduates would attend any college or university. As the academic profession was virtually alone in requiring college matriculation, a university education had little appeal among adolescents, their parents, or taxpayers.

To ensure itself a supply of interested and adequately prepared freshmen, the University first experimented with creating its own preparatory school. It next assisted local high schools to improve their product and "sell" it to the public, in part by admitting to the University all recommended graduates of approved high schools. Raising the quantity and quality of high school students also required a steady supply of appropriately prepared and dedicated teachers.² From the outset the University found itself the major supplier of high school teachers. By its very existence as an educational institution, Berkeley prepared its students to teach. Since women were already the majority of the nation's teachers, this demand alone could make

¹William Carey Jones, The Illustrated History of the University of California, revised ed. (Berkeley, 1901), 8.

²Superintendent I. H. Bradley of populous Amador County, in the motherlode, complained of public "dislike of, or want of confidence in Teachers," most of whom "teach only when they can do nothing more congenial to their tastes." There were then in his jurisdiction 19 male and 9 female public school teachers, in a state in which women were still in very short supply (1861 Report of the Superintendent of Amador County, in A. J. Moulder, *Tenth Annual Report of the Superintendent of Public Instruction—1861.*) (Copy in State Archives, Sacramento.)

women into a progressively larger part of the University's student body.

Eventually the University was forced to do more to equip the public schools with "teacher-professionals" than offer its regular curriculum. Berkeley assented to requests to recommend and certify teachers, offer special "teachers' courses" within academic departments, and finally make explicit provision for career preparation in pedagogy, school organization and management, and pedagogical research through a new department and School of Education. The regents' later decision to adopt and enhance a successful normal school in Los Angeles as the base for the first, irretrievable "branching" of the University of California into a multicampus system, represented, in part, the seemingly inexhaustible need for teachers in booming southern California.

Nineteenth-century rhetoric often placed the state university at the headship of an entire system of public education. It was given certain powers to act on behalf of the state—in accrediting high schools and licensing university graduates to teach anywhere in the state without passing county examinations. In practice, however, several-sided competition limited the principle of University leadership. An increasingly independent public school system challenged the University's presumptive dominance. Moreover, well before the University enrolled its fiftieth class there were signs of an alternative and competing vision for itself within the University of California: securing its membership in a tiny elite of national and international research universities of the first rank. This ambition merits close scrutiny for its effects on the schools as well as on the University itself.

Rethinking University History: Linking School and College

Jones' phrase—"equally in view"—was meant to remind one of the traditional and emerging linkage existing between the University of California and the state's schools. Institutional histories have often been written as commemorative exercises, addressed to strictly local audiences of nostalgic alumni, faculty insiders, and other "friends" of

Geraldine Jonçich Clifford

the school.³ They have typically relied heavily, if not exclusively, upon administrative files in the president's office and the uncritical reminiscences of past students and professors, almost always male "insiders." In contrast, most histories of school theory and practice have been written by professors of education with their concerns rooted, however loosely, in the schools. Schools and colleges are falsely presumed to have separate histories and to represent different things. The very use of the term "higher" education connotes an advanced or specialized education for a selected elite. Its presumptive opposite is often referred to as "lower education": basic, undifferentiated, nonselective, "mass." Instructors in elementary and secondary schools are "teachers," those in colleges and universities are "professors" or, at the very least, "instructors."

The historical record does not justify these separations. Throughout the nineteenth century, the line dividing secondary and tertiary education was extremely porous, with overlapping functions, pedagogy, curriculum, and clientele. As late as 1895, fewer than half of college and university students were high school graduates. Many colleges and even universities did "preparatory" work, duplicating the putative function of private academies and public high schools. In 1889, 85 percent of *all* American colleges still retained preparatory departments. Stranger still, some colleges maintained preparatory departments that also offered nonpreparatory curricula.⁴ Most colleges were, in fact, "in the education business," anxious to obtain students wherever they could; to keep their college faculty employed;

³A notable exception, and one that also deals insightfully with schooluniversity relationships is Merle Curti and Vernon Carstensen, *The University of Wisconsin, A History, 1848-1925* (Madison, 1949), 2 vols. Professor of History at the University at the time that he co-authored his university's history, Curti had earlier been a professor at Teachers College, Columbia University. Author of *The Social Ideas of American Educators* (New York, 1935), he was well versed in the intellectual history of elementary and secondary schooling in the United States.

⁴For simplicity's sake references to "colleges" in this section refer also to universities, i.e., to the whole of higher education, although the characterizations made of the genus may not apply to a specific college or university.

to curry favor with local residents, church bodies, benefactors, or state capital politicians. Along with preparatory students, even the most prestigious colleges accepted "special students," "students at large," "partial course" students, and other designations of non-matriculants. They and the preparatory students often outnumbered the "regular" students.⁵

As colleges were reaching down, the ostensible secondary schools were reaching up—or, perhaps more correctly in both cases, *reaching across*. Many educational institutions sat implacably astride the supposed divide between secondary and higher education. Some changed their names during their histories, becoming rechartered as colleges, or retreated to secondary school status in the face of powerful competition. This might happen without significant revision in their pedagogy, textbook, curriculum, faculty, student body, or local reputation. Many academies, seminaries, high schools, normal schools, and even certain grammar schools offered some "collegiate" and preprofessional work. They did so for some of the same reasons that colleges did secondary work, including the presence of even a modicum of consumer demand and the absence of a cheap or accessible college in their neighborhoods.

The normal (teacher training) schools provide an especially pertinent example. Frustrated with the experiment of giving public monies to private academies to run teachers seminaries and impressed with their limited understanding of Prussia's normal schools, Massachusetts legislators opened two state normal schools in 1839. By 1897 there were 167 state normal schools in the United States, including separate schools for white and black teachers in the South. These institutions have always been studied separately from colleges as a part of the history of public education. They have been treated as institutions existing solely to prepare grammar school graduates to

⁵In 1900, "tertiary" education enrolled 3.9 percent of the age group then associated with college-going. In 1960 the comparable figure was 33.9 percent and in 1970, 45 percent.

Geraldine Jonçich Clifford

be teachers in the primary and grammar grades.⁶ Recent scholarship, however, shows that both private and public normal schools attracted and educated many besides those who intended to teach. They were sponsored by communities and utilized by many students as substitutes for high schools, colleges, or business and other professional schools. Since a large proportion of normal school students—over-whelmingly women—were already experienced teachers, their enrollment represented diverse ambitions, as was true of college students.⁷ And normal school officials had their own ambitions: to expand the curriculum, enabling them to prepare high school teachers as the colleges and universities were already doing; to raise their status by admitting high school graduates as well as, or in lieu of, grammar school graduates; to become degree-granting teachers

"The present elementary and secondary school structure was only dimly forecast in the nineteenth century. The largest number of schools were oneroom, multi-age schools providing a curriculum from the primer through such subjects as beginning bookkeeping and algebra. The term "elementary school" was virtually unknown before the twentieth century. In the towns and in some consolidated rural schools, it became common by the late nineteenth century to find a two- or three-room schoolhouse; the division for the youngest students was the primary school and for the older pupils the grammar school or grammar grades. In some instances a separate grammar school was organized, encompassing what later became the upper elementary and lower secondary grades, with a curriculum that might span the socalled "common English branches" (or "3 Rs"), popular subjects like bookkeeping, industrial drawing and surveying, and the college or precollege subjects of Latin, geometry, ancient history, and natural philosophy (science). A further complication was the habit in graded schools of using smaller numbers inversely-to denote the upper grades; thus Grade One might refer to what is today's senior year in high school.

⁷California's was the fifteenth state normal school in the United States; when California's was opened, only eight of the 34 states had established such institutions. At the close of its first year, it had enrolled 28 female and 3 male students; between 1863 and 1889, 1,222 ladies and 221 gentlemen were graduated. In *Historical Sketch of the State Normal School at San José, California, With a Catalogue of its Graduates and a Record of Their Work for Twenty-Seven Years* (Sacramento: State Printing Office, 1889), 7, 14, 102. colleges instead of certificate-granting schools; even to offer advanced work in education for prospective school principals, superintendents, and normal school instructors.⁸

As late as 1900, only four percent of the 18-21 age group even began college, and high dropout rates typically decimated this group. Therefore, the standard view of American higher education in the eighteenth and nineteenth centuries is that the system was significantly overbuilt, that demand for advanced education was small and largely stagnant for decades, and that the conservative curriculum and the many other opportunities for making one's way to success in America caused most youth to omit college from their plans.

The second part of this proposition, absence of demand, requires some rethinking. Private and quasi-public academies proliferated in the first half of the nineteenth-century, as did high schools and normal schools in the second half. It is *they* who were meeting a demand and absorbing some greater or lesser part of the potential college enrollment. Given their responsive nature, eclectic curricula, and the diverse ages of their students, they were college and university annexes at the very least. The common practice of calling the public high schools and normal schools the "people's colleges" appears fairly accurate on two levels: academies and high schools were substitutes for college among the poorer or more provincial strata of society, and they were alternatives to the college or university proper among Americans in general.

⁸Jurgen Herbst, And Sadly Teach: Teacher Education and Professionalization in American Culture (Madison, 1989); Robert T. Brown, The Rise and Fall of the People's Colleges: The Westfield Normal School, 1839-1914 (Westfield, Mass., 1988). See also Geraldine Jonçich, "Scientists and the Schools of the 19th Century: The Case of American Physicists," American Quarterly, 19 (Winter 1966): 667-85, for an example of the role that normal schools played in advanced education. Several of the first generation (born 1840-1900) of professional physicists in America acquired part or all of their secondary or collegiate education in normal schools.

Geraldine Jonçich Clifford



Figure 4: San Francisco high school graduates ready to face the world: Whether as graduates of the Girls High School or Lowell High School, some of these young women would have been anticipating immediate schoolteaching or the University or the Normal School first.

Rethinking University History: Cherchez La Femme

The term "equally in view" offers historians of education another challenge, as well: to consider women—alongside of and often times distinct from men—when looking for the significant influences of University and school history.

Conventional historiography emphasizes the evolution of American higher education as the result of a growing challenge of the college model by the university model. "College" meant four-year teaching institutions, with their prescribed curriculum shaped by classical "disciplinary" subjects and assumptions, with mandatory chapel exercises and the other parietal features of a closed community. "University" stood for graduate and professional training, broadened and market-driven courses, the research ethos for the faculty and a bureaucratizing impersonality for the students. The notable forces pushing higher education toward the university culture included the economic and political benefits of German scholarship and pedagogy, and the domestic economic and social dynamics demonstrated in the huge fortunes being made in everything from petroleum and railroads to tobacco and Coca Cola. Some of these fruits of corporate capitalism endowed such new universities as Chicago, Johns Hopkins, and Stanford; or transformed Trinity College in North Carolina into Duke University through a tobacco fortune and Emory in Atlanta with Coca Cola money, or accelerated the development of such state universities as California's through the gifts of the Lick, Hearst, and Levi Strauss-Haas families.

Virtually ignored in the college-to-university saga, as a driving force or even a contributing one, is the introduction of and rapid concession to coeducation—although it coincided in time quite remarkably with the events described above.⁹ Rather than see

⁹A widely used survey, so popular that it went into a revised and enlarged third edition in 1976 is John Brubacher and Willis Rudy, *Higher Education in Transition: A History of American Colleges and Universities*, 1636-1976 (New York, 1968). It covers the rise of women's education, women's colleges, and coeducation on only six of its 514 pages. Richard Hofstadter and Wilson Smith's *American Higher Education*, *A Documen*-

women's appearance on college and university campuses as a trifling consequence of the other events indicated above, it is quite sensible to consider women's appearance as an influence on the development of American higher education in the half century or so following the Civil War.

For example, to return to the subject of school-college overlap, an important reason for the presence of "college studies" in the secondary and even the grammar school curriculum must be the over twocentury long exclusion of women from the colleges. Many female seminaries and coeducational academies were virtually indistinguishable from the colleges: in the ages of their students, what they studied, how they were taught and who taught them, the qualifications of their teachers, how their daily and weekly lives were organized, and in what happened to them afterwards. The proliferation before 1880 of female seminaries and coeducational seminaries, and their more robust curricula, and the doubling of secondary school enrollments every decade after 1880 clearly represents female demand for higher education, advanced secondary schooling, or both.¹⁰

tary History (Chicago, 1961) tries to capture the essence of the period 1850-1950 in its Volume II, but none of the 65 selections treats women students and the issues causing or issuing from their appearance, and no entry for "coeducation," "females," or "women" appears in their index. Until Verne A. Stadtman's *The University of California*, 1868-1968 (New York, 1970) was published, the standard work on that institution was William Ferrier's *Origin and Development of the University of California* (Berkeley, 1930); its index is similarly silent about women's presence in this later coeducational institution, and references to women in the text are few and superficial.

¹⁰Female seminaries in the early nineteenth century featured the sexspecific ornamental subjects associated with the "finishing school": music, painting, fancy needlework, the French and Italian languages, dance—along with the basics of an English education. By the second half of the century, however, classical languages, mathematics, and the sciences had relegated instruction in such "feminine accomplishments" to the status of "extras." Kimberley Tolley has found more solid science in female seminaries than in male academics, even in the more traditional South, and more women than men majoring in mathematics at Berkeley and Stanford at the turn of the As early as the 1830s, public education was spreading from east to west. After the Civil War it even overcame the white South's different preference: private schooling for the self-sufficient and charity schooling for the poor. School leaders were satisfied with nothing less than securing universal access. Through free and eventually compulsory schooling in institutions under public control, all of the children of all of the people, boys and girls, were to be educated together: to assume the obligations of citizenship, industry, Christian morality, and parenthood, and without regard to differences in religion or social standing.¹¹ However much actual practice departed from this theory of an education-in-common—which persisted in the 19th-century's designation of public schools as "common schools"—colleges and, later, universities found themselves caught in the tangled web of school expansion.

Given the extent of the schooling enterprise, an army of teachers was required, especially in the rural and village elementary schools that still, in 1880, supplied the entire schooling of three-fourths of the population.¹² Thereafter demand shifted to the large cities as an unprecedented volume of immigrants swept across the Atlantic; they and their children were perceived to be in dangerous need of "Americanization"—most of it to come in the public schools.

The insatiable need for teachers was intensified by the brief careers of many teachers; high turnover rates demanded continuing replenishing of the teaching force. Males, far more than females, were diverted from satisfying this need by the poor pay and insecurity of teaching, its uncertain status, and a wealth of other opportunities in an expanding economy. As Catharine Beecher solicited funds in

4

century. See Kimberley Tolley, "The Science Education of American Girls, 1784-1932" (Ph.D. diss., University of California, forthcoming).

¹¹The best short treatment of the ideology of the common school movement and its variations in practice is Carl Kaestle, *Pillars of the Republic: Common Schools and American Society*, 1780-1860 (New York, 1983).

¹²United States Bureau of Education, Circular of Information Number 2 (1883), 8. Cited in David Tyack and Elisabeth Hansot, *Learning Together: A History of Coeducation in American Public Schools* (New Haven, 1990), 50.

Geraldine Jonçich Clifford



Figure 5: Graduating seniors, Salinas High School, 1905. Typical of the period was the small size and female majority of the graduates.

r,

the 1830s and 1840s to send New England women west to teach, she repeatedly warned that it was "chimerical to hope" that men would supply the need "when there are multitudes of other employments that will . . . lead to wealth."¹³ Whether making a virtue of necessity, or sincere in their belief in female moral superiority and innate selflessness, the supporters of common schools claimed that women are the "natural teachers" of the young, that their personal qualities and deeper religiosity better fit them for such work. "To enlighten the understanding and to gain the affections is a teacher's business," Catharine Beecher explained in 1829, and "is not woman best fitted to accomplish these important objects?"¹⁴

From the early nineteenth century women were being qualified to teach by the very fact of having been schooled. Completing a common school education was generally thought sufficient given the popular opinion that all a teacher needed, besides a mastery of the common branches, was his physical strength or her moral authority. In time, however, the seemingly inexorable tide of "educational inflation" or "credential creep" raised the ante. The more attractive schools and the more progressive communities began to ask more of their teachers, and they found those who qualified. For one thing, women teachers began to do what male teachers had long done: use their earnings as common school teachers to purchase further schooling for themselves at an academy or female seminary, thus increasing their chances of better-paid teaching in a more attractive community, a larger town, a graded school, or perhaps a high

¹³Catharine Beecher, "An Essay on the Education of Female Teachers," (1835), quoted in Kathryn Kish Sklar, *Catharine Beecher, A Study in American Domesticity* (New Haven, 1973), 114.

¹⁴In "Suggestions Respecting Improvements in Education," (1829), quoted in Sklar, *Catharine Beecher*, 97. The "peculiar character" of women's minds also better fitted them "to become the instructor of the rising generation," argued a writer in *Vermont Aurora of the Valley*, March 17, 1849. Quoted in Mary B. Slade, *Thetford Academy's First Century* (Thetford, Vt., 1956).

Geraldine Jonçich Clifford

school.¹⁵ For ambitious and determined women the contemporary appearance of the normal school was another Godsend.

Some male teachers had enjoyed the additional opportunity of a college education, and by the 1870s, many women had multiple opportunities to attend a college or university at low or no cost. In addition free high schools and normal schools were proliferating. Moreover, the expansion of common schools, and eventually public high schools, oftentimes inspired legislatures to fund state or county scholarships for prospective teachers so that they might attend private academies and colleges if public facilities were absent.¹⁶ As modest a reform, in 1873 in California, as raising the minimum age for county teacher licenses to age 18 encouraged teaching candidates to complete high school and, increasingly often, to get normal school, college, or university training, while county boards secured a two-year reprieve. In 1875 the ruling began to be enforced. Given the underenrolled condition of most colleges and universities before the

¹⁵Compared to open country or village schools, urban teachers could earn two or three times more in schools that remained open for twice as many months a year—these prizes were in addition to the other presumed benefits associated with rationalized (bureaucratizing) school organization. Not surprisingly, available studies of teacher characteristics show urban teachers to be older, more educated, and more experienced. For generations of teachers career mobility was primarily achieved by moving to progressively larger school systems, up through the grades, or from teaching to administration, often earning additional educational qualifications along the way. See David F. Labaree, "Career Ladders and the Early Pubic High School Teacher, A Study in Inequality and Opportunity," in *American Teachers: History of a Profession at Work*, ed. Donald Warren (New York, 1989), 157-89.

¹⁶Educationally backward and still small in population, the state of Florida nonetheless followed national patterns in creating free normal schools and permitting coeducation in the teacher-training departments in its universities. In 1901 the legislature noted that it had been giving each county a scholarship for males to acquire military and industrial education but not women who were the majority of the state's teachers. Therefore, teacher scholarships were instituted to finance study at the State Normal School for Whites. In Records of the Florida State Normal School, Special Collections, University of Florida Smathers Library.
1890s, if not later, such teacher-scholars were welcomed, at least by the treasurer. They were, however, only a foretaste of the flood of would-be teachers, most of them women, who would be entering America's colleges and universities—with consequences to be suggested in the case study of the University of California that follows.

Rather than delegate the University of California's campus daughters to obscurity—or merely to repeat what other historians have documented about the discriminatory treatment women received by the faculty, administration, and males students. "Equally In View" attempts a three-sided study of relationships.¹⁷ The three points of the triangle are the University, the schools, and women—as students and as teachers.

BRIDGES AND BOULDERS BETWEEN SCHOOL AND UNIVERSITY

The Teacher in the Professor

Universities and schools exist, of course, in a common social, religious, political, and intellectual environment.¹⁸ Beyond this their histories are otherwise linked.

The early University of California faculty knew, at first hand, the life of a grade school, high school, or academy teacher—as did most of its early presidents. The most successful of them, a classical philologist with a German Ph.D., Benjamin Ide Wheeler, taught at Providence (Rhode Island) High School for four years, a rather long time for a young man of such intense and obvious ambition. His

¹⁷The most comprehensive survey history of women's higher education is Barbara Solomon, *In the Company of Educated Women* (New Haven, 1985), which details much of the dogged opposition to women's access and, especially, to their equality within colleges and universities.

¹⁸Some of the features of that shared environment are discussed in Geraldine Jonçich Clifford: "'No Shade in The Golden State': School and University in Nineteenth-Century California," *History of Higher Education* Annual, 1992, 35-68.

predecessors with school teaching experience included Henry Durant, Daniel Coit Gilman, Martin Kellogg, William T. Reid (principal of Boys' High School in San Francisco when selected). Wheeler's successor as president, David Prescott Barrows, taught history in the State Normal School in San Diego prior to becoming superintendent of schools for Manila in 1900, and offered school administration courses at Berkeley before becoming University president.¹⁹ John Seely Hart, a former Princeton professor, was "an actual teacher of youth" when seriously considered as the university's first president.²⁰

Gilman's schoolteaching was limited to assisting the headmaster in a school Gilman himself was attending, but he visited and wrote about schools in Europe, went on to become a member ("School Visitor") of the New Haven School Board while teaching at Yale's Scientific School, functioning as effective superintendent, and was Secretary of Connecticut's State Board of Education. Of those midnineteenth century years Gilman recalled,

We are obliged to go around the State in old, settled communities to lecture, take part in teachers' institutes, call meetings of farmers, to arouse an interest in these important educational movements. I do not believe this new education,

²⁰The top student in his Princeton class, Hart (1810-1877) later headed a large preparatory school for Princeton, was principal of one of the nation's leading high schools, Philadelphia's Central High School, and of the State Normal School of New Jersey. His letters of recommendation are in "President's File," Box 4, Folder 8, Regents' Files, University Archives, Bancroft Library, his biography in *Dictionary of American Biography*, 8 ed. Dumas Malone, ed. (New York, 1932), 359-60. Recorded in Regents' Files, Box 10, Folder 22, University Archives is the consideration given to other schoolmen: United States Commissioner of Education John Eaton and his eventual successor in that role, the superintendent of the St. Louis public schools, William Torrey Harris, who were both considered for the University's presidency in 1887.

¹⁹Barrow's biography, in brief, is included in Mary Suzuki, "American Education in the Philippines, The Early Years: American Pioneer Teachers and the Filipino Response, 1900-1935" (Unpublished doctoral dissertation, University of California, Berkeley, 1900).

as it has been called, will achieve its proper work until a great deal of that enlightenment is done far and wide.²¹

Later, as president of Johns Hopkins University, Gilman received an appointment to the Baltimore Board of Education. The famous American reporter and lexicographer, H. L. Mencken, then a young reporter, thought, as did others, that Gilman's appointment was proforma. He, and they, were surprised to see Gilman become the board's most active member. Gilman was also offered the superintendency of the New York Public Schools in 1896. Had he remained longer at the University of California the appointment of a professor of pedagogy and the creation of specific courses for teachers in various other departments conceivably would not have been delayed until the early 1890s.

Like these university presidents, California's early faculty drew from the ranks of school teachers. The minor poet and man of letters, Edward R. Sill, taught first in Ohio and was at Oakland High School when recruited to the University faculty in 1873. Albin Putzker taught modern languages at Adelphi Academy, Brooklyn, and at Santa Barbara College, an academy, before joining the University faculty. Philosopher George Holmes Howison taught in various schools in Ohio and Massachusetts before starting his University career. The University's first professor of pedagogy, former teacher Elmer Ellsworth Brown, left Berkeley to become United States Commissioner of Education and, in 1911, Chancellor of New York University. The task given to historian Bernard Moses, on leave from the University to serve under William Howard Taft on the Philippine

²¹Daniel Coit Gilman, in an address at the University of Illinois in 1871. Quoted in Patrick J. Foley, "Antecedents and Early Development of the University of California, 1849-1875." (Unpublished doctoral dissertation, University of California at Berkeley, 1970), 118. Gilman's interests in the schools are discussed in Fabian Franklin, *The Life of Daniel Coit Gilman* (New York, 1910); and Abraham Flexner, *Daniel Coit Gilman: Creator of the American Type of University* (New York, 1946).

Commission, was to design an American-style educational system in that new colonial dependency.²²

Perhaps the most popular teacher in Yale's history, William Lyon Phelps, learned how to teach at the new Westminister School in Dobbs Ferry, New York, where he went in 1888, hardly older than his students. In 1908 he taught early morning summer school classes at Berkeley, writing of his mostly female audience, "The earnestness and enthusiasm of those students—many of whom were school-teachers from California, Oregon, and Nevada—was tremendous." Phelps also wrote inspiring treatises on teaching: *Teaching in School and college and The Excitement of Teaching*. In his autobiography, Phelps confessed, unashamedly,

I had rather earn my living by teaching than in any other way.

... I love to teach. I love to teach as a painter loves to paint. ... Teaching is an art—an art so great and so difficult to master that a man or a woman can spend a long life at it, without realizing much more than his limitations and mistakes, and his distance from the idea.²³

²²California's situation was not unique, for at least 70 percent of the mostly prominent university figures who served on the National Education Association's famed Committee of Ten on Secondary School Studies (1892-93), or on its nine subject-matter "conferences," had secondary school and probably grade school teaching experience. This fact was used by James C. Mackenzie, founding headmaster of Lawrenceville School, a feeder school for Princeton, to defend the Committee of Ten against charges that it was dominated by university men and their interests. In Theodore R. Sizer, *Secondary Schools at the Turn of the Century* (New Haven, 1964), 170. Some of the data on background also come from biographical dictionaries or institutional histories, especially Curti and Carstensen's *Wisconsin*; Jones, *Illustrated History*; Verne A. Stadtman, ed. *The Centennial Record of the University of California* (Berkeley, 1967); and Howard H. Peckham, *The Making of the University of Michigan*, 1817-1967 (Ann Arbor, 1967).

²³At the convention of Texas teachers that he addressed thrice-daily, one in the segregated Colored Teachers' audience later wrote him, "When you were speaking, I forgot I was black." In William Lyon Phelps, *Autobiography With Letters* (New York, 1939), 307, 491, 686-87.



Figure 6: Vice-Principal Fannie McLean, '85 (standing in the back row, extreme right), and 1896 graduating class, Berkeley High School. An English teacher, McLean was a statewide speaker on behalf of the 1911 woman suffrage campaign.

Had the regents been willing to consider seriously the applications for employment on the faculty, of women, they would have tapped even more deeply into the rich ore of schoolteachers.²⁴ As it was, the earliest recorded female applicant to teach at the University was Josephine Lindley Corella, a nongraduate member of the first class of women admitted, and daughter of the judge who helped codify the statutes of California. Mrs. Corella was the widow of another non-graduate who had taught French in 1871, mostly in the University's preparatory department, while himself a student. Mrs. Corella asked to be considered as Instructor in Spanish. She described herself as a California native who learned Spanish in childhood and had lived in Mexico for a number of years. With five vears experience as a Spanish teacher, she wrote, "I feel fully competent to undertake the work." Newspaper reports of her application drew a letter from a state official to Regent (and Oakland mayor) J. West Martin trusting that the fact she was not known to the Board "will not prejudice the lady's chances." Her supporter, James L. Avers, concluded,

Let me say this in answer to the objections made to placing a female teacher over this class: If you believe there would be any diffidence on the part of the young men in taking instruction from a young lady, I will say that Mrs. Corella, when teaching, becomes so identified with her calling that her personality is blinded with her vocation, and the pupil loses sight of the woman in the instructor. She is of a very sweet, amiable nature, easy and lady-like in all her actions, and what I may term "becoming" in whatever sphere she is placed.... I know from your kindly nature, you will not let

²⁴Of the 49 women who taught on the Wellesley faculty before 1920, a quarter had been teachers. In Patricia Palmieri "In Adamless Eden: A Social Portrait of the Academic Community at Wellesley College, 1875-1920" (New Haven, 1995). See also, Introduction to Geraldine Jonçich Clifford, ed., *Lone Voyagers: Academic Women in Coeducational Universities, 1870-1939* (New York, 1989).

any groundless prejudice carry you into a course that might risk harm to her.²⁵

No more successful in getting a position, was Catherine K. Martinez, who applied in 1883 to teach Spanish or French. She had taught these subjects in some of California's "most celebrated academies" for 12 years.²⁶

Despite coolness, if not outright hostility to women's attempts to become college and university faculty, the appearances of coeducation and the women's colleges provided openings, sometimes, first, as "matron" or "preceptress," anticipating the dean of women positions. Most early deans of women had been teachers, although this was not the case at Berkeley, although Lucy Sprague left the deanship to build a career in teacher education and pedagogical experimentation. founding Bank Street College of Education in New York City.27 Eventually, even at the University of California, women appeared as instructors in those departments that catered to women students: education, home economics, library science, social work, women's physical education. The liberal arts also gained their sprinklings of women faculty, women's share usually being inversely proportional to the prestige of the discipline because of high female enrollments in those fields that prepared them to teach in the schools on graduation. Because faculty women's opportunities for appointment and promotion varied inversely with the status of the institution, they found it

²⁵James H. Ayers, Office of the Superintendent of State Printing, Sacramento, to Hon. J. West Martin, March 7, 1883. This and Corella's application are both in Academic Senate Files, Box 7, Folder 18, University Archives. This same Josephine Lindley Corella—later Mrs. Phipps—told an interviewer in 1916 that it was through the persuasion of Jeanne Carr, wife of the University's later ousted professor of agriculture, Ezra Carr, that "we girls were allowed to enter the University." Carr was subsequently elected state superintendent of public instruction and Mrs. Carr became his deputy. See Flossie Banks, "A Co-Ed of '70," *Student Opinion*, II, No. 7 (March 13, 1916), 3.

²⁶Catherine K. Martinez, May 1, 1883. In Academic Senate File, Box 7, Folder 18. University Archives.

²⁷ Joyce Antler, Lucy Sprague Mitchell: The Making of a Modern Woman (New Haven, 1986).

Geraldine Jonçich Clifford

easier to succeed in normal schools and teachers colleges, women's colleges, state colleges, and in the junior and community colleges that appeared in the twentieth century.

Very shortly after the University of California admitted women as students, the news reached those assembled at the September 1870 State Teachers' Institute that the regents had reportedly adopted a rule "whereby ladies are excluded from becoming teachers in that institution." W. J. Gorman, principal of San Francisco's Tenth Street School, introduced a resolution asking the regents to reconsider, so as "to leave the more important positions of that institution open for the competition of ladies."²⁸ In his 1889 report, President Kellogg, lending credence to the earlier rumour, recommended a reversal of the board's policy against appointing women faculty. By this time women students had become over a third of the student body and a woman, Phoebe Apperson Hearst, had been appointed to the Board of Regents.

There is evidence, however, that the University remained resistant and inhospitable to those women who surmounted the obstacles. "I have always felt that I was considered a sort of pariah in the University," recalled the first of that tiny number, Dr. Mary Bennett Ritter.

²⁸Proceedings of the California State Teachers' Institute, September 13-16, 1870 (Sacramento, 1871), 12. The existence of such a rule is not mentioned in the regents' Minutes. The institute was chaired by the Revered O. P. Fitzgerald, state superintendent of public instruction and, for three years, a regent. For whatever reason the resolution lost, and the following day it was formally expunged from the record, but not from the institute's Minutes, kept by institute secretary, Kate Kennedy, one of San Francisco's most outspoken feminist teachers and leader of the successful action to require that male and female teachers be paid the same wages for equal work. Principal Gorman's faculty were exclusively women, and his sister, Katie E. Gorman, taught in the city's Eighth Street Primary School. In San Francisco Directory for Year Beginning December 1869 (San Francisco, 1869), 36, 268. If the regents' implicit policy was to exclude women from the faculty, it was undoubtedly related to a growing general concern that a further "feminization" of America's teaching staff would alienate male students as well as reduce still more the attractions of teaching to men, even within the more prestigious high schools and colleges.

Hired part-time after pressure from women students, Ritter was their physician, her salary paid by Mrs. Hearst and not the University.²⁹ So, if the University of California faculty was to maintain rapport with the state's teachers, the preponderance of them women, it would have to be done by men. And, for the short run, at least, enough of these men proved competent, sympathetic, and willing.

The "Boyish Bipeds" of the Fifth Class: The University's Secondary School

In their dealings with school teachers and principals, the University faculty and administration did not have to rely entirely on dimming memories of the lives and concerns of teachers. Rather, the first faculty members found themselves teaching both secondary and college subjects and students. At a time when preparatory school appendages were still common in American higher education, the regents created one. It represented what the faculty came to loath: a distraction from their university duties and a reminder of how far the University of California would have to travel to become a "real" university.

As elsewhere, a combination of factors was probably responsible for the decision: unprepared students, the absence of enough secondary schools locally, a democratic commitment to the education of would-be Christians and future citizens. Other reasons were the financial and political weakness of American higher education in general, personal and business connections with would-be teachers, and merchants with a financial interest in a flourishing school. In rational terms, a preparatory department promised a flow of sufficiently prepared freshmen, extra tuition income, and a channel for steering uncommitted adolescents toward the sponsoring college. Being a free university, it was probably the shortage of qualified

²⁹Mary Bennett Ritter, *More Than Gold In California, 1849-1933* (Berkeley, 1933), 206. Women students were made to feel the same by Wheeler, some faculty, and many of the male students. See Lynn D. Gordon, *Gender and Higher Education in the Progressive Era* (New Haven, 1990), 58.

students that chiefly, but not necessarily exclusively, motivated the University of California's Regents' controversial decision.

The faculty first dissented from the board's proposal for a preparatory department—a so-called "Fifth Class," came in January 1870. Troubled by the unflattering comparison with leading eastern colleges that were dropping their preparatory programs, faculty arguments centered, however, on the preferred strategy of encouraging public high schools instead of creating a competitor for them:

[W]e do not consider it expedient that a Preparatory School in connection with the University, should be organized at present;—but we think it desirable, that the High School System through out the State, should be so extended and modified as to make it available for the purpose indicated. . . . The organization of a Preparatory Department . . . would subserve only a *temporary* valuable purpose, which would cease as soon as the system of High-Schools is properly organized and co-ordinated with the course of instruction in the University.³⁰

This response gave the board an opening. Regent Tompkins, absent when the regents had accepted the faculty's opinion, persisted in favoring the preparatory school plan. Regent and State Superintendent Fitzgerald spoke of the need to link the University to the state's grammar schools. The College School of the former College of

³⁰The story may begin in 1869, when the former College of California's College School petitioned to be called the State University School, a request that divided the board. In Regents Files, Box 4, Folder 11A. On the Academic Senate's actions see *Academic Senate to Moulder, January 17, 1870*. In Regents Files, Box 4, Folder 7, University Archives. Succeeding references to the Fifth Class are documented in this folder unless otherwise indicated. For the most complete source of data on University requirements, see Herman Adolph Spindt, "A History of the Relations of the University of California and the Public High Schools of California, 1872-1935" (Ph.D. diss., University of California, Berkeley, 1946), 6-10. Legal authorization for the regents to operate a Fifth Class was pushed through the legislature by Regent (and legislator) Tompkins on January 6, 1870. The act is in *Regents' Manual of The Laws, Orders, Etc., Governing the University* (Berkeley, 1884), 43, in University Archives.

California stood ready. So the faculty "yielded to the views of the Board." While a preparatory department was an embarrassment, it was preferred to lowering entrance requirements, as happened when Ohio State University dropped its algebra requirement and gained 20 students.³¹ To equip young men to enter the Fourth Class (as the Freshman class was then called) was an acceptable argument for acceding to the regents' Fifth Class proposal. The faculty reemphasized that its agreement was for an interim arrangement that would not "disturb the present standards for admission to the *Fourth Classe*." In this spirit there was some talk of creating Fifth Classes in various parts of the state; aside from one formed briefly in Stockton, the idea fizzled, since no University funds were to be provided.³²

Teachers, some from the preparatory College School of the University's antecedent—the private College of California—were hired, along with a new principal, George Tait, former San Francisco school chief and current head of the College School. The original minimum age of 15 was raised to 16. In the first year there were 88 in the Fifth Class year, 58 of whom later became freshmen, and 262 in the following year. Principal Tait explained, in tortured prose, that he had been liberal in admitting students, "deeming that the outgoing of an impression of a hospitable spirit on the part of the University was the first desideratum, while vigor and checks and conservatism might come afterward."³³

President Durant complained that these growing numbers exceeded faculty resources. More teachers were required: "Should

³¹Frederick Rudolph, *The American College and University, A History* (New York, 1965), 260. It was reported that in 1889 only 65 of nearly 400 institutions of higher education were free of a preparatory department. Sizer, *Secondary Schools*, 37.

³²The resolution for the faculty to examine and license, "without charge upon the funds of the University, to organize Fifth Classes in any of the counties of the State... preparing Students for entering the University" was passed November 2, 1870. In Regents' *Minutes*, Vol. 1, 137, 161, 173, *et passim*, Office of the Secretary of the Regents, Oakland, Calif., hereinafter: Oakland.

³³In Regents Files, Box 4, Folder 12, University Archives. See also Vol. 1 of Regents' *Minutes*, Oakland, throughout 1871 and 1872.

not this deficiency be very soon supplied, the Class must become demoralized more sadly than before as its numbers are larger and more heterogeneous.³³⁴ There would have been yet more heterogeneity had the Fifth Class enrolled girls, but their inclusion was evidently never considered.

University faculty were heavily involved in teaching and disciplining the Fifth Class, responding to the Regent's directive that the faculty

... have the supervision of their respective departments of instruction so far as they exist in the Fifth Class course; that the Professors be required to examine the class at stated times and to report to this Board the results of their examinations; and they continue to instruct as many students of this department as opportunity shall enable them to do.³⁵

Thus the University's faculty were to do "the work of schoolmasters," precisely what Gilman later told the Johns Hopkins' trustees prevented America from having any real universities.³⁶ From the public's perspective, however, a greater worry was that the contact with University students had a bad influence on the Fifth Class and the primary-school boys at the adjoining College School. In turn, the boys' behavior around the school and on Oakland's streets embarrassed the regents. The board finally adopted and printed rules against preparatory students visiting "any drinking or billiard Saloon in the city or township," and asked the faculty to enforce the prohibitions; the regents did not specify how that was to be done.

There were still other problems. Various regents had insisted on opening the Fifth Class to students who could not pay tuition, or who

³⁴President Henry Durant to Regents, Jan. 7, 1871, Academic Senate Files, Box 4, Folder 7, University Archives.

³⁵Regents' meeting of December 22, 1870. In Regents' *Minutes*, Vol. 1, 186-87, Oakland.

³⁶Flexner, *Gilman*, 51. Opportunistic local citizens, however, were not above delaying local public high schools—and their burdens on the property tax, by supporting preparatory departments at public colleges, normal schools, and universities, which were state funded.

were unable to find comparable schooling elsewhere. This strained the University's budget, ultimately eroding regental support for the preparatory class. By mid-1871 Tait was instructed to impose tuition fees on nonboarding students and, during 1872, he was exhorted to "use all efforts" to collect on the unpaid bills of boarding pupils.³⁷ The whole experiment was ended, in a sour mood all around, after these two troubling years. Twenty years later the regents reluctantly accepted a gift to establish and operate the Wilmerding School, where boys were to be taught trades by practical work, but as soon as possible they divested themselves of this new, onerous, and distracting sideline.³⁸

There was some consolation in knowing how general the problem was in the United States. Of the 23 state universities operating in 1870, only one, Michigan, is known to have had no preparatory department or school. Hampered by the general absence of public high schools in a thinly settled state, the University of Minnesota opened in 1867 with a preparatory school—and nothing else! Two years later, trying to upgrade itself into a mere college, it dropped all preparatory work except in Latin. Student numbers in the University of Washington's Collegiate Department (71) no sooner exceeded its Preparatory Department (68) than four other would-be colleges opened in competition. At century's end there were still over 70,000 secondary students—9.7 percent of the total—enrolled in ostensibly higher education institutions, most of them in tuition-dependent colleges and universities.³⁹

³⁷In March 1874 Moulder reported that \$2,045.39 represented "deficiencies in consequence of inability to collect tuition fees from day students." University Documents, Vol. 1, 49. University Archives.

³⁸Notice of the Wilmerding School gift appears in the Regents' *Minutes*, Oakland, for July 23, 2895, and periodically thereafter.

³⁹The distribution was as follows: in public institutions, 8,219; in private women's colleges, 13,817; in other private colleges and universities, 48,066. In U.S. Commissioner's Report for 1899-1900, in Elmer E. Brown, The Making of Our Middle Schools (New York, 1902), 467. On territorial Washington, see Florence B. Anderson, Leaven for the Frontier: The True Story of a Pioneer Educator (Boston, 1953), 313, 395-96.

The Spectre of Institutional Competition

All early California institutions competed for the same tiny supply of academy and high school graduates and the privately tutored, and all enrolled more preparatory than college students. In 1852 the head of young Santa Clara College admitted that "we do not now claim for it even the name of a college," being merely "a select boarding and day school." One Jesuit called Santa Clara a "nondescript" institution with "an infant school on one end and degrees at the other." In 1875, only one-third of its 275 students were doing college work.⁴⁰ The College of California had sold off management of its preparatory department, the College School—the largest preparatory school on the west coast—to raise funds. In so doing it lost the school's income and perhaps hastened its own demise. In 1870, 14 California colleges other than the University together enrolled 515 students, 351 of them preparatory students.

Schoolmen were especially apt to think that college and university preparatory departments retarded, rather than inspired, the development of high schools since their existence weakened the argument for public secondary schools. When the famous Henry Barnard was appointed chancellor of the University of Wisconsin in 1859, his first recommendation was that the preparatory department be disbanded, and that each larger town be charged with preparing future freshmen in a high school. Not until 1880, however, did University authorities reluctantly close the department that enrolled up to a third of its total students. By so doing, they finally heeded "the insistent demands of representatives of high schools."⁴¹

⁴⁰Like the majority of Catholic colleges nationally, Santa Clara accepted students as young as six years of age. The junior (elementary) divisions finally closed in 1911, and the high-school component was moved offcampus only in 1921. In University of Santa Clara, A History From the Founding of Santa Clara Mission in 1771 to the Beginning of the University in 1912 (Santa Clara, 1912), esp. 57-104; Gerald McKevitt, The University of Santa Clara, 1851-1977 (Stanford, 1979), 28-29, 92, 170-71.

⁴¹Curti and Carstensen, *Wisconsin*, 79, 101, 110, 177, 317, 364, 484-86, 494. A similar complaint was made against having a normal department within the University, as being in competition with private academies' In California, a schoolmaster heaped ridicule on the regents' decision to open the Fifth Class, part of his broader attack on regental management of the University of California. Applying the standards of his native Germany, Gustavus Schulte, teacher at the Female College of the Pacific, an academy in Oakland, argued that, over the

strenuous remonstrances of the faculties, the students, the Press and the people, the Regents had *lowered* instead of raised the *low* standards of the University, an institution by the people and the Legislature ordained to be the crowning fabric, pure and undefiled, of the widely ramified educational system of the State; [and] . . . incorporated a boarding school for boys—a Kindergarten . . . antagonistic to the true character of any University; as interfering with the interest of preparatory schools at Oakland and elsewhere . . . a disturbing agent, an unwieldy weight, an incubus of debts, deficits, rubs and frictions, now long deserted by the boyish bipeds, to the great delight of students and professors, and even of the erudites in the secret conclave.⁴²

Unlike private colleges that promoted academies and high schools in their own region primarily to ensure an adequate supply of qualified freshmen,⁴³ to pay institutional bills, and often to promote

⁴³Thus, President McCosh obtained funds to open a preparatory school within the College of New Jersey (Princeton); after its failure, he pressed for academies, one of which, Lawrenceville, became a major feeder—analogous to Phillips Andover and Phillips Exeter as feeders for the New England

financial interests in preparing teachers (p. 118). Also Edith Nye Macmullen, In the Cause of True Education: Henry Barnard and Nineteenth-Century School Reform (New Haven, 1991), 223.

⁴²Gustavus Schulte, "Our State University," in *Pamphlets Historical*, I, (7), 2, University Archives. In a later missive he charged, "For the grounds and buildings of a decaying private school to be converted into the kindergarten were paid \$112,476.25"—money diverted from the Morrill [federal grant] funds. In "Columbia's Wrath," *Pamphlets Historical*, I, (8), 13. Schulte wrote again, from Napa where he was teaching in a female seminary, advising the regents about how to meet their retrenchment needs by reforming the teaching of modern languages. In *Schulte to Regents, October 18, 1881*, Regents' Files, Box 7, Folder 18, University Archives.

a sponsoring religion, public universities were expected to aid high school expansion as a general good. Visualized as the capstone of the state's educational system, the University of California had a duty to assist public schools. In this spirit, Henry M. Bolander, state superintendent of public instruction and regent, President Gilman, five members of the faculty, the principal of the State Normal School, and 13 high school representatives met in February 1873 to discuss the broader problem of preparing students for the University. This was the second of what became many such meetings to facilitate cooperative relationships, with sometimes diverging perspectives on what the problems were as well as on how to solve them.⁴⁴

"A MORE INTIMATE RELATION": THE UNIVERSITY AND THE ACCREDITATION OF THE HIGH SCHOOLS

As the defunct College of California had looked to Yale, the University of California invoked the example of the University of Michigan. When the Academic Senate and the regents suggested that "fifth classes" be created around the state, they may have had in mind the early Michigan plan whereby the University established collegepreparatory branches in various areas.⁴⁵ There is no doubt, however,

colleges and universities. Graduates were often pressed into opening such preparatory schools, for public schools did not fit into McCosh's plans. In Patricia Graham, *Community and Class in American Education*, 1865-1918 (New York, 1974), 189-90.

⁴⁴"Conference of High School Teachers," in *California Teacher*, 10 (February 1873), 270-85. Accepting the principle of cooperation, not competition, in later years the argument was made that the University should not open its Extension offerings to sub-University courses like typing since these could be taught in secondary schools. President Kellogg in *San Francisco Examiner*, February 26, 1893. Cited in Kathleen Penfield, "Academic Excellence vs. Public Service: Conflict and Accommodation within the University as Revealed in the Development of University Extension of the University of California" (Ph.D. diss., University of California, Berkeley, 1972), 40 *et passim*.

⁴⁵Willis F. Dunbar, *The Michigan Record in Higher Education* (Detroit, 1963), 176.

about the origin of the scheme for inspecting high schools. After inspection, approved schools could send recommended graduates to the University without further examination: Michigan's innovation, begun in 1871, was repeatedly mentioned both by University of California and public school leaders who supported the same arrangement with Berkeley.⁴⁶

The Accreditation Principle

The articulation of secondary and higher education is an enduring political, philosophical, and practical issue. By 1900 the states outside of the northeast had largely replaced the increasingly inefficient system of an entrance examination administered by each college, with the accreditation or certificate plan.⁴⁷ While for the most part state departments of education and regional associations of secondary schools and colleges eventually acquired this function in the later ninetcenth century, state universities assumed the primary, In 1884, California followed if not exclusive, responsibility. Michigan, Iowa (1872), and Wisconsin (1876) by adopting a policy of sending a team of faculty to those public high schools requesting inspection for the purpose of seeing their graduates admitted to the University without examination. In 1888 the regents added private schools to the plan, at their request, providing they met visitation costs. Graduates of nonaccredited schools, like applicants prepared

⁴⁶Jones, *Illustrated History*, 153-58. In its *Memorial to the University* of *Michigan* on its semi-centennial, the Academic Council of the Academic Senate specifically acknowledged that university's contribution through "the beneficial influence exerted upon the school system of the state through the connection established with the high schools" Academic Senate Files, Box 2, Folder 39, University Archives.

⁴⁷Even in New England this approach found favor. Wellesley College approved schools and then admitted on certificate. It did not, however, inspect schools. The plan is described in *Wellesley College Catalogue*, 1887, 24. Copy in Academic Senate Files, Box 3, Folder 3, University Archives. This section depends heavily upon Spindt, "Relations." See, also Joseph L. Henderson, *Admission to College by Certificate, Teachers College Contributions to Education*, No. 50. (New York, 1912).

by tutors or parents, had the option of taking the University's entrance examination; in time the regents authorized the faculty to administer these examinations in convenient sites around the state.

The first official sign of the faculty's recognition of the high school record as a factor of admission came in October 1880 when the Academic Senate—the whole body of regularly appointed members of the faculty—asked high school principals to send a statement of academic fitness along with each applicant. A month later Professors Sill and Welcker presented a motion and after a divided vote the Senate published an offer: high school principals were invited to request visits from University faculty for the purpose of reporting on the kind and quality of instruction being received. A favorable report guaranteed admission of an applicant to the University on a principal's recommendation.⁴⁸

This collaboration got off to a rough start when the regents withheld approval from Oakland High School and Boys' High School of San Francisco, possibly because of disagreements within the faculty and the opposition of private school headmasters to a plan that appeared to favor public high schools. Meanwhile, in an effort to improve admission procedures and high school graduates' performance, the University's oral entrance examination was replaced by a written version, and examples of questions were sent to public school teachers. The visitation and accreditation plan languished only briefly, however, because President William T. Reid, formerly Boys High School principal, reopened the issue in 1883. He informed the regents of invitations in hand to visit preparatory schools and received the board's authority to accept them "in order that a more intimate relation may be established between the University and the schools of the State."⁴⁹

⁴⁸Report of the Committee on Relations Between the University and the Preparatory School, Academic Senate Papers, Box 1, Folder 5, University Archives.

⁴⁹Annual report of the Secretary to the Board of Regents . . . Year Ending June 30, 1883. In Spindt, "Relations," 23.

Reid viewed the benefits as twofold: the University protected its standards while helping secondary schools to raise theirs.⁵⁰ He secured a motion from the regents requesting the Academic Senate to consider a plan for admitting graduates of approved preparatory schools. The earlier-drawn scheme was resurrected, and the regents' approval of the whole came on March 4, 1884. A standing Committee on Examination (or Visitation) of Schools, the so-called "Schools Committee," was established in 1886, and persisted even as the University and the schools changed.

University accreditation quickly displayed its power as a carrot and a stick. San Francisco's Boy's High School was among the first to win approval. In 1885, however, the University faculty recommended that "the Principal be notified that unless a thorough and radical improvement takes place in the instruction in English" the school would be dropped from the approved list. The next year Professor C. B. Bradley of the Schools Committee commented again on inadequate instruction in English. Professor Stringham reported that the teaching of mathematics was similarly poor, being conducted by several different teachers who taught other subjects, often without seeming enthusiasm. Stringham added that his assistants at the University found the San Francisco graduates poorer in their work in mathematics than some who were prepared elsewhere. For the "welfare of the school itself and on account of its important relations to the University," it was hoped "that the principal and the Board of Education would reorganize the instruction." Principal Blackburn acknowledged that "certain orders of the Board in regard to the school seem to me changes in the wrong direction, and such as the Faculty would not be likely to approve." The critical reports were sent to the San Francisco School Board, the faculty believing, in President Kellogg's words, "that the disinterested testimony of its Committee

⁵⁰Reid, Addresses at the Inauguration of W. T. Reid as president of the University (1881), 26. In Spindt, "Relations," 24.

Geraldine Jonçich Clifford



Figure 7: Calaveras County Teachers' Examination, 1893. University of California graduates could escape such trials by getting the University's Teacher's Recommendation, allowing them to teach in any county in the state.

۴

may be of service to the authorities having the interests of the School in charge."51

The state's larger towns and cities had the means and the incentives to establish and improve high schools. City populations were sufficiently large to reduce the per-student costs of high schools to a level that their wider tax bases could support. Cities' mixed economies offered more professional and commercial employment for which high school and even university graduates might be wanted. Cities were also places of anonymity and incipient bureaucracy, where formal credentials were more often called upon to substitute for personal estimates of worth. And the cities were less likely than rural and small town America to provide adequate occupational teaching at parental knees, while cities also received most of the immigrant children, whose families typically ended their schooling at or before the legal school-leaving age. Meanwhile, the lower-middle class. native-born American began to see high schools as a way of maintaining their children's status advantages over scrambling newcomers.52 Thus, the public high school was the logical extension of the graded primary and grammar schools, the adoption of free and uniform textbooks, the better-educated teacher, and the semibureaucratic school administration of an urbanizing America.53

When Principal Clark requested University examination of his Los Angeles High School in 1888, he admitted, "I do not feel positive that the school will give perfect satisfaction in every particular, but I am hopeful that its condition may in general be found satisfactory, and at any rate desire your judgment." In sending the requested, unculled samples of his students' examination papers, Clark took pains to inform the University that rapid growth in his city had put all pupils on half-day sessions, and that the high school lacked a building of its own and facilities for using newer methods of teaching

⁵¹The school remained accredited. Academic Senate Files, Box 1, Folder 56; Box 2, Folder 15, University Archives.

⁵²Robert L. Church, Education in the United States: An Interpretive History (New York, 1976), 155-56, 181-86.

⁵³Some of these points are made in Sizer, Secondary Schools, 6-10.

science.⁵⁴ In some cases the success of their graduates at the University encouraged principals of unaccredited high schools to request examination and accreditation. Modesto High School did this in 1889.⁵⁵

Exhorting local school boards and citizens to establish and improve high schools or, at least, to attach high-school level classes to a grammar school, and exploiting local pride and promoting competition among communities and schools, were deliberate strategies used by University faculty. The Schools Committee prodded schools to ensure that matriculation subjects were offered. and to an acceptable standard, by qualified teachers.⁵⁶ Because the University in those days had two major parallel courses of study-the classical curriculum in the College of Letters and the modern in the several Scientific Colleges-it was possible to ask that courses meeting the entrance requirements of the latter at least be available. This was not, however, the only proposal heard. In 1879, for example, the principal of Berkeley High School offered a plan whereby the high school diploma would be the sole basis for university matriculation, although the diploma itself would be awarded on the basis of a test administered by the University. Resembling the "Regents Diploma" plan in New York and other systems of centralized external examination, the proposal died for unknown reasons.

⁵⁴F. H. Clark to Stringham, Dean of Faculties, May 10, 1888, and Clark to Academic Senate, February 26, 1889. Box 3, Folder 24, University Archives.

⁵⁵S. C. Phipps to President Davis, March 16, 1889. Box 3, Folder 24, University Archives.

⁵⁶The faculty may have raised a collective eyebrow at the numerous misspellings of a holder of a New York regents diploma, who had also won a competitive scholarship to Cornell. His father's death required a move to California and an application to the University. He was admitted, graduated successfully, took a Ph.D. from the University, and progressed to professor of chemistry—so much for the predictive power of correct spelling! Walter C. Blasdale to President Holden, March 15, 1888. Academic Senate Files, Box 2, Folder 39, University Archives.

Operation of the System

The University's visitation and accreditation plan worked haltingly at first; only nine of the state's 20 existing public high schools were accredited. Few adolescents wanted, or were even able, to prolong their schooling past age 14, much less into the productive years of young adulthood. This fundamental situation frustrated the University faculty's desire to increase the depth and breadth of high school teaching specializations. When its principal wrote to the University in 1890, the senior class of Ventura High School had only one student, Roberta T. Lloyd, pursuing a "kind of special course."⁵⁷ Rural and village communities lacked the critical mass to offer effective classes at a cost that communities were willing to pay.⁵⁸ It seemed grossly undemocratic to spend four times as much to educate a high school student than to instruct one common school pupil.

In California and elsewhere, workingmen's organizations were more concerned with doubling the common school's minimum term from three to six months than they were in promoting high schools. Under the revised Constitution of 1879, the state was precluded from supporting high school enrollments in apportioning the State School Fund or state tax revenues.⁵⁹ The University's faculty and regents,

⁵⁷Samuel T. Black, March 19, 1890. Miss Lloyd was admitted, joined other women students in petitioning for equality in the use of the gymnasium, and graduated in 1894. Academic Senate Files, Box 4, Folder 21; Box 5, Folder 16, University Archives.

⁵⁸Much of the celebrated growth in high school enrollments nationally, especially in the years 1880-1920, probably came from make-shift arrangements like Ventura's, or the adding of a high school level course, like algebra or chemistry, to a one-room school's curriculum for the benefit of a few of the older pupils.

^{5%} The public school system shall include primary and grammar schools, and such high schools, evening schools, normal schools and technical schools as may be established by the legislature or by municipal or district authority; but the entire revenue derived from the State School Fund and state school tax, should be applied exclusively to the support of primary and grammar grades." Constitution of the State of California, 1879. Art. IX, Sec. 6.

Geraldine Jonçich Clifford

successive state superintendents of public instruction, various of the state's teachers' institutes and organizations, newspaper editors, and others petitioned for a constitutional amendment to fund public high schools. Partial relief came with the Caminetti Act (1883), which allowed elementary schools to add "grammar grades" courses that would prepare students for the "scientific" (i.e., modern) courses of study at the University.⁶⁰ This compromise retained the populist intent of the Constitution, which was primarily to withhold support from classical studies.

The ideological character of the high school issue showed itself again in 1898 when the governor vetoed a bill authorizing high schools if approved by the voters of a county. In 1891, however, school districts of larger towns were allowed to open high schools using specially raised local, not state, tax revenues. Several elementary school districts were also permitted to join in creating a union high school district, and these greater tax bases undermined taxpayer resistance and encouraged new high schools. The state's total swelled accordingly: from 24 in 1890, to 87 in 1894, to 98 in 1896. The number accredited by the University grew apace: from 17 to 43 to 61 in these same years. In 1899 there were 118 high schools in California, and 72 of them had full or partial approval from the University.⁶¹

One of the most dramatic shifts in the history of schools in the United States was the rapid reversal of the relative positions of private and public secondary schools. In 1880 the private sector had more students. By 1888 public school enrollment had surpassed that of private schools, and by 1900 the private sector educated a mere 18

⁶⁰Anthony Caminetti was a "back country Democrat" known for his long fight against the Southern Pacific's influence in California's politics and economics, according to George E. Mowry, *The California Progressives* (Chicago, 1951), 61. Another "Caminetti Act" appeared in 1907, authorizing high schools to use their funds to add two years at the top, bringing the junior college into existence.

⁶¹Data drawn from the Biennial Reports of the State Superintendent of Public Instruction and the Biennial Report of the President of the University, 1902-1904. In Spindt, "Relations," 64.

percent.⁶² Yet many of the new public high schools were tfily. Principal Hall of Vacaville High School near Sacramento, Superintendent Heaton of Fresno, and Professor Frederick Slate of the University's physics department found that 37 of 71 reporting high schools had only one or two teachers. The University was not able to increase the minimum number of teachers required for accreditation from two to three until 1903. By 1917, however, only 30 of the state's 280 high schools had as few as three teachers, the mean number was 12.⁶⁴

One of the most contentious elements in the accreditation scheme required principals of approved schools to recommend graduates for admission. While this signaled confidence in the professional judgment of school heads, it also subjected them to intense pressure not to deny recommendations to the academically marginal offspring of influential, or at least noisy, citizens. Principals' irritation grew when the University began to rank accredited high schools on the basis of their graduates' performance at the University, and to publish the rankings. Insult was added to injury, particularly among smaller high schools, when the University's Examiner of Schools proposed in 1915 that schools on the "A" list would be automatically reaccredited for the next year unless changing conditions dictated otherwise. Always vulnerable under the American system of lay control, and untenured in their positions, school superintendents and principals felt trapped between University standards and local public opinion. They were not appeased by the University's public statements that a place on the "B" list did not reflect on the school's value

⁶²Ronald Story contends that Harvard's rising entrance requirements, and their spread to similar institutions, solidified a relationship with elite preparatory schools—some private, some, like Boston Latin Grammar, public. This permanently *tracked* secondary education along class lines. In "Harvard Students, the Boston Elite, and the New England Preparatory System, 1800-1876," in *The Social History of American Education*, ed. B. Edward McClellan and William J. Reese (Urbana, Ill., 1988), 73-90.

⁶³Edward L. Thorndike, "A Neglected Aspect of the American High School," *Educational Review*, 33 (March 1907): 245-55.

⁶⁴Alexis F. Lange, "The Junior College—What Manner of Child Shall This Be?" (1917), in *The Lange Book*, ed. Arthur H. Chamberlain (San Francisco, 1927), 107.

to the community or to its noncollege-bound students. In 1929 a committee of representatives of the University, the Association of Secondary School Principals and the State Department of Education, finally reached a compromise: individual schools were identified publicly not by name but by a code number.

A Changing Relationship: Diverging Values and Careers

Such modifications in policies and procedures responded to new realities in the schools, the lessons learned from experience, a growing independence of schools from University influence, and even older pragmatic tendencies in a competitive marketplace. Many high schools found it impossible to secure full accreditation. In 1892, for example, only 11 of 31 schools were fully accredited.⁶⁵ So the University acquiesced by awarding partial approval, permitting an affected student to take the entrance examination in the nonapproved field *or* to be admitted "on condition." Approval by subject rather than by school probably saved the plan.

In another accommodation, after an 1889 meeting with high school teachers the University substituted "Government of the United States" for the existing history and geography requirements. Accreditation and consultation on University entrance requirements had so many advantages to high schools that the regents' decision to cease faculty visits, after the nation's economic collapse in 1893, brought enough protests that sufficient appropriations were restored to permit schools to be examined in most subjects. Both sides gained, for simplicity's sake, when different matriculation requirements for the University's several "colleges of general culture"-classics, letters, social sciences-were ended after 1901. A single pattern of prerequisites was adopted. This was also consistent with the thrust of Harvard President Charles W. Eliot's belief, which shaped the Committee of Ten's Report: that the satisfactory completion of any approved secondary school curriculum should be considered full qualification for college admission.

⁶⁵Milicent Washburn Shinn, "The University of California," *The Overland Monthly*, 20, No. 119 (November 1892), 595.

In the 1890s Michigan and Minnesota substituted a Schools Examiner for faculty teams. The growing demand on University of California professors, given the proliferation of high schools and the presence of a new Department of Education at Berkeley, prompted California to adopt a variant of this idea in 1903. A University Examiner of Schools was hired to visit schools for half the year, teach in the education department the second half, and chair the Schools Committee. Members of faculty inspection teams were now also expected to observe instruction in two or more fields. This reduced the emphasis on subject-matter specialization and probably lessened the inspector's interest in all that was being observed in the high schools. (In 1937 the University ceased altogether on-site inspection of already-accredited schools.)

Under the old examination system, secondary schools wishing to send college-eager graduates to higher education were at the mercy of the examining college, whose curriculum was ordinarily rigidly designed and narrowed. The accreditation system, however, entailed not only visitation, inspection, and "grading" of schools but consultation, compromise, and the possibility of co-optation. It built the selfconfidence of secondary school teachers and principals in their own judgment and helped convince them that they possessed the most relevant knowledge about their own students, and, most importantly, about their own educational mission. The result was a broadened approved curriculum for both terminal (life-oriented) and preparatory (college-oriented) students. "The examination system is one largely of domination," concluded a former University of Texas professor and school visitor, while "the true certification system is one of cooperation."⁶⁶

Diverging Careers: Professors and Schoolpeople

Alexis Lange had been appointed assistant professor in English in the University in 1890 and progressed up the academic ladder, but when the School of Education was created in 1913, he was appointed

⁶⁶Joseph Henderson, "Admission to College by Certificate," *Teachers College Contributions to Education*, No. 50 (New York, 1912), 151.

its head. With a new position came a new constituency, and Lange had something of a different song to sing. Thus he quipped to junior college faculty (almost always former high school teachers), "Educational thinking is usually the last thing a university faculty thinks of."⁶⁷ This was not, of course, true, but the bonds between the various sectors of education were weakening. As school administrators gained more power in enlarging school *systems*, they became less deferential. Men who might once have taught school before finding another career—including the professorate—were being drawn immediately into the lengthened preparation for the chosen profession. Between 1850 and 1900, the census reported the professorate to be among the fastest growing professions, and the Ph.D. assumed growing importance as a qualification in more academic disciplines after 1900 or so. For University, if not college, positions, there was little time to waste.

As the University faculty became larger and more diverse, and the numbers of California high schools wanting inspection grew, it seemed expedient to appoint as visitors those professors with long academic experience. But, as the University's pedagogy professor explained in 1900, in the increasingly self-conscious teaching profession, "experience as a teacher in secondary schools is regarded as a qualification of no small importance."⁶⁸ However, this experience was becoming scarcer at the University. One of its longest-serving professors regretted that the scientific insights he offered teachers had to be worked out in practice by others:

I regard it as a real misfortune that I have never had any experience in the school room. Such experience is very important even to the thinker and writer on education. It is absolutely necessary in carrying out principles and practice.⁶⁹

⁶⁷Lange, "The Junior College" (1917), in Lange Book, 93.

⁶⁸Elmer E. Brown, "Secondary Education," in *Monographs on Education in the United States* (New York, 1900), ed. Nicholas M. Butler, No. 4, 26-2.

⁶⁹Joseph LeConte, "Sense Training and Hand-Training in the Public Schools," *Pacific Educational Journal*, 3, (March 1888): 41-52. Bound in LeConte, 3, Miscellaneous Writings, Bancroft Library.

As University faculty were seemingly becoming more the "academic" than the teacher, teachers and administrators in public schools were themselves becoming more "teacherly." Despite their overlapping interests, Harvard's Albert Bushnell Hart, who served on the History Conference of the Committee of Ten on Secondary School Subjects, felt moved to complain: "It is well known that college professors are not included [any longer by schoolmen] within the popular definition of the word 'educator."⁷⁰ The negative response to the Committee of Ten's 1893 report was led by public school people like Chicago's school superintendent A. F. Nightingale; his was part of a general, and increasingly assertive declaration-of-independence on behalf of the noncollege bound high school student.

"The high school is for the 95% that never go father," asserted W. Scott Thomas, principal of San Bernardino High School, and later University of California Examiner of Schools. "The studies which have in them the most for the future citizen," he argued, "should receive special attention—such as history, science of government, economics, and all the sciences." Of course, school people and university people did not line up consistently on opposite sides of this question. At the same teachers' convention where Thomas uttered his challenge, the University's professor of philosophy, the former schoolteacher George Holmes Howison, agreed. He faulted the high schools for themselves thinking overmuch about college preparation.⁷¹

Beginning in 1884, shared backgrounds, frequent conversations, and mutual need built agreements between representatives of the university and the schools to broaden the array of subjects recognized for admission to the University. In 1909, they granted entering students limited matriculation credit for high school work in general science, applied and mechanic arts, domestic science, agriculture, commercial subjects, economic geography, and music—a veritable

⁷⁰In National Education Association Proceedings (1894), 338. In Sizer, Secondary Schools, 103.

⁷¹W. Scott Thomas and George H. Howison, both in *Pacific Educational Journal*, 11, (January 1895), cited in Spindt, "Relations," 43-44.

curriculum revolution.⁷² After 1,900 high school leaders increasingly questioned the University's specification of content for approved subjects, and even the subjects themselves—the evolving "A to F" requirements so familiar to later University students, their teachers, parents, and counselors.

The new High School Teachers Association became an effective voice in adjusting the "delicate relations" between the University and the schools. Association President Beidenbach diplomatically said of these matters "It is not right to say that they have been strained or even that there has been friction" so much as a problem of misunderstanding. As part of a general movement to, open up the curriculum and make time for more utilitarian subjects, the association's initial proposal was to reduce the total amount of foreign language study required for University entrance (to below five years) and to make both Greek and Latin optional in meeting that requirement. Given such a decided difference of opinion, the only possible resolution was to move such disputed subjects from being entrance standards to becoming requirements for junior-year status, i.e., students could make up a portion of their high school deficiencies during the first two years of University work. "Granted that Latin is prerequisite to adequate university specialization in languages, literature, history, philosophy, and law," argued Professor Lange in 1908, let us move "the day of final judgment from the beginning of the freshmen to the end of the sophomore year."73 This approach was consistent, moreover, with the general trend in American higher education to use the first two years of college for general and preparatory studies and the last two years for specialization in one's major field of study.

Put differently: higher education and schools nationally were working out a new *modus vivendi*, even as fewer, on either side, would quite know the literal meaning of those words. Somewhat ironically this 1907 compact brought back into the universities certain of the studies that colleges had been pushing down into the high schools—by making them entrance requirements—during the second

⁷²Spindt, "Relations," 109.

⁷³Alexas F. Lange, "Self Directed High School Development" (1908), in *Lange Book*, 61.

half of the nineteenth century. Concepts such as lower division (prolonged secondary or general education for the purposes of "liberal culture") and upper division (the beginnings of a German-like specialization) were being institutionalized. A new graduate division completed the California version of a gymnasium-university nexus as Americans understood the much-admired German system. Another chapter in the story of the overlapping of school and university was being written.⁷⁴

Then and later, of course, educators differed on the pace of desired change. "The high school ship was moving slowly along narrow safe channels, rather than progressing boldly through seas that might become stormy," was how President Geer of the Representative Council of the Association of Secondary School Principals later put it. "I and we felt that the ship was anchored at both ends to the University drydock, not as much for the preparation of the ship for a famous voyage, but the care and protection of the barnacles."75 As early as 1905 many public school leaders believed that the new type of rigorous psychology was effectively demolishing the oldest argument for requiring a specific pattern of high school subjects for university matriculation: namely that certain subjects gave mental discipline, i.e., they purportedly "trained" the mind as well as "filled" the mind. Experiments measuring the results of studying abstract and irrelevant subjects (like Latin or geometry) for developing some presumed mental faculty, proved the lack of transfer from one subject to another, as, for example, from doing geometry to doing debating. Thus, those who argued for including school subjects on the basis of their demonstrated practical value were being strengthened in the

⁷⁴Such matters also encouraged Academic Senate committees to think of the new junior colleges, summer sessions, University Extension, and the nondegree curriculum of the College of Agriculture at Davis as places to take care of the question of where algebra and geometry were to be taught; these subjects were the two most irritating examples of what University spokesmen considered strictly high school responsibilities. See Spindt, "Relations," 146-48, 183.

⁷⁵Charles L. Geer, Report of the President . . . (Mimeographed, April 14, 1936). Cited in Spindt, "Relations," 186.

struggle over the high school curriculum. Meanwhile, anti-elitist forces in American education were undercutting the second (and hallowed) argument for prescribed requirements: that no person having completed this or that curriculum could possibly be considered liberally or truly educated without having studied it. Academics found themselves challenging this rationale if their *own* subject lay outside the traditionally defined core of a liberal education. But it was the embittered and defeated high school and college classics teachers who remained the most committed to the traditional curriculum, and who most needed its justifications. The third, and most solid, rationale was left to carry the day: the argument that specified high school subjects were substantive prerequisites to University studies.

In 1903, Elmer E. Brown, the University's professor of pedagogy, reminded his colleagues that their votes on entrance requirements would become "legislation for the internal workings of secondary schools," admit it or not. Such legislation should at least build on "some intelligent conception of the nature and functions of the secondary school." Brown thought that the accrediting system represented "the evil of subjecting the secondary schools to tests and influences somewhat foreign to the real purposes of secondary education."⁷⁶ Yet, the University also had a history of readiness to compromise, and the pressure to do more was there. By 1918 the University's total foreign language requirement was lowered to two years, and Latin was not specified.⁷⁷ Disagreements about the content, teaching, and standards of academic subjects in the high schools soon raised questions about including vocational subjects like home economics, business, and industrial arts in the high school

⁷⁶E. E. Brown, *Making of our Middle Schools*, 442; E. E. Brown, "Secondary Education," in *Monographs*, 26-28. In Spindt, 'Relations," 92.

⁷⁷Latin did virtually perish. In 1915 slightly more than a third of America's high school students were studying Latin to some level of competence; a half-century later it was five percent and in 1990, one percent.

curriculum of every future citizen, including the college bound.⁷⁸ Disparities in viewpoint both persisted and shifted as new battle grounds were glimpsed and staked out. It could hardly have been otherwise, given the greater variability of the high school population, the better articulation of competitive versions of the purposes of secondary education, and the fact that high school teachers and principles were themselves better educated and career-minded—due in large measure to the University itself. By preparing educators of every stripe, from kindergarten teachers to the central office curriculum staff, for country schools and normal schools, professors were arming what were, on occasion, their adversaries. And the solid majority of these were women.

THE UNIVERSITY'S WOMEN: "SCHOOL TEACHERS AND OLD MAIDS"

Benjamin Ide Wheeler's Presidential Biennial Report of 1899-1900 revealed that 77 women and 37 men, among 221 graduates in 1900, applied for a teacher's certificate. Wheeler, for one, found this a bothering statistic. So, in the fifth year of his presidency he held his first meeting with the Associated Women Students. Perhaps out of wishful thinking, he lectured them:

You may have the same studies as the men, but you put them to different use. You are not here with the ambition to be school teachers or old maids; but you are here for the preparation of marriage and motherhood. This education

⁷⁸For example, Oscar D. Robinson, principal of Albany (N.Y.) High School and the only working representative of the public schools on the Committee of Ten (except for the Principal of Boston's Girls High and Girls' Latin), argued for penmanship, manual training, and business subjects as recognized high school subjects for any purpose, including college admission. In Sizer, *Secondary Schools*, 143.

should tend to make you more serviceable as wives and mothers.⁷⁹

The intentions of most of those women students are no more known than are those of most male students. but the actions of many are recorded. Women did marry, sometimes leaving college before graduation to do so; large but unspecified proportions of men also left without completing. In growing and then in greater numbers than University men, Wheeler to the contrary notwithstanding, many other women evidently did intend to teach, came to the University for that purpose, and entered the state's schoolrooms. Some taught briefly. before marriage or taking up another career, but others found lifetime work in teaching. The ambitions of certain women graduates, like their male teacher counterparts, led them from teaching into the burgeoning field of school administration and even into its leadership cadres. An act of 1874 had made California's women eligible to hold school offices, and in 1876 four women were elected county superintendents of schools. In 1911 the successful extension of school suffrage into general women's suffrage in California found them gaining many more elected county superintendencies. Of 52 such posts in 1915, 24 were held by women, including University graduate Florence Barnes ('03) of Sonoma County.⁸⁰ Mrs. Emma J. McVicker

⁷⁹As reported in *Daily Californian* (September 1, 1904). Wheeler's domestic preferences did not translate into a curriculum in marriage and motherhood. Mary Ritter's course in household hygiene died when she resigned her now-unpaid position as women's physician, and the Department of Home Economics was not formed until 1916. See Lynn Gordon, *Gender and Higher Education in the Progressive Era* (New Haven, 1990); and Maresi Nerad, "Gender in Higher Education: The History of the Home Economics Department at the University of California at Berkeley" (Ph.D. diss., University of California, Berkeley, 1988).

⁸⁰Clotilde Grunsky, "College Women as Teachers," in *California Alumni Fortnightly*, 9, No. 4 (March 4, 1916): 55; Barnes data in California Alumni Association, *Directory of Graduates* (Berkeley, 1916) and Robert Sibley, ed., *The Golden Book of California* (Berkeley, 1937). Unless otherwise noted these are the sources from which occupational data hereafter provided are drawn without citation. On women in county superintendencies see, also, Roy W. Cloud, *Education in California: Leaders, Organizations,*

(M.S.,'03) returned to her native Utah, to be elected state superintendent of public instruction and a regent of the University of Utah.⁸¹ Wheeler did not mention women in electoral politics in his address, but the female graduates of his own university did sometimes follow that calling.⁸²

The Bumper Teacher Crop

Whether out of some impatience with his "Pelicans," the unflattering term the male students had given "coeds," or paternalism, Wheeler employed in 1906 an attractive, well-connected woman of a wealthy family as the University's first dean of women. (He evaded questions about why California did not have as many women faculty as Stanford had.) The graduate of an eastern women's college, Lucy Sprague found at Berkeley a conservative faculty and discrimination against women that students had built into their subculture. She also found nearly 2,000 women students, 92 percent of whom were applying for teachers' certificates.⁸³ Perhaps because of her social class background, perhaps because she herself had never taught or contemplated it, perhaps out of a youthful idealism that maintained

and Accomplishments of the First Hundred Years (Palo Alto, Calif., 1952); Robert Treacy, "Progressivism and Corinne Seeds: UCLA and UES," (Ph.D. diss., University of Wisconsin, 1972), 336ff.

⁸¹California Alumni Fortnightly, 9, No. 9 (May 13, 1919), 188.

⁸²Mrs. Wheeler was a sponsor of the anti-woman suffrage movement in California. While not proof of her husband's own views, it would be inconsistent with her organization's ideology for her to have publicly expressed a position contrary to his. See the antisuffrage leaflet, "Some Reasons Why We Oppose Votes for Women" in Regents File, Box 77, Folder 26, University Archives.

⁸³The percentage of Berkeley's women actually receiving teachers' certificates was 81 percent in 1904 and 75 percent in 1906. Antler, *Mitchell*, 104. Ironically, Lucy Sprague left Berkeley, after her marriage to Berkeley economics professor Wesley Clair Mitchell and devoted her life to developing progressive teaching methods in early childhood education. She founded Bank Street College of Education in New York City. On Sprague's Berkeley years see, also, Gordon, *Gender*, 62-67.

that any woman could be whatever she chose to be, perhaps because she knew that not all of Berkeley's women would make good teachers, Sprague agreed with Wheeler that too many women students were preparing to teach. She and her successor, Lucy Stebbins, set out to inform them about other careers, as well as to develop their social skills and knowledge of community and world events. The results were not impressive: a survey by the Alumni Association of the 137 women in the class of 1907 found that, within three years of graduation, 38 were married, 34 were "at home" with their parents, 62 had entered teaching, and only three had other occupations.⁸⁴ In that same year the United States Commissioner of Education reported that women made up 967 of the 1,070 teachers in San Francisco's schools and two-thirds of high school teachers in Los Angeles.

Although the United States led in the "feminization" of high school teaching, both in the rapidity and extent of its happening, teaching was recruiting a disproportionate number of graduates everywhere in the English-speaking world and in France. The phenomenon characterized every type of institution: elite women's colleges, major state universities, coeducational colleges of all types, Catholic women's colleges, and, of course, state normal schools. The University of California was itself a place of teachers, classrooms, chalk, books. By its very existence as an educational institution, it prepared its students to teach. It was also in the faculty's collective interest to have its graduates—female or male—enter teaching, however much patriarchal professors might prefer to see coeds waiting passively for beaux to claim them in the deep shade of "Wheeler's Oak."⁸⁵

Higher education enrollments and scholastic achievement profited from successful schoolteaching, and the University of California specifically gained as its graduates commanded elementary and

⁸⁴Grunsky, "College Women," 55.

⁸⁵In 1895 Professor Howison moved a change in language in a report on graduate study and higher degrees to the effect that "the candidate" replace "he" in the statement of the regulations. The motion lost. Minutes of the Academic Council, May 1, 1895, Academic Senate Files, Box 8, Folder 5, University Archives.
secondary school classrooms. Competent and admired teachers affected their students' academic futures and raised the tone of an entire school and, it was believed, the well-being of its supporting community. Teachers promoted or retarded interest in further education, and channeled it. Had the University had a teacher-graduate in Marysville when Professor Soulé went there to hold the University's entrance examination in June 1885, he probably would have found a more adequate school, less *unanswered* ignorance about the benefits of University study, and a rebuttal of the "low opinion of the morals and conduct of its students" that prevailed unchallenged in that Sacramento Valley town.⁸⁶

In 1883 a graduate of the University, a teacher who operated a teacher employment agency, put her finger on some of the political benefits to the University that would flow from placing its graduates in California's classrooms. In her 1897 proposal to the regents that she be hired to centralize the granting of faculty recommendations for Teachers' Certificates, May Shephard Cheney wrote something about high schools that was considered important enough to be marked for regental notice:

It is the teachers in these preparatory schools who decide where the pupils will receive their higher training. Every successful teacher wields a powerful influence over pupils whose parents are often unqualified to decide for them. The failure of the teacher, or his maladjustment to the school repels the pupil from his institution. On the other hand ... the right placing of a single University graduate in a neighborhood has made that neighborhood a permanent center of loyalty to the University, affecting its legislative delegation as well as its school authorities.⁸⁷

The argument succeeded: Cheney filled the new post of Appointments Secretary, beginning a 40-year tenure in office. Teaching, it

⁸⁶Frank Soulé, Jr., to President Reid, June 1, 1885. Academic Senate Files, Box 1, Folder 59. University Archives.

⁸⁷"Appointments Secretary" in Regents' File, Box 19, Folder 32, University Archives. Cheney also shrewdly enclosed the Appointments Circular of Harvard University with her letter.





Figures 8 and 9: May L. (Shephard) Cheney ('83), readied to go forth as a teacher and, c. 1920, as the University's first Appointments Secretary.

"Equally in View"

should be noted, was the only field for which something like career counseling and placement was institutionally provided; this was the case well into the twentieth century—although professors provided, of course, advice and example for other professions.

The California legislature made this, in 1893, the first state to require beginning high school teachers to have a bachelor's degree.⁸⁸ Indirect evidence suggests that raising the state's qualifications for public school teachers was made possible by a growing supply of talent attracted to the University and to the schools by higher-than-average teacher salaries, as well as by the climate and scenery. Given the competitive spectre of nearby Stanford University, after 1892, teacher education and placement merited careful attention.

The naming of Phoebe Hearst to the Board of Regents gave women students the feeling that they now had a powerful advocate. Mrs. Hearst's initial gift of scholarships dates from 1891, her regental appointment from 1897.⁸⁹ Herself a former Missouri schoolteacher before her marriage to mining magnate George Hearst, that experience gave her the beginnings of the self-confidence in her own

⁸⁸In 1930 California pioneered again by requiring a bachelor's degree of all elementary school teachers. How much California led the nation is suggested by the fact that, between 1935 and 1955, the proportion of elementary school teachers who were college graduates rose from 10 percent to 70 percent. The comparable figures among high school teachers were a far higher 85 percent, increasing to 97 percent.

⁸⁹Mrs. Hearst's initial gift of scholarships is in Regents' *Minutes*, 9, October 13, 1891, 15-16, and the names of Hearst Scholars are periodically listed thereafter in the Regents' *Minutes*, Oakland. Hearst spelled her name "Phebe" in her early association with the University and was so addressed in University correspondence. I am indebted to Alexa Nicklas for her insights into the character and values of Phoebe Hearst, the mother of publisher William Randolph Hearst.

It was the predecessor organization of the American Association of University Women (AAUW) that got the governor's promise, in 1895, to appoint the first woman regent. In Grace Partridge, "The Association of Collegiate Alumnae," *Student Opinion*, 1, No. 15 (Nov. 29, 1915), 8-9. Hearst was described by Jones (*Illustrated History*, 281), who knew her well, as having "an insatiable desire to help girls get an education."

abilities and judgments which drove her philanthropies. There is no evidence she shared President Wheeler's opinion that too many University women were educating themselves to be teachers rather than wives and mothers. She strongly supported women's aspirations to be whatever they wanted to be. Her scholarships were meant for "worthy young women . . . of noble character and high aims." Many of the recipients became teachers.

The women's gymnasium, the women's pool, the women's social center, the first course in women's health and hygiene, and the first woman's physician were central to Mrs. Hearst's role as the University's major benefactor of its first half-century. Had she been a regent when Emma Marwedal requested use of one of the University's cottages as a kindergarten training school, the response might have been affirmative.⁹⁰

The ubiquity of the teaching profession among the college-going social classes was sometimes astounding: Evelyn McCracker (Class of 1930), daughter of Oakland mayor William McCracker, had five sisters who were teachers in Oakland public schools.⁹¹ In addition, May Cheney's annual reports show how dependent the state was becoming on the University for its teachers, principals, high school department heads, and normal school instructors. In 1899 she informed Acting President and Regent Hallidie that "We can not place all of our graduates who wish to teach when half of a graduating class take the Teacher's Certificate. But our graduates are already filling one third of the High School positions in the State." She also

⁹⁰A German kindergarten leader active first in Southern California, Marwedal's request and the regents' denial, without comment, are in Regents Advisory Committee File, June 23, 1897, Box 1, Folder 9, University Archives. To her support of the kindergarten movement, Hearst gave considerable money and introductions to socially powerful women in San Francisco.

A snapshot album presented in 1916 to Phoebe Hearst on behalf of the women of the University writes of her as "our friend" and the maker of "our happiness." University Archives.

⁹¹University of California at Berkeley Alumni Association California Monthly, 105, 1 (September 1994), 44 (obituary of Evelyn McCracker Warnecke).

kept the University informed about how it was faring relative to Stanford, especially in southern California where the population had begun to grow at a rate that challenged the north's historic political and economic dominance.

The Directory of Graduates, produced in 1916, listed 12,706 alumni whose occupations were known. Fifteen percent (1.903) were stated as teaching at the time of their listing. The next largest field was the law. An additional 1.200 graduates were married women listed as homemakers. From what is known from non-California experience, a substantial proportion of these women also would have taught at some time, and there would have been many teachers among the 2,116 whose occupations were unknown. For those graduates reporting themselves when surveyed by the Alumni Association, some interesting facts emerge. First, as women became a larger part of the student body, there was an expanding proportion of "educators" produced: 25 percent of the 1873-90 graduates, 62 percent of the 1891-1899 group, and 68 percent of those from the 1900-03 classes.⁹² A conclusion drawn from the Directory data is that, arguably, two things were happening. First, as more women made their way to the University, there was a wider knowledge of the schools' need for teachers across the state, even in towns that had as vet no high schools, and a new understanding of youth's need to prepare for employment. Second, by their greater proportional representation, women gained in personal and collective self-confidence, as they encountered more independent-minded and employment-oriented role models, and met more better-positioned women to assist as well as compete with them in forming and fulfilling their ambitions.

Additionally, the educational positions in which men and women graduates found themselves differed markedly and consistently. Compared to women, male teachers were far more likely later to become college or university professors or to be promoted to school principalships and superintendencies—and this happened earlier in

⁹²During the three periods noted above the numbers of educators produced grew from 53 during 1873-90, to 202 during 1891-98, and to 221 during 1900-03.

their teaching careers. Among males, the minority remained schoolteachers. In contrast, relatively few women teachers became principals, college or normal school teachers, or otherwise deviated from the routine of schoolteaching. Among those who notably did so was J. Shirley Jones ('03), who became director of the Idaho Experiment Station.

The Class of 1908 appears to be more typical. Eight years after graduation, the *Directory of Graduates* reported the "teacher" component of the 194 male graduates to be seven teachers, five administrators (four of them school principals), and five professors. Among the 184 women there were 61 teachers, three administrators, and one University of California instructor.⁹³ Incidentally, only four of the women teachers had "Mrs." before their names, but from other research one knows that a number of the women for whom no occupation was listed had taught for a time.

To understand more fully the social meanings of the University's preparation of teachers, consider that the University of California's presence in a given community was sometimes most evident in its teacher-graduates, who worked with all the young people, touching most families. To take one example: one would not expect to find many University graduates in a working-class town like San Pedro, the port city of Los Angeles, with its large numbers of Yugoslav, Italian, and Portuguese immigrants. But San Pedro was part of the Los Angeles School district, and affected by its teacher employment preferences and practices. A later alumni directory shows that, in 1936, San Pedro was known to be home to 161 persons who had attended the University of California: 64 men, including the sailors aboard U.S. Navy ships, 93 women and four whose given names disguise their sex. This female to male ratio was higher, of course, than the University's. Thirty persons were working as teachers: four men, 24 women, and two of undetermined sex. It is quite likely that others of the total, especially among the women listed as married, had

⁹³Calculated from data in Alumni Association, *Directory of Graduates*, 1916, 117-27.

"Equally in View"

been teachers at some time in their lives.⁹⁴ In prosperous communities like Pasadena or Piedmont, with their much greater total numbers of University graduates, teachers were proportionally less numerous, and teaching was probably not as likely to be a beacon as it was to aspiring second-generation San Pedrans. But University-educated teachers were common enough in these communities as well.

As happened almost everywhere in America after the Civil War, the University of California's sometimes causal, sometimes reluctant, and sometimes deliberate preparation of teachers encouraged even more women to go to college—and thereby to become a progressively larger share of the student body at this and other institutions. In 1872, two years after their first admission to the University, there were 28 women (19 percent) of a student body of 151. When Professor E. E. Brown wrote about the University in the December 1899 issue of *Land of Sunshine*, he reported that there were 953 men and 763 women (44 percent) at the University of California. And, in six of the years from 1915 through 1930, women were 50.1 percent or more of Berkeley's new undergraduates.⁹⁵

The "Feminization" of the Student Body and the Schoolroom

From the beginning, the distribution of the sexes within the University was uneven across department and colleges, with women concentrated in fields that led more directly to teaching positions. During the period 1911-1916, for example, women were between 39 and 50 percent of total undergraduate admissions at Berkeley, but

⁹⁴Calculated from listings in Sibley, *Golden Book*, 1005. The directory includes, where known, addresses and occupations of graduates from the Berkeley and Los Angeles campuses and the Los Angeles Normal School. Three of the latter are in the San Pedro totals. Nongraduates were also listed in this but not in the 1916 Directory of Graduates.

⁹⁵E. E. Brown, "The University—Its Past and Present," in Land of Sunshine, 12, (December 1899), 9-21, bound in University of California Historical Pamphlets, 5, (10), "Distribution of New Undergraduates, By Colleges and Classes." Academic Senate Files, Box 15, Folder 9, University Archives. The data do not distinguish freshmen from transfer students among new admissions.



Figure 10: The first UC field trip with geologist A. C. Lawson. Increasing specialization and graduate work are prefigured here. The women are Grace M. Fisher, B.L. '89, M.L. '92 (center front), later Oakland YMCA president; Mrs. (Ludovika Van Jantschi) Lawson (far right); and Salina Sharpe, B.S. '92, M.S. '96, who later taught in Sonora.

they were a higher 59 to 68 percent of those in what became known, in 1915, as the College of Letters and Sciences. Within "L&S," women were most heavily represented in the general liberal arts fields than in the pre-med, pre-legal, and other prerequisites for professional training.⁹⁶ Yet, surprisingly perhaps, women were never absent from the Colleges of Agriculture, Chemistry, and Natural Sciences, as they were rare in the Engineering and Mining Colleges. Of those awarded the Bachelor of Science degree in the College of Chemistry in 1900, for example, one-third were women. At least some of these women taught school, and since women teachers were underrepresented in some physical science classrooms but not in mathematics, some of the women science majors probably taught mathematics instead. (Female "math anxiety" had not yet become discovered—or invented.)

The sex-segmented character of the fields studied at the University, and taught afterwards in the schools by its graduates, is illustrated in enrollment data and photographs. Women students were very well represented in the life sciences: botany, entomology, zoology, physiology. They were far fewer in physics and geology-although there were two women students among the 11 taken on the University's first geology field trip to Carmel in 1892. Natural science courses not only prepared women who would be junior and senior general science, zoology, and physiology teachers but also fed the even greater popularity of nature study in the grades 1-8 school curriculum between 1893 and 1914. Given that there were far more grade school than high school positions, especially in rural and small town America, and that women scientists, women teachers, and women text-book authors were well represented in the Nature Study Movement-especially among school science supervisors-the appeal of such courses to coeds at Berkelev is easily explained.⁹⁷

⁹⁶In *California Alumni Fortnightly*, 9, (April 29, 1916). Among the new undergraduates admitted in 1919, for example, women were 64 percent of the "general" group and only 17 percent and 12 percent respectively of the pre-med and pre-legal cohort. Admissions report in Academic Senate Files, Box 12, Folder 9, University Archives.

⁹⁷Tolley, "Science Education," (see note 10).

The sex imbalance between the University's graduates in their entry into teaching was a function of more women electing that profession, compounded by the greater probability that women teachers would persist, at least until they gave it a fair chance or left it to marry as society expected "normal women" to do. One of many of the latter was Florence E. Beaver ('92), who wrote to President Kellogg of finding "a delightful position here as assistant to W. C. Nicholson of Stanford University in the Santa Paula High School."98 Her subsequent occupation was reported as author and Mrs. Watson Nicholson. While many others left teaching to marry-like Miss Alice J. Kirk, "one of Sutter [County's] most efficient teachers, [who, in 1897] was married . . . to Under-Sheriff M. T. Brittan, an exteacher of the county and ... a promising young lawyer....."99 But there were also many like Jovita Fitzgerald, a fifth-generation descendant of an alcalde of San Francisco, a 1929 graduate of the University, and a 44-year professional as teacher, counselor, and administrator in Oakland schools.¹⁰⁰ The stereotype of women teachers as having short-lived careers is, at best, a distortion, and it may better fit males, like the aforesaid under-sheriff. Records of the State Board of Examination, from 1868 onward, show that the life diploma [a permanent teacher's license] often went to women, whether she be "Miss" or "Mrs"; this certificate required evidence of 10 years' experience.¹⁰¹

Tracing students' names through biographical directories and examining graduates' petitions and letters requesting a University recommendation for a teachers' certificate together, show persisting

⁹⁸Florence E. Beaver to President Martin Kellogg, August 7, 1892, Box 6, Folder 1, University Archives.

⁹⁹Alexander B. Coffee, "Snap Shots," *Overland Monthly*, 30, No. 180 (December 1897), 15.

¹⁰⁰ Vigil for ex-Oakland Teacher," obituary in *Oakland Tribune*, July 21, 1994.

¹⁰¹Volumes of the Minutes of the California State Board of Examination are housed in the State Archives, Sacramento. Male teachers were also more likely to have their teaching certificates revoked for immorality or other offenses.

"Equally in View"

career differences between the sexes.¹⁰² Most of the men making applications, for licenses, whether or not they actually taught, moved quickly into law, business, medicine, engineering, and other professions. Only one of the five students of the class of 1898 who were nominated by pedagogy professor, E. E. Brown to be a commencement speaker, is known to have entered teaching. He was Albert C. Olney, later superintendent of schools in both Santa Barbara and Fresno (where he formed the first high school-junior college); he was later president of Marin County's junior college. The other two males Brown proposed became attorneys, and the two women were listed as housewives, although they likely taught first.¹⁰³

A partial exception to the general pattern for males in California schoolteaching was Clement Calhoun (C. C.) Young who taught for three summers in a rural school near his father's farm in Sonoma County, as early as 1887. He had been advised by Isaac Young to "do some studying so as to be qualified for any immergency [sic]" since the Board of Education "propose to be very severe in their examinations for the purpose [of] sifting out some of the cranky and poor teachers" who were overrunning the country.¹⁰⁴ After graduating from the University in 1892, Young taught English at Santa Rosa High School and San Francisco's Lowell High School until 1906, then entered business and politics. He was elected governor of California in 1926 as a Republican progressive, but lost the primary

¹⁰²A critical factor in women's career persistence was the low marriage or delayed marriage rates of University of California women graduates of those generations, as was true nationally. For example, among the 213 UC women graduates of the 1887-1889 classes, only 10 had married by 1890. It was also noted that single women were more likely to join the alumni association, "for they are usually teachers and need the help of association." In Clotilde Grunsky, editorial titled "The Marriage of College Bred Women," *Overland Monthly*, 15, No. 88 (ns) (April 1890): 443. For similar but later data, see Grunsky, "College Women as Teachers," *California Alumni Fortnightly*, 9, No. 4 (March 4, 1916), 55.

¹⁰³Commencement nominations in Academic Senate Files, Box 8, Folder 16, University Archives.

¹⁰⁴Isaac E. Young to Clement Young, C. C. Young Papers, Bancroft Library.

campaign for renomination to a southern Californian. In his electoral speeches and writings, Young referred frequently to his nearly 14 years experience as a professional teacher, and to his legislative and gubernatorial contributions to building the state's reputation as a national leader in public education. The "schoolmaster's exacting work and inconsiderable salary," were reasons to leave teaching, but on the other hand there were the many contacts he had made in business and politics, contacts he could now take advantage of. These were opportunities unlikely to be put before an equally able woman teacher.¹⁰⁵

Continuing national efforts to professionalize teaching helped reduce male participation. What economists call the "opportunity costs" associated with teaching became too high for most men as California and other states imposed even more stringent examinations and training requirements. Besides mandating well before other states baccalaureate degrees for all its beginning teachers, California, more like the others, instituted a longer public school year that prevented men from easily combining teaching with farming, preaching, business, or medical, legal, and theological study as was once so common.¹⁰⁶ Since women still had very limited access to these fields, they were not similarly affected.

Other, successive additions to professional expectations also attracted women while they discouraged men: mandatory attendance at state- and county-wide meetings called "institutes"; compulsory subscriptions to teacher journals and memberships in local, county, and state associations; proliferating courses in child study, the history of education, and classroom management; campaigns for salary equity between men and women teachers, and a single salary scale for elementary and secondary school teachers; even pedagogical and disciplinary reform that elevated "female" attributes like patience, cooperation, and "sweet reason" over brute force, competitiveness,

¹⁰⁵C. C. Young, "Inaugural Address" Commonwealth Club Presidency, nd. In C. C. Young Papers, Bancroft Library.

¹⁰⁶The earliest notice of this phenomenon is probably Thomas Morain, "The Departure of Males from the Teaching Profession in Nineteenth-Century Iowa," in *Civil War History*, 26 (June 1980): 161-70.

and individualism in the teacher's arsenal of motivational and disciplinary techniques. Had teaching paid well or had educated men as restricted employment options as women, the calculus might have kept the male-female balance in school teaching more even. It did not, and the doors for women were accordingly opened wider.

In recognition of the University's place at the head of California's public education system, the state conferred privileges on its teacher graduates-compensating them somewhat for their investment in a University of California education. Two sections of the State School Code provided that University graduates who were recommended by the faculty would be issued a Teacher's Certificate of High School Grade, without examination by local or county school boards. A later provision conferred the same right to California's State Normal School graduates who had completed in addition, a two-year course at the University. Accordingly, many earlier University graduates who had not settled in another career, or who were teaching in graded or ungraded common (i.e., elementary) schools or with subpar credentials needing annual renewal by examination, took advantage of this legislation: they asked their University for a recommendation for a high school certificate. A graduate of the College of California, counted among the University's graduates, Charles Turner Tracy ('64) requested a University diploma in 1885 as proof of his graduation so that he might continue teaching in San Diego without examination.¹⁰⁷ Warren Chenev, a student leader of the Class of '78, requested a certificate in 1887 in order to teach in Yolo County. Rufus A. Berry ('82) wrote from Wheatland in 1889 asking for his Nellie Medbery (B.S. in civil engineering '83) had certificate. married and taught private pupils briefly; she asked for a certificate in 1890, having the opportunity to teach the summer term in a country school. More important in the larger scheme of things, the privileged position of University graduates undoubtedly encouraged would-be teachers and maybe-teachers to choose the University over other institutions, while giving the uncertain a nudge in the direction of teaching. George M. Stratton ('88) wrote from Ventura (then San

¹⁰⁷Charles T. Tracy, November 30, 1885. In Regents' Files, Box 11, Folder 5, University Archives.

Buena Ventura), asking for his teacher's certificate. He later returned to the University as Instructor in Philosophy, and took a Ph.D. in Germany; he introduced experimental psychology into the University of California, teaching it to many other future counselors, teachers, and school administrators.¹⁰⁸

In an era when most people probably questioned any specific preparation for teaching beyond knowledge of the subjects to be taught, the University faculty was content to do no more then teach its regular curriculum, write letters of recommendation for graduates to school boards, and give leaves of absence to students who left to teach for a time-common student behavior in the history of American colleges. So, when the vice-principal of Sacramento High School fell ill with typhoid fever in early 1883, freshman William Avery (class of '86) was excused from his University studies to take his place-which says something about Avery's exceptional maturity or Sacramento's desperation for a male teacher. "Being obliged to leave college on account of finances," junior Howard B. Gates ('91) petitioned, and was excused to prepare for the teachers' examination; he returned and graduated in 1893. Clement C. Young ('92) asked to start the Fall 1890 term late, "being engaged in teaching a school in Sonoma County." When a suitable substitute was found, he returned to the University.¹⁰⁹

¹⁰⁸Warren Cheney to president and faculty, June 1, 1887, Box 2, Folder 38; R. A. Berry, May 18, 1889, in Box 3, Folder 27; Millie Medbury Reed, January 9, 1890, Box 4, Folder 7; George M. Stratton, September 20, 1889, Box 3, Folder 32. All in Academic Senate Files, University Archives. Cheney (LL.B., 1881) became a real estate and insurance broker. Berry (LL.B., 1897) was Berkeley's postmaster. Mrs. Reed was listed as housewife in the 1937 alumni directory.

¹⁰⁹William Avery to President Reid, January 8, 1882. Academic Senate Files, Box 1, Folder 19, University Archives. It is not known how long Avery taught. He did not graduate with his class. He may have been the same William Avery who graduated from the University's College of Dentistry in 1893. See Gates' request of January 6, 1890, in Box 4, Folder 7. Gates later took an M.D. at the New York Homeopathic Medical College. C. C. Young's correspondence is in Box 4, Folder 21 and Box 5, Folder 16

"Equally in View"

"To Energize and Elevate": Pedagogy at Berkeley

By the last decades of the century, the growing centrality of the public schools in the lives of young Californians raised more insistent calls for a new and greater institutional response by the University. In 1889 a committee of the Academic Senate (called the Academic council), discussed at length how the University might rearrange its own schedule of terms and vacations in accord with the realities of the schools' calendar: to bring professors' vacations in line with those of their children, facilitate the movement of recent high-school graduates directly into the University, and more conveniently bring teachers and professors together on matters of mutual interest. The state's teachers had repeatedly asked the University to respond better to their professional aspirations. By the 1880s colleges and universities elsewhere admitted normal school graduates and experienced teachers into academic courses or special courses for teachers. Wellesley College, for one, opened its regular classes to those who had taught. and a course on "The Art and Science of Teaching" was offered by one of the regular faculty, many of them former schoolteachers. In 1888, Principal Charles H. Allen of the California State Normal School asked the University to consider something like the University of Wisconsin's accommodation of normal school graduates. He promised it good students:

Our pupils, in addition to a pretty thorough knowledge of what they go over, acquire studious habits and a certain *ability* to study, not often given, outside of Normal School. We supervise their study, and give instruction in methods of study, all of which appears [beneficial] in their after student life.¹¹⁰

(all in Academic Senate Files, University Archives.) See also Directory of Graduates, 1916.

¹¹⁰Charles H. Allen to President Holden, June 6, 1888. Academic Senate Files, Box 3, Folder 3, University Archives. Although the intention was for normal school graduates to enter the University as special students, thus acquiring more academic preparation for teaching, it sometimes led to another career, especially for males. When Allen recommended Mr. A. W.

One such normal school graduate was Mary Tyrell (San Jose, 1890), admitted to the University in 1893. She was, successively, a special student in agriculture and a limited-status (part-time) student in mathematics, botany, and entomology, attending classes while teaching in Oakland. Thereafter she taught at Oakland Technical High School and was still on its faculty in 1937.¹¹¹ As a normal school graduate and experienced teacher, Tyrell now wanted academic courses, but many teachers craved more professional training especially in the period after 1895 or so when ferment in educational and psychological circles was growing intense. And, like Mary Tyrell, most of the normal school and experienced teachers were women.

Petitions to provide actual study of pedagogy were heard at the University from its earliest days. A strong supporter of the Normal department at Wisconsin during his professorship there, Berkeley's first agriculture professor, Ezra Carr, raised the question in his 1874 manifesto on the University's neglected responsibilities in practical education. He described preparing and qualifying school teachers in mechanics and agriculture, as rightfully, among the University's most important objectives.¹¹² Regent Henry N. Bolander's state superintendent's *Report* for 1875 argued, unsuccessfully, for a special and extended course in the University for teachers. California's teachers agreed, and memorialized the regents several times. At the 1880 annual meeting of the Teachers' Institute of San Mateo County, this unanimous resolution was adopted: "That we recognize the impor-

Gray (Charles H. Allen, April 20, 1888), he commented that "since graduating he has taught with marked success." Gray received a Berkeley degree, a Ph.D. from Berlin, and worked in industry as a physicist and metallurgist (if the A. W. Gray listed was indeed Arthur Wellington Gray, 1896).

¹¹¹Mary Tyrell's petition to change her status on August 25, 1894 is in Academic Senate Files, Box 7, Folder 15, University Archives.

¹¹²"Professor Carr's Response," in The University of California and Its Relations to Industrial Education, As Shown by Prof. Carr's Reply to the Grangers and Mechanics; Prof. Swinton's Testimony Before the Legislature; . . . and Other Documents (San Francisco, 1874), 87. Copy in University Archives.

tance of advancing the profession of teaching, and that we therefore request the Board of Regents of the State University to establish a Chair of Pedagogics in the State University." The group went further, suggesting "Summer Schools of science and literature" taught by University faculty. Being unable to meet the expense of living away from home in San Jose, the young female would-be teachers of San Francisco had earlier petitioned for a local branch of the State Normal School, and later the experienced teachers asked the University for teachers' classes to be held in their community.¹¹³ The California Teacher's Association at its meeting that same year urged establishment of a pedagogy department at the University.¹¹⁴

A Chair in Pedagogy

Throughout the 1880s, various state superintendents pressed the case for a professorship of pedagogy to their fellow regents. They had at least one ally in President Horace Davis who described himself as "decidedly of the opinion that the University should offer some instruction in the Art of Teaching." Davis had in mind a two-year course for graduates of normal schools, "or any teacher in the Public Schools who wanted to continue her mental training or to enlarge her horizon of knowledge." He thought the legislature would license graduates of such a program for any teaching post in the state. In addition to the state's gain in the quality of instruction, the University would attract more students as "every such teacher would be a missionary in the University cause"-making the same point May Cheney would later push. After a fact-finding eastern trip in 1889, where he visited Harvard, Michigan, and the Teachers College of Columbia University, Davis pressed the regents for a chair in pedagogy. Of Michigan, he said, "At Ann Arbor where the general conditions most closely resemble ours, they have maintained a chair

¹¹³W. B. Turner to President John LeConte, October 4, 1880, Regents' Files, Box 11, Folder 3 University Archives; The San Francisco Normal Class," in *The California Teacher and Home Journal*, 2 (August 19, 1883): 53-54.

¹¹⁴Cloud, Leaders, 92.

of this kind for twenty years and President Angell advised us by all means to follow their example, believing that it would result in great good for the schools of the state.¹¹⁵

If teachers' exhortations did not suffice, the invocation of Michigan's example did. At their meeting of May 14, 1889, the regents adopted the resolution that they had asked Davis to prepare, for a course in pedagogy, "with a view of giving its students a better fitting for positions in public & private schools." The Academic Senate was authorized "to announce the intention of this Board to establish a course of instruction in the science and art of teaching as soon as the same can be properly organized."¹¹⁶ There it languished for 31 months. However, President Davis tried again:

We have constant urging from teachers in the Public Schools about a Course in Pedagogy. I am sure such a course would bring many teachers into the College, and give us the warm support of a large and influential body in the community; and I am sure it would react on the schools greatly to their benefit. We cannot put the College on a stronger foundation than by connecting it in the popular estimate directly with the welfare of the Schools.¹¹⁷

With Davis' resignation in April 1890, the issue was left to Acting President Kellogg and the Academic Council. In talking with the state's teachers at their meeting in Riverside in December 1891, Kellogg noted the nationwide demand "for distinctive courses of instruction in the interest of the teaching profession," mentioning the chairs in pedagogy just appearing at Harvard and Stanford. He did not tell them that, just that month, a special committee of the Academic Council, appointed to consider several matters relating to the schools, finally recommended that a "chair of the *History and Institutes of Education* be established in the University at once and

¹¹⁵Horace Davis, "President's Bi-Monthly Report," March 1889 and May 1889," in Regents Files, Box 10, Folder 18, University Archives.

¹¹⁶Meetings of March 12, 1889 and May 14, 1889, Regents *Minutes*, Vol. 7, 241. Oakland.

¹¹⁷Horace Davis, President's Report, January 14, 1890. In Regents Files, Box 25, Folder 14, University Archives.

"Equally in View"

that a suitable incumbent for this chair be immediately sought for.²¹¹⁸ Elmer Ellsworth Brown was recruited from Michigan; more than Harvard, Michigan was always a beacon seen in Berkeley.

The conservatism of the Academic Council shines through in its academic-sounding designation for the proposed professorship. The regents, however, labeled their creation more consistently with teachers' notions and developments in the institutions that Davis had visited. It was to be a pedagogy department with its head the "professor in the science and art of teaching." A certain unease with the decision showed itself again in 1905 when the Graduate Council's Committee on the Preparation of teachers recommended a Teachers College—a new academic unit, with a faculty drawn from the Departments of Education and Philosophy, and the heads of all other departments representing subjects taught in the state's elementary and secondary schools. This proposal languished until a School of Education was approved, in 1913, with similar membership except for philosophy.

The University also made no provision for a training or practice school, perhaps because it was a conspicuous, popular, and essential feature of normal schools. The 1904 meeting of the California Teachers Association urged the University to open a practice school as a laboratory in connection with its teacher training. But it was the state's new requirement governing teacher certification, issued in 1905, that forced the Academic Senate to ask the regents for a practice school.¹¹⁹ Additional pressure came again, in 1912, from the state chairman of the Education Committee of the California Federation of Women's Clubs, the University's Appointments

¹¹⁸Minutes of the Academic Council, December 18, 1891 (emphasis added), Academic Senate Files, Box 5, Folder 20, University Archives. Senate approval came on January 22, 1892. Minutes of the Academic Council, Regents Files, Box 19, Folder 14, University Archives; Martin Kellogg, "Educational Progress in California," in Addresses Delivered Before the California State Teachers' Association at Riverside in University Bulletin, #37 (Berkeley, 1892), 14-15.

¹¹⁹Secretary of the Senate to President Wheeler, May 3, 1905. In Academic Senate Files, Box 11, Folder 10, University Archives.

Secretary, May Cheney. She urged club women to lobby for state funding for a training high school on the University campus.¹²⁰ To both organizations' appeals the regents responded by contracting with local area public schools as practice and demonstration sites.

Years later Lucy Sprague recalled the Berkeley undergraduates who took advantage of the pedagogy program. She condescendingly called them the "girls from little towns ... [who] took the prescribed dull courses for a teacher's certificate and returned home without ever touching the big human problems by which we were surrounded."¹²¹ The picture is of limited accuracy and utility. The University's regular required "general culture" courses and the specialized and group electives of the student's major field constituted the great bulk of the future teacher's program. Many of these students specialized in the social sciences, so if the students lacked a grasp of "big human problems," the blame lay elsewhere in the faculty than at the door of nedagogy. Various departments offered a "teachers' class" in their discipline taught by a regular, usually senior, member of its faculty. These classes met the requirement that students have "at least one course in the University devoted to investigation and exposition of the pedagogical principles involved in that subject."¹²² Only departments whose subjects were well represented in the public schools' curriculum tended to offer such courses, however, because otherwise there would be no demand.

Hence, there was no teachers' training course in Greek to match Professor Merrill's in Latin, where prospective teachers received practical hints. The Greek faculty complained of the "make-shift" two-year Greek program in some California high schools' classics programs, claiming "California is still behind other States of equal

¹²⁰May Cheney, "Program of Education Committee," in *A Record of Twenty-Five Years of the California Federation of Women's Clubs, 1900-1925*, ed. Mary Gibson (np, 1927), 248-49. This reference is courtesy of Maresi Nerad.

¹²¹Quoted in Antler, Lucy Sprague Mitchell, 104.

¹²²Report of Committee on Pedagogical Course, to Academic Council, October 31, 1895, in Academic Senate Files, Box 8, Folder 5, University Archives.

education development." In fact, only the Latinists had reason to hope for their subject in the high school curriculum. They expressed the University's wish "to encourage sympathetic communication with the Latin teachers of the State, . . . ready to give advice and opinion on any matter connected with Latin teaching." In the same spirit, Professor William B. Rising organized a Summer School of Chemistry, beginning in 1890, primarily for the state's teachers who wished to feature chemical experiments in their teaching.¹²³

When "Lillie Belle" Bridgman came to California in 1891 with a degree from Kansas State Agricultural college and five years experience in country-school teaching, she obtained one of Phoebe Hearst's scholarships. She also received informed attention from science professors Joseph LeConte, Irving Stringham, E. P. Lewis, William J. Raymond, English professor C. B. Bradley, and President Kellogg during her studies for the Master of Science degree from the College of Agriculture. Lewis responded knowledgeably about which of the state's high schools were best equipped with laboratories. And when she wrote to Frederick Slate from her position at San Diego High School, he answered, "I will attend to the cases of the young people mentioned in your letter. If they will come to me personally, I shall be glad to see them for the sake of the school and yourself."¹²⁴

At least through the '90s, the Academic Council strongly supported the pedagogy requirements for those many University students seeking a state teacher's certificate. Professor Stringham reported in 1898 that

the Committee does not recommend any reduction of the normal requirement in pedagogy, believing that the present

¹²³The 1895 leaflets for the Greek and Latin department and Summer School of Chemistry announcement for 1895 are in Academic Senate Files, Box 8, Folder 5, University Archives.

¹²⁴Correspondence, letters of recommendation, and official University Recommendation for a high school teacher's certificate, all in Lillian B. Bridgman Papers, Bancroft Library. After teaching in San Diego and at the California (Lick) School of Mechanical Arts in San Francisco, discouraged by the salaries given women teachers, Bridgman (1865-1948) reentered the University in 1910, studied architecture, and practiced as an architect thereafter.



Figure 11: "My first high school class in Chemistry," with teacher Lillie Belle Bridgman, M.S. '93 (seated in well), San Diego High School, 1896.

requirement is not excessive. Relief has already been provided for students of ability and manifest aptitude for teaching, in cases where real difficulty is met in the adjustment of schedules for graduation. Such students may substitute work in other departments for a part (not more than one third) of the regular [12-unit] pedagogy requirement.¹²⁵

Thus, the preparation of teachers at the University of California could, indeed, be said to be the work of the entire University: in its classrooms, through the school textbooks authored by its the faculty. by the participation of leading professors in the Schools Committee's accreditation visits to high schools, and through the California Teachers Association whose offices and programs regularly engaged many faculty. Perennial CTA participants included Joseph LeConte (geology), Charles Gayley (English), Cornelius Beach Bradley (English), Martin Kellogg (Latin), Irving Stringham (mathematics), George Holmes Howison (philosophy), Frederick Slate (physics), William Carey Jones (iurisprudence), Bernard Moses (history), Isaac Flagg (classics), William D. Armes (English), George C. Edwards (mathematics), Armin O. Leuschner (astronomy and mathematics). Two of the University's faculty, Martin Kellogg and William Rising, were members of the first board of education in the city of Berkeley, and Kellogg became board president. When the San Francisco Board of Education decided, in 1893, to give the University of California unprecedented authority in annually filling the first 18 vacant teaching posts, the specified examiners were to be the city superintendent and five University professors of the president's choosing.¹²⁶

¹²⁵Report of the Special Committee on Group Electives and Pedagogy, March 4, 1898. In Academic Senate Files, Box 8, Folder 16, University Archives.

¹²⁶The examination committee had, among other duties, to select six teachers from among the top scholarship graduates of the Normal Department of San Francisco Girls High School and 12, by competitive examination, from the graduates of the San Francisco branch of the State Normal School. F. A. Hyde, San Francisco Board of Education President, to Martin Kellogg, March 21, 1893, Academic Senate Files, Box 6, Folder 16, University Archives.

There is, however, no question that the existence, first of a chair of pedagogy, and then a Department and School of Education, began to erode the authority and interest of academic departments in matters of schooling. In 1895 the Regents' Internal Administrative Committee responded to Brown's inquiry about how he should answer requests for lectures from Pomona College by saying that "there is more reason for the transfer of such service in the Pedagogical Department than in any other. This department is charged with a sort of missionary work among the Teachers of the State."¹²⁷ Although the regents were unwilling to add pedagogy faculty quite as quickly as Brown wanted, the committee stated its support of this department

whose field of labor is co-extensive with the State [when]... the effects of its labors are as far reaching as the entire educational system of the State. It is the outward visible sign and agent by which the University performs its allotted task to energize and elevate all of the educational functions of the State.¹²⁸

Hence, while experienced teachers continued to elect Summer School and Extension courses with professors in several departments, it was the Saturday classes in child study and pedagogy that increasingly drew them in. These classes first appeared in 1898, by which time Brown had two associates and a graduate fellow to help teach the expanding curriculum in "The Practice of Teaching," "School Supervision," "History of Education," "Theory of Education," "School Systems," "Biological Aspects of Education," "Seminary" [seminar], and "Graduate Seminary." The opportunity to pursue advanced degrees and certificate programs grew apace as these became increasingly necessary for advancement in a world of public

¹²⁷Report of the Internal Administration Committee, nd. Regents' Files, Box 21, Folder 4, University Archives. The committee nonetheless found the lectures too disruptive of Brown's Berkeley obligations, setting a possibly troublesome precedent.

 ¹²⁸Committee on Internal Administration Report to the Board for April
14, 1896. In Regents' Files, Box 21, Folder 5, University Archives.

education that was becoming specialized and professionalized—as were all fields in the University.¹²⁹

In 1899 nearly half of Berkeley's graduating seniors applied for the teacher's certificate. The University's own pedagogy requirement for awarding it could not be waived without consulting Professor Brown, whose policy is illustrated by a revealing example. His decision, after investigating the complaint of a civil engineering graduate with "two years of practical experience in teaching before coming to college" was to deny the certificate because there was no modern pedagogical training on his record.¹³⁰ Brown was critical of one "who has not enough of pedagogic interest and teacher-training to enable him to join hands with others in making the school a school."¹³¹

Some rejected applicants undoubtedly resented pedagogy as a dubious or onerous requirement, and they many have gotten some sympathy in their own departments. In some instances denied applicants went on, via other avenues, to teach—perhaps well. Examples include high school teachers, school principals, and a Columbia University Ph.D. who later taught biology at Reed College. In other cases, Brown's decision, based more often on low scholarship than on insufficient pedagogy, was proven correct. Many "rejects" settled for housewifery or careers in family businesses, agriculture, construction, engineering, the law, surgery—for which, indeed, they may have been more fitted. Nor was Brown disposed to award a young man a grammar school certificate after he was denied,

¹²⁹The twentieth century story of Berkeley's and other departments and schools of education, and their relations with academic departments and the public schools, is told in Geraldine Joncich Clifford and James W. Guthrie, *Ed School: A Brief for Professional Education* (Chicago, 1988).

¹³⁰He became a farmer and life insurance agent in Washington state. His petition, along with others' applications for a teacher's certificate, are in the Academic Senate Files, University Archives. Examples are drawn from the first decade of the existence of the pedagogy requirement

¹³¹E. E. Brown, "The Distinctive Functions of University and Normal School in the Preparation of Teachers," in *Government by Influence and Other Addresses* (New York, 1910), 204.

on scholarship grounds, a high school certificate. (He went on to practice law instead of teaching.)¹³²

Contests over academic turf sometimes surfaced, as they did elsewhere in academe. In 1898 Brown asked that his own title be changed to the loftier one of "professor in the theory and practice of education" and his colleague Bailey's to "associate professor of education as related to character." This latter was a compromise after Professor Howison objected to having the title "professor of the science of character" located in a department other than philosophy. But Howison was, at base, an ally who taught the philosophy of education, and was a frequent participant in school-University interactions.¹³³

There were others less friendly, as Dean Lange pointed out, in 1920, describing teaching as a "more or less learned profession" in the "common contemptuous attitude of the members of other professions." But because California had the nation's highest scholastic requirements for teachers, he thought "Here Cinderella has a chance among her sisters."¹³⁴ The prospects, even in 1900, had seemed favorable: Brown was personally highly esteemed, his departure for the U.S. Commissionership of Education was regretted, and his name kept on the Academic Senate roster as an honor. The renowned professor of English, Charles Mills Gayley, wrote of him in the *Nation*:

His is not the superficial pedagogy of the "faddist," or the spasmodic procedure of the empiric. He has had a thorough training in philosophy and the history of it, in psychology and the perils of it, in the classics and the perennial vitality and need of them, in history and the unchanging fact of

¹³²Applications for teachers' certificates are in the Academic Senate Files, University Archives.

¹³³Regents *Minutes*, Vol. 11, 375, 395; Vol. 12, 58-59. Oakland; E. E. Brown to President Kellogg, September 12, 1893 and May 27, 1899, both in Regents' Files, Box 25, Folder 4, University Archives.

¹³⁴A. F. Lange, "The Proposal to Substitute the Designation Ed.D. for Graduate in Education," 1920, Academic Senate Files, Box 12, Folder 12, University Archives.

it. . . . He has the advantage of many professors of the incipient science of pedagogy in possessing an uncommon sum of common sense, in being a scholar, and a man among men as well as among teachers.¹³⁵

The later dean, A. F. Lange, appeared similarly respected. He was promoted from English to education, made dean of both the College of Letters and Science and the Graduate Division, and was acting president in Wheeler's absence. Later still, David Barrows was hired by the Department of Education, headed the political science department, was Dean of the Graduate Division, and was named President Wheeler's successor. No shortage of personal respect for these early "educationists" seemed to mark them. Something was already amiss, however, and there are a few clues in the group with which Brown was contrasted by Gayley: the pretentious, the unscholarly, those who were comfortable with children in schools and with the women who taught them.

Cinderella's Troubles in Paradise

In 1893, in the inaugural issue of *School Review: A Journal of Secondary Education*, founded and edited by President Shurman of Cornell University, the distinguished Harvard historian and author of textbooks, Albert Bushnell Hart, wrote promisingly of three developments that would advance the professional status of the teacher. One was the improvement of those institutions established for the sole purpose of training teachers, the normal schools. Another was that the scientific study of pedagogy was just gaining recognition as a part of university work in departments of pedagogy and psychology. The third was the offering of courses for teachers by colleges, universities, and technical schools. Hart gave some examples of the latter, asserting that, "The probable effect in bringing about a feeling of

¹³⁵Quoted in LeRoy Elwood Kimball, Introduction to E. E. Brown, A Few Remarks (New York, 1933), 8.

harmony and mutual interest between the colleges and schools is too evident to require discussion."¹³⁶

Twenty-three years later, a quarterly dedicated to controversy, *The Unpopular Review*, published articles by three authors that offer relevant testimony about the progress in achieving that "feeling of harmony and mutual interest." In the first article, "If I Were a College President," the anonymous author (probably a professor at Amherst College) described how he would serve his faculty:

I would liberate them from a despotism in their own midst. The measure of my boldness is given when I announce that I would shut the mouths and vacate the chairs of the professor of pedagogy and all his satellites.... Here is an extraordinary fact. Of the innumerable college men with whom I have talked, not one has ever expressed anything but contempt of the department of pedagogy as an educational futility, and abhorrence of it as a meddling nuisance.¹³⁷

Two succeeding issues of *The Unpopular Review* offered a rebuttal by a defender of professors of pedagogy and a counter-rebuttal by another academic who claimed to know the breed and their work intimately, having had office space next to various of them, in different institutions, for 20 years and having inherited 17 linear feet of the "dreadful stuff" that is pedagogical literature.¹³⁸

Meanwhile, in California, the University of California found itself possessed of *two* schools of education, when the Los Angeles State Normal School was made the southern branch in 1919, soon renamed the University of California at Los Angeles. The sister campus

¹³⁶Albert Bushnell Hart, "The Teacher as a Professional Expert," School Review, 1, No. 1 (January 1893): 12. On the origins of this new venture, see Harold S. Wechsler, "The Primary Journal of Secondary Education, 1893-1938: Part I of a History of The School Review," American Journal of Education, 88, No. 1 (November 1979): 83-105.

¹³⁷Anonymous, "If I Were a College President," *The Unpopular Review*, 5, No. 9 (January-March 1916): 64.

¹³⁸Anonymous, "The Professor of Pedagogy," *The Unpopular Review*, 5, no. 10 (April-June 1916), 349-60 and Anonymous, "The Professor of Pedagogy—Once More," *The Unpopular Review*, 6, No. 11 (July-September 1916): 58-72.

"Equally in View"



Figure 12: Ernest Carroll Moore, instructor in philosophy and pedagogy at the University of California, 1899. Aspiring teachers were the likely audience for this future principal of the Los Angeles State Normal School and first head of UCLA.

aroused bitter divisions of opinion.¹³⁹ One issue was whether the University should split its energies, resources, and loyalties between two campuses. This question was settled over the objections of the Academic Senate and President Barrows, as a concession was made to the escalating political and economic power of southern California. Had it not been conceded, southern Californians were prepared to battle for a second state university, an even more intolerable outcome than having two branches of one university. In the process the larger and intense sectional rivalry in California had gained a home in the University.

The second question became whether the Teachers College, the heart of the former Normal School, should accompany the rest of the "southern branch" when it was moved to the new Westwood campus in 1929, or be left behind and turned back to the normal school system. The Teachers College prepared elementary school teachers, something that Berkeley did not explicitly do, although a great many Berkeley women graduates became grade school teachers. More importantly, the Teachers College issue symbolized the growing disengagement of many college and University teachers (even professors of education) from the schools. That separation sometimes brought a degree of distaste for, even antipathy to, the whole enterprise of popular public education. In deliberating the UCLA question, the Berkeley Academic Senate characterized teacher preparation as an illogical and distracting "sideline," and President Campbell (1923-30) reportedly said he found it degrading for the University president to have to sign the credentials of prospective kindergarten teachers when signing students' degrees.

Behind this pomposity lies the more important fact that two distinct cultures had been forming in California education circles, at least since the 1890s. One was the public school culture, with its self-

¹³⁹The president of the Los Angeles Normal School was Ernest Carroll Moore, onetime member of the philosophy and education departments at Berkeley. He headed UCLA until his retirement in 1936. For a discussion of the politics of acquisition, from an administrative perspective, see Stadtman, *University of California* (1970). For an elaboration of the conflict, see Clifford and Guthrie, *Ed School*, 258-320.

"Equally in View"

conscious commitment to a science of education, an increasingly bureaucratized organization, at least in urban school systems, its experimentation with vocational education and progressive pedagogy, and, crucially, the presence of a heavily female teaching force presided over by ambitious, usually male, school administrators. This school culture was for universal, democratic, and utilitarian education in its stated philosophy, and commonly enough, in its practices. Partly in consequence, the college-bound students in the evolving high schools probably enjoyed a less academic school climate even where the traditional college-prep courses remained—and some did not. With their student bodies becoming more diverse and challenging, many high school teachers, counselors, and administrators grew understandably less amenable to University direction.

The second of the two diverging cultures was that of a university in a state that was no longer a raw western outpost of the new American university movement, but one well on its way to joining an institutional elite. The University of California was an institution proud of the fact, it can be argued, that it had more graduates in Calcutta than in Carmel. Its educational philosophy was cast in the language of "maintaining standards" and "creating leaders." The University farm had long since been dispatched to Davis, and some hoped that the Agricultural College would follow it. The Academic Senate had wrested substantial academic authority from the overbearing President Wheeler, who had been chosen leader and given power by a lay board too busy for the day-to-day meddling it had practiced in the 1870s and 1880s. As Regent Wellman, a San Francisco banker had insisted when Wheeler was being recruited, "We want no old man and no cheap man."140 Intense specialization of knowledge, the research ethos, and the commitment to graduate education had all been secured at Berkeley. And despite the presence of as many women students as before, it was still a determinedly male world, with only a few women professors. It was a place where Professor Gayley felt free to bar women from his overcrowded advanced English classes. The values of impersonality, rationality, and "neutral"

¹⁴⁰Isais Wellman to Andrew Hallidie, April 28, 1899. In Regents' Files, Box 19, Folder 2, University Archives.

science and scholarship defined faculty norms. What we now call "male bonding" dominated the undergraduate scene, with fraternities and intercollegiate athletics defining "the Cal man" and feeding the nostalgia of the "Old Blue" alumnus.

The two cultures did, of course, retain elements in common. One was the careerism important to the modern middle class. Another was professionalization and the institutional processes defining it. A third was teaching: however much professors yearned or maneuvered for more time away from students, and not all did, it was almost impossible to escape the fact that they *were* teachers—far more than were the big city school superintendents whose salaries usually exceeded the professor's. And finally, the institutions of school and university still depended upon one another. The schools, under lay control and mired in local and state politics, needed the University for teachers and administrators, for the authority of university certified knowledge, and for ideas, even bad ones. The University depended on the schools for students who, in turn, generated almost all of the University's public and private support, public tolerance, and political good will.

CHALLENGING "THE CROWN": SCHOOL-UNIVERSITY RELATIONS IN A NEW AGE

When Professor William Swinton testified at legislative hearings way back in 1874, he supported the University's detractors when he noted the criticisms for the time he devoted to writing grammar and history schoolbooks. He had been warned to "not make any more books." Swinton defended himself thus: "I judged that as the incumbent of a Chair in a University avowedly the head of the public educational system of the State, a praiseworthy piece of work would be to prepare in my own department a series of books which might facilitate the passage from the school to the University, and thus bridge over a gulf which I have always regarded as unhappily too wide."¹⁴¹ Jacob B. Reinstein ('73) was probably an interested

¹⁴¹William Swinton, "The University and Its Managers, Before the People and the Law" in *The University of California*...; Prof. Swinton's Testimony (see note 112), 73. His Word Book and Outlines of History were

observer of that threatening controversy about the infant University's public obligations. Appointed to the Board of Regents in 1895, Reinstein spoke grandly to them in 1898 about the once sluggish bear, now "awakened to nobler and higher purposes, keenly alive to its superb destiny, and thrilling with new consciousness and fuller appreciation of its exalted mission, its expanding life, its glorious opportunities." The state, said Reinstein, had turned over to the University its commissions on viticulture and forestry to direct, and those in mining, highways and other sectors should follow suit. The University must also exercise a "commanding if not a controlling direction" over the practice of law and medicine, while the visitation of schools was a step toward directing the state's public education. The 1894 constitutional amendment making the University's president and professor of pedagogy members of the state board of education was a portent of the future:

The University is admittedly the crown of the public school system of the State, and its conduct and control, therefore, should be felt in every part of the system of public education, whether in primary, grammar or high school.... The entire system of education in the State, including the Normal School and the State Superintendent of Public Instruction, and the matter of school text-books should be under the control of the University.¹⁴²

Grandiose?—yes. New?—not quite. A scheme for statewide coordination and integration of education was articulated by Thomas

being used in public and church schools, on county teachers' examinations, and in normal schools cross-country, as late as 1900.

¹⁴²"Address of Regent J. B. Reinstein, at a special meeting of the Regents of the University of California for the purpose of suggesting and discussing matters necessary to the prosperity of the University, June 15, 1898" (Berkeley, 1898), in University Archives. Grand visions of its coordinating role were also evident in the regents' earliest deliberations on the proposed medical college. They stated that the Board of Medical Examiners of the University would not only examine the University's graduates but confer medical diplomas on the qualified graduates of other schools as well. See Regents' *Minutes* for April 1, 1873, Vol. 1, 310. Oakland.

Jefferson for Virginia in 1779, with William and Mary College to be its pinnacle. About the same time Benjamin Rush submitted a similar plan for Pennsylvania, featuring a proposed new state university. But it was the University of Michigan that nineteenth-century educators thought of when they looked for real models, although perhaps not quite so sweeping as Reinstein envisioned. While some of the earlyplanned features did not take hold in Michigan, its university did introduce high school accreditation, made various efforts to draw school and University into closer union, and pioneered a chair in pedagogics—that "distinct and most valuable science."¹⁴³ Michigan's partisans so consistently described its enveloping and uplifting role that it came to be seen as the ideal of the state university. As Michigan's pioneering chancellor, the German-inspired Henry P. Tappan, said in his inaugural in 1852,

the Primary School, the Intermediate School, and the University, now stand before us clearly defined; and these three constitute the educational system founded alike upon philosophy and experience.... And the University crowns the whole.¹⁴⁴

¹⁴³Superintendent O. C. Comstock, 1843. In George L. Jackson, *The Development of State Control of Public Instruction in Michigan* (Lansing, Mich., 1926), 154.

¹⁴⁴Henry Tappan, "A Discourse, Delivered by Henry P. Tappan, D.D. at Ann Arbor, Mich., on the Occasion of His Inauguration as Chancellor ..., December 21st, 1852," in *The Colleges and the Public, 1787-1862*, ed. Theodore R. Crane (New York, 1963), 162. The University's original powers over the state's educational system were greater than those given the education superstructure called the Regents of the State University of New York. Forgotten by then was the fact that the citizens of Berrien County, Michigan, had proposed in 1843 that the University's lands be sold and the proceeds turned over to the common school system. In Howard H. Peckham, *The Making of the University of Michigan, 1817-1967* (Ann Arbor, 1967), 22.

In 1854 California's state school superintendent, Paul K. Hubbs, argued for a Michigan-like university to be "the head or great high school to the public schools of the state."¹⁴⁵

The hierarchical relationship of university over school most benignly referred to as "coordination" came up against the facts of institutional competition. In competing for public support and loyalty, common school leaders often had the advantage over the friends of higher education. A writer in San Francisco's The Wide World proclaimed, in 1858, "the perfection of our Common School system is a much wiser and more generally efficacious aim to be attained, than the establishment of a College."146 Most heads probably would have nodded in agreement. As the writer prophesied, however, a state university was founded within a decade. Even so, California's first investment in public "advanced education" was not in the University but in the State Normal School, legislated and signed into being by Governor Leland Stanford in 1862. This was a more popular institution. if not because of a belief in pedagogy, then because of the general subjects it provided in a society with scant opportunities for public secondary schooling. Branches of the Normal spread south to Los Angeles in 1882 and north to Chico in 1889, before the University of California yielded to teachers importunings by establishing its pedagogy department.

Institutional competition had other faces, too. The University of California's hiring a professor of pedagogy to help prepare high school teachers delayed granting the ambition of normal school leaders to train high school as well as grade school teachers. Like the elite private colleges of New England, the University was not interested in contesting the turf of the traditional normal school or the normal departments of public high schools that guaranteed their

¹⁴⁵Paul K. Hubbs, Fourth Annual Report, 1854, California Superintendent of Public Instruction, 3. In James E. Myers, "The Educational Work of Andrew Jackson Moulder in the Development of Public Education in California, 1850-1895" (Ph.D. diss., University of California, Berkeley, 1961), 96.

¹⁴⁶The Wide West, January 17, 1858. Clipping in Scrapbook, Moulder Papers, Bancroft Library.

graduates only a teaching position in local elementary schools.¹⁴⁷ Instead, it was the opportunity to recruit aspiring teachers for the proliferating public high schools that eventually led various private colleges and universities to offer formal teacher-training courses themselves and, crucially, the implacable determination to thwart normal school incursions onto *their* turf.¹⁴⁸

Public schools, normal schools, and the state university did not face much competition from private education in California. The West was settled late enough in the political campaign for free public education to forestall the profession of private institutions that characterized the rest of the nation. Although with the tides of Catholic immigration, especially after 1880, California's few independent schools were joined by a body of parochial schools, most of elementary school grade, the two private systems had little in common, other than to prevent the "perfect articulation" of the University and the public schools. In their interest, if there was to be any regulation of schools, better have it done by the state department of education or the state superintendent of public instruction than by the professedly secular University.

¹⁴⁷Nevertheless, many of the graduates of the elite women's colleges taught in both elementary and secondary schools. A study of the 1912 graduates of five leading women's colleges concluded that 74.4 percent from Mount Holyoke and 30.8 percent from Vassar were teachers; still, Vassar refused to have an education department. Mabel Louise Robinson, *The Curriculum of the Woman's College*. Bureau of Education Bulletin, 1918, (Washington, 1918), 120, 124.

¹⁴⁸President Eliot of Harvard founded a chair in pedagogy, despite the opposition of Harvard's faculty. When a "professor of the history and art of teaching" was hired at Harvard in 1891, the legislature gratefully tabled the request for a higher normal school forwarded by common school spokesmen. See Hugh Hawkins, *Between Harvard and America: The Educational Leadership of Charles W. Eliot* (New York, 1972), 252-53; Arthur G. Powell, *The Uncertain Profession: Harvard and the Search for Educational Authority* (Cambridge, 1980), 37-38. Even more revealing is Robert T. Brown, *The Rise and Fall of the People's Colleges: The Westfield Normal School, 1839-1914* (Westfield, Mass, 1988).
For its part the University faced two sets of competitors of its own: the denominational colleges founded by Protestant and Catholic denominations, some before its own chartering. When the University was besieged by farmers' and workingmen's organizations in 1874, some believed that the private colleges were stirring the pot. Cornell's President Andrew Dickson White wrote to his close friend, President Gilman, "I have been curious to know what Bishop Peck accomplished for his rival 'University." Peck was Jesse Truesdell peck, Methodist pastor and Presiding Elder in California from 1858-1866, a "great lover and defender of his own church" and its college in California (the University of the Pacific).¹⁴⁹

The challenge of Stanford University proved more serious and protracted. It competed with the state university throughout California and in virtually every activity. In the words of one Berkeley participant, the University's early fondness for "the pies Mother Yale used to bake," had been succeeded by the examples of German universities, then Johns Hopkins, Michigan, and Harvard. But what California had lacked was the "fear of the Lord." This arrived with Stanford's opening in 1892.¹⁵⁰ The accreditation of high schools and the preparation of teachers and other school professionals were two of the fields on which their initial scuffling took place. In his first year Professor Brown warned President Kellogg that "our chief competitor" was pressing its educational work among the state's teachers "more than ever," having just hired Miss Margaret Shallenberger to work almost constantly in the various state and county teachers institutes-those inspirational and training sessions that teachers were periodically required to attend.¹⁵¹ The Academic Senate

¹⁴⁹A. D. White to D. C. Gilman, March 26, 1874. In Franklin, Gilman,
342. Peck's biography is in Malone, *Dictionary of American Biography*,
Vol. 4, 379-80.

¹⁵⁰In "The Junior College," unidentified mimeographed ms. In Academic Senate Files, Box 11, Folder 13, University Archives. This was almost certainly the work of Alexis F. Lange, in 1915.

¹⁵¹E. E. Brown to Martin Kellogg, December 13, 1893. In Regents' Files, Box 25, Folder 4, University Archives. Margaret Shallenberger, a graduate of the State Normal School in 1880 became a "critic teacher" in its training school in 1888. She went on to become, with Helen Heffernan of

politely rebuffed President's Jordan's immediate proposal that the two universities collaborate in accrediting high schools. California's faculty commented privately that Stanford was much more permissive in admitting students and anticipated that "the varying views of education in the two faculties" might cause disagreements in visiting teams. But Berkeley's faculty probably felt more impelled to protect its "peculiar relation" to the state's public schools, than "trust which we can not easily turn over to others."¹⁵² The fact that Stanford opened as a tuition-free school increased its competitiveness, especially among would-be teachers.

The University's chief obstacle to realizing a simple "headship" or domination of California's educational system, however, was the public school itself, particularly the high school. In the year of the stock market crash, there were 450 high schools accredited by the University, including 203 public and 40 private schools in the "A" division. The University's Schools Committee reported its gratification that 15 schools moved from "B" to "A" that year, further evidence of continuing academic advances.¹⁵³ Yet that same year Charles Ernest Overman wrote his Master of Arts in Education thesis on "Holding Power of the Junior and Four-year High Schools of San Francisco."¹⁵⁴ The year 1929 seems to be the high water mark in the public schools' commitment to satisfying the University's persisting

the Elementary Education Division of the State Department of Education and Corinne Seeds of the University Elementary School of UCLA, the most influential woman educator in California's history. Her early biography is in *Historical Sketch of the State Normal School at San José, California* (Sacramento, 1889), 128. Kathleen Weiler of Tufts University is working on a fuller study of Shallenberger and Heffernan as part of her book on women teachers in Tulare County from 1860 to 1960.

¹⁵²David Starr Jordon to President Kellogg, November 10, 1891 and December 15, 1891. An internal report of the Schools Committee recommended against the Stanford proposal. Academic Senate Files, Box 5, Folder 19, University Archives.

¹⁵³Report of the Committee on Schools, October 1929. In Academic Senate Files, Box 15, Folder 9, University Archives.

¹⁵⁴"Degrees and Certificates, August 26, 1929." In Academic Senate. Files, Box 15, Folder 9, University Archives.

concern for high standards in the ever-more numerous high schools, with their increasingly socially diverse student bodies. Although future University freshmen might have equaled or surpassed their parents and grandparents in average academic aptitude, the ensuing Great Depression accelerated the transformation of the typical American public high school into something approaching a mass rather than a selective institution. The "holding power" of the high school became a deeper concern, when to fail or repel a youngster was probably to send him or her to certain and likely prolonged joblessness. Schoolmen and many professors of pedagogy, therefore, worried more about how to prevent the high school from becoming internally differentiated—into college preparatory and general or vocational streams—than they were concerned about their obligations to be colleges' partners as custodians of high culture.

Professors may be constitutionally inclined to lament the prior preparation of their students for university work, but there were some grounds in the fact that, as early as 1915, two-thirds of the male and half of the female undergraduates failed the University's "Subject B" examination. This was an exercise in translating an ordinary passage of prose from a modern or ancient language into English, despite having had 10 to 12 units of high school and/or college foreign language study.¹⁵⁵ Nor could having immigrant backgrounds account for much of this problem. While, in 1910, 32 percent of the schoolchildren of Los Angeles and 57.8 percent of those in San Francisco were the sons and daughters of the foreign-born, the University educated proportionally few of them. Despite its location next to immigrant-rich Oakland and San Francisco, the free University of California had, however, fewer foreign born or second-generation students than did some other public universities.¹⁵⁶ The native-born

¹⁵⁵Report of the Subject B Committee, January 1915. In Academic Senate Files, Box 11, Folder 13, University Archives.

¹⁵⁶The University's figures were closer to those of eastern private universities than to public institutions like the City College of New York (with only 13 percent of its students native-born of native-born parents) or, a less extreme example, the Universities of Minnesota (61 percent) and Illinois (50 percent). *Report of the Immigration Commission: The Child*-

children of native-born fathers were 69 percent of male and 72 percent of female students in the letters and science departments, and 65 percent of the male students in engineering and technological fields.

Given the large role that the University was playing in the education of future teachers, one wonders whether teachers were overrepresented among the rather small number of immigrantbackground students enrolled at Berkeley in the first decade of the twentieth century. Since the foreign born and children of the foreign horn were so prominent among the nation's total teacher-force-48.6 percent nationally-and even more so among San Francisco's teachers-an astounding 61 percent-this seems likely. We know that teaching, especially among immigrant women, was a well-trod ladder of upward social mobility and acculturation.¹⁵⁷ The universities' lesser exposure to the nation's latest newcomers, then, was one contributor to that "unfortunate chasm"-to use Swinton's term. As early as 1886 Kellogg cautioned the Academic Council about a reference in a draft letter to San Francisco school officials about "the introduction of elements outside of the University requirement" into the English curriculum. If left in the University's letter, he warned, it might have elicited the rejoinder that these "same outside elements' are wanted by the majority [of students and parents] who do not look

ren Immigrants in Schools (Washington, D.C., 1911). A study of 37 cities found that foreign-born and second-generation school children were 57.8 percent of the total enrollment in grades 1-12. *The Children of Immigrants in Schools, in Five Volumes,* Vol. 1, esp. pages "k", 15-19, 129-40 and Vol. 5, 716-837. African Americans were a much smaller proportion of the state's urban school population: 3.2 percent in Los Angeles and 0.2 percent in San Francisco. In both cities German immigrants were the most numerous. Reprinted with an Introduction by Francesco Cordasco (Metuchen, N.J., 1970).

¹⁵⁷The Los Angeles immigrant-origin teacher was, at 26 percent, below the national average. On teaching and immigrants see Hasia R. Diner, *Erin's Daughters in America* (Baltimore, 1983) and Ruth Jacknow Markowitz, *My Daughter, The Teacher: Jewish Teachers in the New York City Schools* (New Brunswick, N.J., 1993).

forward to University study.³⁵⁸ Kellogg understood that high schools and the future junior colleges and state teachers colleges would have to operate in limited reference to the state university.

"Articulation" between university and school has never been smooth. While the one encouraged, the other sometimes resisted and probably often chafed and resented university influence. The University's accreditation system particularly irritated California's small high schools. And however limited the education and formal training of the mass of California's teachers, there were undoubtedly perceptive and wise teachers and administrators present in the state, ready to agree with Dean Lange that "university men are not divinely inspired in educational matters."159 There must have been many California teachers, administrators, and school board members who would not echo the congratulations meted out to this University by the author of a Harper's Weekly story in the late 1890s, who spoke of the University's having "secured practical control of the entire system of secondary education in California, [and] steadily extending its influence in the field of primary education."160 Reiterated optimistic references to improving relations with the schools may testify as much to their absence as to satisfaction on this score.

The schools' resentment of unwanted and "unwarranted interference" was the reason given in 1891 by State Superintendent James W. Anderson for his opposition, as a regent, to appropriations to professors for school visits during the vacation periods. He called their "drumming expeditions" less evidence of an interest in the common schools than a "convenient way of meeting the expenses of a vacation." Worse still, the entire thrust of the faculty's efforts was at turning the high schools—"the means of useful higher [i.e., secondary] education for the children of the people"—into "nurseries to feed the State University."

I sincerely deprecate this interference on the part of the Faculty of the State University with our schools of lower

¹⁵⁸Report of Academic Council, as amended by Professor Kellogg. Academic Senate Files, Box 2, Folder 15, University Archives.

¹⁵⁹Lange, "Junior College," 8.

¹⁶⁰Ouoted in Jones, Illustrated History, 239-42.

grade. Were they advised relative to the effect which this interference is having they would arrive at the same conclusion . . . that they are doing harm to our lower schools and no good to the University. . . . The people have proper advisers among themselves, and they desire to say to the Faculty of the State University—that they are transcending the limits of that which legitimately falls within the purview of their duties. . . . I speak plainly, because, as one of the people, I claim to know the sentiments of the people upon the subject.¹⁶¹

The independence and pride of public school educators was strengthened by the reform movement that came to be called progressivism. In 1904 Robert Hunter published *Poverty*, a book whose impact on the campaigns for compulsory schooling, laws against child labor, and child welfare measures generally was like that which Michael Harrington's *The Other America* had on the 1960s "war on poverty." Hunter wrote, in part,

161 J. W. Anderson to Secretary Bonté, July 13, 1891. In Regents' Files, Box 14, Folder 25, University Archives. In a subsequent letter (July 22, 1891) Anderson elaborated on his views, contending that not more than one in six hundred of the school census population expects to go beyond the public school, that the high schools needed an "eclectic" curriculum with the college preparatory track as only one option and not the determining element, and that improvement of elementary education was being neglected. The regents' recommendation and Jones' proposal for the summer forays are in Academic Senate Files, Box 19, Folder 14 and W. C. Jones to Bonté, May 7, 1891, Regents' Files, Box 14, Folder 26, University Archives. State superintendent from 1891-1894, Anderson (1831-1920), was a graduate of Washington and Jefferson College, taught school, came to California from his native Pennsylvania in 1854, taught in and was superintendent of Solano County's schools, went to San Francisco as a grammar school principal, and was elected the city's superintendent in 1887. A Republican, he defeated Ira G. Hoitt for the state's top educational post. After leaving office he became an orchardist, but retired to Oakland and attended the annual meetings of the California Teachers Association to a very old age. In Cloud, Education, 63, 88-91. See also Curti and Carstensen, Wisconsin, Chapter 17, for the concessions forced on that university.

The universities are great and powerful in their way; but how much greater and more powerful are these common schools, training the hearts and minds of these millions. The head of the greatest university in New York has five thousand students to make into men; the head of the common schools of New York has half a million children to make into citizens.¹⁶²

While Berkeley law Professor Jones thought public school authorities were still "much at sea as to how to organize high schools," the historical outcomes of school-University conferences and the tussles over the accreditation process showed that the schools could also instruct the University. The interests of parents and students not headed for the University came to determine significant elements of the educational programs even of the college-bound. Students' prior preparation affected both the University's entrance requirements and the general shape of the courses they followed in the University and, in turn, the future of fields, departments, and professors employed to teach. While the University of California tutored school men and school women, its faculty and regents also had their lessons to learn.

CALIFORNIA'S DAUGHTERS: WOMEN STUDENTS AND THE EMERGENCE OF THE MODERN AMERICAN UNIVERSITY

In his account of education in California prepared for the Louisiana Purchase Exposition, longtime Oakland High School principal J. B. McChesney wrote that, once its full meaning was grasped, the University of California's admission of women

... gave an additional impulse to the cause of secondary education and rendered the multiplication of high schools necessary. The reaction of this movement upon the high schools themselves was particularly beneficial, in that young

¹⁶²Robert Hunter, *Poverty* (New York, 1904), 222. Cf. Michael Harrington, *The Other America* (New York, 1962).

women ... became equipped to render valuable service to the high schools.¹⁶³

True, but there was more: women also rendered valuable service to their university's development and to the generality of American higher education. These concluding pages will pull together, from California's history and elsewhere, a several-sided thesis: that women, especially as student consumers, belong at the core, not the periphery of the evolution of American higher education as we know it. Furthermore, that the enabling role played by college and university women was initially driven, and sustained thereafter, by demand for more, and better educated, schoolteachers.¹⁶⁴

The growth of 19th-century public schooling, with its relentless demand for teachers, was a driving force behind the surprisingly rapid and near-total collapse of resistance to women's entry into American colleges and universities soon after the Civil War. The initial portal was usually the "back door": the summer session, extension courses, nonmatriculant special-student status, the Ladies' College or the Teachers' Course—usually carefully described as representing a generous public service and not an alteration of the school's fundamental character as an institution for, and by, men. The University of Missouri, opening a normal department for women first, was fairly typical. In 1870, as President Reed explained,

finding that the young women at "the Normal" did no matter of harm, we very cautiously admitted them to some of the recitations and lectures in the University building itself, providing always that they were to be marched in good order,

¹⁶³J. B. McChesney, *Secondary Education in California* (San Francisco, 1904), 15.

¹⁶⁴Several of these ideas were first elaborated, illustrated, and supported by an extensive bibliography, in Geraldine Jonçich Clifford, "Shaking Dangerous Questions from the Crease': Gender and American Higher Education," *Feminist Issues*, 3, No. 2 (Fall 1983): 3-62, and subsequently developed for presentation at the Annual Meeting of the History of Education Society, Chapel Hill, North Carolina, November 1994 and the "Women at Cal," conference, Berkeley, April 1995.

with at least two teachers, one in front and the other in the rear of the column as guards.¹⁶⁵

The private University of Pennsylvania justified its admission of a few women in 1878 as "special students" in advanced courses in history, physics, and chemistry—the result of a petition of ladies who planned, "without exception," to be physicians or teachers. Since,

... they asked of the University, what was essential to their calling, and what, according to their own statement, they could not find elsewhere, except at great inconvenience, the authorities would not only have been unjust, but cruel, if they had denied their request. ... What may be done in the future depends upon the wants of the future.¹⁶⁶

Despite the quantities of ink spilled arguing whether higher education masculinized the females or feminized the males, it was a rather quiet revolution—perhaps too quiet for many historians' ears. As Wisconsin professor James D. Butler recalled, in 1890, coeducation "came in almost unawares, as the morning steals upon the night, chasing the darkness."¹⁶⁷ Women's enrollments benefited individual women and women in general, while supplying the nation's schools with enough teachers to put the United States at the forefront in the world's expansion of tertiary as well as secondary education. Not only did women's presence play a decisive role in the development of higher education as we know it, but even those few institutions that did not admit women until recently, arguably, had their histories shaped by their discrimination on the basis of gender. How did this work?

¹⁶⁵Quoted in Robert E. Belding, "Iowa's Brave Model for Women's Education," Annals of Iowa, 43 (Summer 1976): 346.

¹⁶⁶Quoted in Saul Sack, "The Higher Education of Women in Pennsylvania," *Pennsylvania Magazine of History and Biography*, 83 (January 1959): 40.

¹⁶⁷From the Wisconsin *Badger*. Quoted in Helen Olin, *Women of a State University* (New York, 1909), 272-78. The Mormons' University of Deseret (Utah) was the first state university to admit women (1850); Iowa followed in 1855.

First of all, to admit women was to open the only reservoir of untapped, academically qualified, and highly motivated students adequate to sustain and expand American higher education. Female seminaries and coeducational academies had been founded in great numbers, especially since the 1820s. The new public high schools were also becoming "female places," by the century's end, young women were 51 percent to two-thirds of all high school graduates, and carried off more than their share of academic honors.¹⁶⁸

During the Civil War various all-male northern and midwestern institutions admitted women students to avoid closing as their only students—young men—entered the military. The "necessity of the university" became "women's opportunity."¹⁶⁹ A postwar return to all-male student bodies proved impossible. Whether it was the calming effects of women's presence on male conduct, a shrewd calculation of the economic and political benefits of coeducation, or the sheer difficulty of undoing an action so badly wanted by an articulate and blameless few, coeducation persisted and spread. Indiana and Kansas imitated Wisconsin. The older University of

¹⁶⁹Professor Butler, in Olin, *Women*, 272-78. In contrast, southern institutions simply closed during the war, and eventually reopened as before. Even by 1910, only six of the 11 state universities from Virginia to Texas accepted women. The University of Georgia, founded in 1801, first took women as regular undergraduates in 1918, and Virginia waited 50 years longer. When Florida reorganized its public system of higher education in 1905, it consolidated schools and abandoned coeducation, *except in its teacher training*, creating the University of Florida for white men, and Florida Female College for white women (later the coeducational Florida State University). See Samuel Proctor, "The University of Florida: Its Early years, 1853-1906," (Ph.D. diss, University of Florida, 1958). Because the South was late to reap the benefits of women's presence it had fewer bridges to traverse the chasm of institutional power, prestige, and national ranking that separated its institutions from the nation's university elite.

¹⁶⁸Except in the largest communities, affordable tax-funded high schools could not have existed without either their women teachers or their women students. In the United States Commissioner of Education's *Report* for 1889-90, for example, females were 57.6 percent of high school pupils and 64.8 percent of high school graduates.



Figure 13: Students in the entomology classroom, Budd Hall, 1900. The popularity of nature study in the elementary school classroom and opportunities as teachers of the life sciences in high schools drew women to Professor Woodworth's classes.

Michigan and the infant University of California both admitted women in 1870, making it almost certain that all subsequent state university foundations would do likewise. By 1900 there existed 190 women's colleges alone, and half of all other colleges admitted women who made up 37 percent of total college and university enrollments nationally.¹⁷⁰

Moreover, given the widening flow of women into school teaching—a consequence of greater need for teachers, declining male interest, and more women obtaining the prerequisite schooling—to prepare women to teach was to further the expansion of high school and, hence, enlarge the supply of potential college and university students. Women, thus, brought colleges and universities larger enrollments in some proportion to the nation's demand for teachers. High school teaching became the proximate if not the ultimate aim of many collegians. Between 1800 and 1900, the percentage of *all college graduates* who entered teaching grew from about 5 percent to 25 percent, and reached 38 percent in 1966. *Among women* the figure averaged around 40 percent of college graduating classes over the decades. In 1896 it was reported that of all employed women college graduates nationally 90 percent were teachers.¹⁷¹

¹⁷⁰In the post-Civil War era, few colleges were founded for one sex exclusively except by Roman Catholic religious orders, and many of these eventually failed or survived only by belatedly becoming coeducational. As a percentage of all colleges and universities, those admitting both sexes grew steadily: being 29 percent in 1870, 58 in 1910, 75 in 1957, and 92 in 1980.

¹⁷Bailey H. Burritt, "Professional Distribution of College and University Graduates," in U.S. Bureau of Education *Bulletin* No. 19 (Washington, 1912); Kate H. Claghorn, "The Problem of Occupation for College Women," *Association of Collegiate Alumnae Publications*, Series 11, No. 21 (1897).

The opportunity to teach in racially segregated schools in black communities also succeeded in making females the majority of black high school graduates and causing black colleges to become *de facto* teachertraining institutions. The dean of women at Howard University reported that 90 percent of the Howard women in the early 1930s were preparing to teach. In Elizabeth L. Ihle, "Lucy Diggs Slowe," *Women Educators in the United*

Public high schools were essential if higher education was to prosper. Because American high schools of the late 19th century were willing to employ women teachers, enrollments could grow at an unprecedented rate, popularizing secondary education a generation or more before this happened in Europe. Given women teachers' availability and the lower wages they would accept, it was possible for over 10 percent of the 15 to 18 year old age group to attend U.S. upper secondary schools in 1910 This was a figure reached in Europe only after 1945. By 1930, the percentage of the age group in American high schools was five times higher than in Europe. In high school enrollments American higher education thus had an enormous advantage for growth if it chose to use it.¹⁷²

To enroll women was to enable various things to happen. For one, their presence allowed struggling, undersubscribed colleges to open or remain open and to continue to offer higher education to a limited constituency, that is, their local community or the regional adherents of a sponsoring religious denomination. This was the position of California Wesleyan College, which graduated its first class in 1858: five women and five men.¹⁷³

Colleges could also "buy time"—putting off, perhaps indefinitely, other unsettling, unwelcome, or expensive changes. Simply by

States, 1820-1993, ed. Maxine Schwartz Seller (Westport, Conn., 1994), 450.

¹⁷²The 30 percent mark was passed in the U.S. in the early 1920s, in Europe in the 1960s. A. J. Heidenheimer, "The Politics of Public Education, Health and Welfare in the USA and Western Europe: How Growth and Reform Potentials Have Differed," *British Journal of Political Science*, 3 (1973): 320. For the average of 26 nations see *Annuaire International de l'Education et de l'Ensignment* (International Bureau of Education, Geneva, 1936). Significantly, in 1933, only Ireland (where men were 48 percent) and the U.S. (40 percent) had more female than male secondary school teachers. In Leo M. Chamberlain and Leonard E. Meece, "Men and Women in the Teaching Profession," Bureau of School Service, College of Education, University of Kentucky, *Bulletin*, 9, No. 3 (March 1937).

¹⁷³It survived to become the College (later University) of the Pacific. In William Warren Ferrier, *Ninety Years of Education in California, 1846-1936* (Berkeley, 1937), 191.

their admission, women students offered institutions a chance to more than double their enrollments in their classical, literary, or English streams—fields of declining popularity among male students. This opportunity entailed little or no expense by way of added faculty, classrooms, seats in chapel, or library acquisitions since almost all colleges had underutilized facilities, and local residents were eager to take in student lodgers and boarders, precluding the need to build dormitories immediately. The University of California took little interest in housing its women beyond some regulation of private boarding houses.

Along with filling unused college places, women's enrollments functioned to "hold the line" for the liberal arts, balancing the old subjects with such new curricular claimants as the physical and social sciences, architecture, journalism, commerce, and engineering. Women students were content with the older college curriculum longer, in part because the classical curriculum had for centuries been put beyond women's reach, declared beyond their mental and physiological capacities.¹⁷⁴ And as already noted, the liberal arts also constituted the largest part of the secondary schoolteacher's preparation. The greatest growth at the University of California in its first half century came in its English, history, and modern language

¹⁷⁴The first generations of college women were driven to prove otherwise, with Carey Thomas the best known example. See Marjorie Housepian Dobkin, ed., *The Making of a Feminist: Early Journals and Letters of M. Carey Thomas* (Kent, Ohio, 1979), 50-51. Thomas chose coeducational Cornell University over her initial preference for Vassar. She was unable to breach the males-only policy of the Johns Hopkins University (she was admitted to do graduate work but not allowed to attend classes), earned a doctorate at the University of Zurich in 1883, and returned to be dean and then president of the new Bryn Mawr college, which she determined would be as rigorously intellectual as the best of the male colleges. While few women were as energetic and aggressive as Thomas, she articulated the ambition and anger that many women felt. Thomas achieved a measure of revenge when her close friend, Mary Garrett, made women's entrance to the Hopkins Medical School the condition of her gift, in 1890, which enabled that school finally to open.

courses.¹⁷⁵ Some of the explanation was the increase in women's share of total admissions. But the liberal arts preference was cinched by the appeal of these studies to prospective high school teachers. Professors might resent the presence of any, or so many, "co-eds," but the fact remains that otherwise underemployed liberal arts faculty were finding their classes filled—with women.¹⁷⁶

Women's contributions to collegiate well-being were not limited to traditional studies. Women's presence helped pay the bills in colleges that chose to modernize: to diversify offerings and introduce whichever of the expensive, university-type changes seemed essential or desirable. The "head count" of the women students in the culture courses helped cover the new costs. In 1902, economics professor J. Laurence Laughlin reassured the recorder (registrar) that the apparent feminization of the University of Chicago by large female enrollments was only a temporary phenomenon:

The congestion of numbers is now largely due to the fact that the undergraduate courses are . . . used by women *as an advanced normal school* to prepare for teaching. Just so soon as proper support and endowments are given to . . . training for careers in engineering, railways, banking, trade and industry, law and medicine, etc. the disproportion of men will doubtless remedy itself.¹⁷⁷

However useful was the engineer or the banker, the average American had more direct experience with the teacher. In the

¹⁷⁵President Davis' report on Fall 1889 admissions noted that the freshmen increase over the previous year was entirely absorbed by those fields, the others barely holding their own. The College of Letters received 67 percent of all those admitted.

¹⁷⁶This kept liberal arts faculty employed; they even faced the happy prospect of gaining new colleagues. The association of women with the liberal arts became so strong that when Princeton, in its 223rd year, finally chose co-education, one of the arguments used was that women's enrollment would permit the University to augment its humanities faculty, particularly in the arts.

¹⁷⁷Quoted in Rosalind Rosenberg, Beyond Separate Spheres: Intellectual Roots of Modern Feminism (New Haven, 1982), 48-49 (emphasis added).

production of school teachers, taxpayers had a credible, self-interested reason to support public higher education, and to give universities quasi-governmental status in accrediting high schools and licensing teachers. For how could educated women more visibly, and directly benefit society, in thousands of communities, than through their contributions as teachers, in improved elementary and secondary schools? Small wonder that, of all women collegians in 1900, already 92 percent were enrolled in public higher education.

As teachers, women not only prepared thousands of young people for college but also motivated and channeled their enrollment, and served as role models of independent women. In many communities, it was only through college graduates who were teachers that most citizens *ever* apprehended the benefits of higher education before World War II. Colleges and universities that wished to grow in students and income, and to stave off institutional competition, were well advised to see that their graduates became teachers, especially high school teachers. Nor is it surprising that, at a time when colleges and universities did nothing in an organized fashion to help graduates find employment, many created offices to coordinate faculty recommendations for would-be teachers and principals, and to put them in touch with schools and school districts.

As seen in the University of California, and in the histories of at least 1,500 other institutions, prospective and actual teachers—most of them women—generated new departments, the largest and most numerous of them being education.¹⁷⁸ Eventually, most institutions, yielding to the importunings of teachers, the public, and politicians, created departments of pedagogy and later schools or colleges of education. Very quickly education also became the largest field for masters and doctoral degrees, hastening the growth of graduate

¹⁷⁸In 1983, even after a decade of attrition, there were still 1,287 teacher education programs in U.S. colleges and universities. This number was 13 times the number of law programs, 14 times the number of medical schools, 16 times that of business programs, and 17 times that of journalism and mass communications departments. Some 8 percent of all four-year college and university faculty were in education departments. See Clifford and Guthrie, *Ed School*.

enrollments. Teachers made summer sessions and extension courses a permanent feature of countless colleges and universities.¹⁷⁹

The schools' need for teachers probably broadened the social composition of college and university student bodies, and ultimately faculties, more quickly and to an extent beyond anything previously experienced. The diversities that teaching initially introduced into higher education were primarily those of social class and gender, since the majority of public school teachers produced by the colleges and normal schools before 1900 were still "old stock" Americans: native born of the native born, white, Protestant, the children of farmers and others of the variable middle and lower-middle classes. The 1910 census, however, revealed that 27 percent of women teachers nationally were native-born daughters of foreign-born parentage.¹⁸⁰ Immigrant origins were most prominent among big city teachers, precisely the teachers who had received, on average, the most education beyond high school.

Women's entry into higher education resulted in coeducation in most cases. The woman student and her interests, a healthy measure of which concerned children and schools, were in the college and university for good—like it or not. But what of those few male-only northeastern and southern colleges and universities that resisted coeducation, in a few cases well into the twentieth century? Are their histories not unaffected by women? Quite the opposite seems true. Not only did women's presence play a decisive role in the development of higher education, but even that minority of institutions that

¹⁷⁹University of California and public records make clear that the regularization and expansion of summer school and extension work was primarily a response to the demands of teachers, especially high school teachers, as was the creation of the chair of pedagogy. See, for example, Special Committee on Summer Schools Report to Academic Council, March 1, 1898. Academic Senate Files, Box 8, Folder 16, University Archives. In "University Summer Session," *The Northern Crown*, V, No. 2 (May 1912), published in Petaluma, Sonoma County, it was reported that three-fifths of the 1,950 students at the 1911 summer session were teachers.

¹⁸⁰By 1920 teaching ranked fifth among the occupations of all women with foreign or mixed parentage. In Lotus D. Coffman, *The Social Composition of the Teaching Population* (New York, 1911), 55. long excluded them arguably had their histories shaped by their discrimination on the basis of gender. Women's entry into almost all colleges and universities permitted a few of the older, stronger, betterendowed all-male private colleges and universities to remain so. In return for their trustees' persistence in excluding women, they exacted the pledge that their alumni and other supporters would send their sons and their dollars in return: to "protect the character of the college as they had known it," to retain the "manly intimacy" and undiluted culture of an all-male institution, and as an alternative to coeducation.¹⁸¹ Yale, Virginia, and Princeton, among a few others, did it by exclusion. Harvard, Columbia, Brown, Rutgers, Western Reserve, and Tulane established coordinate (women's) colleges with greater or lesser degrees of sex segregation. By this strategy, they defused the pressures for coeducation and mitigated feelings of guilt among their patrons. Now there were, they could say, plenty of acceptable alternatives for the daughters of wealthy or influential families. Eventually, of course, these "holdouts to coeducation" capitulated to the many other attractions of coeducation.

Ironically, given the long history of male doubts about college walks being turned by coeds into "hairpin alleys," it was the men's students' preferences that turned the tide within those institutions that eventually said "Yes" to this most basic wish of women: for access. Notwithstanding the lateness of their welcome, institutions of higher education got more than they bargained for with the *ladies*—and so did America's schools, with their *lady teachers*.

¹⁸¹Frederick Rudolph (*The American College*, 324-25) wrote in 1965, possibly wryly, that male liberal arts colleges (like his own Williams College) "preserved the liberal inheritance of Western civilization" by protecting the nurturing of that tradition from "the danger of being monopolized by women." Thus, it was possible to study the humanities at Harvard and Yale without being thought entirely "unmanly," something more difficult to achieve in the coeducational institutions where sexism caused some men to avoid fields in which women students were concentrated. Changes in the occupational structure, however, probably caused more of the decline in the liberal arts than did "sex repulsion"; witness declining enrollments in the liberal arts in the all-male colleges.

The Author

Geraldine Jonçich Clifford, emeritus professor of education, received two degrees from UCLA and taught in public and private schools in California and Venezuela. Her faculty appointments included a year at the University of California, Santa Barbara, and 32 years at UC Berkeley. Her doctorate is from Teachers College, Columbia University, where she studied the history of education with Lawrence A. Cremin. Among her past books are *The Shape of American* Education, Ed School: A Brief for Professional Education (with James W. Guthrie), and Lone Voyagers: Academic Women in Coeducational Universities, 1870-1937.



Photo: Jane Scherr

The Editors

Carroll W. Brentano is an architectural historian and Project Coordinator of the University History Project, Center for Studies in Higher Education at the University of California, Berkeley.

Sheldon Rothblatt is Professor of History and Director of the Center for Studies in Higher Education, University of California, Berkeley.

The Series

The Center for Studies in Higher Education at Berkeley, in cooperation with the Institute of Governmental Studies, takes pleasure in publishing a series of "chapters" in the history of the University. These are designed to illuminate particular problems and periods in the history of U.C., especially its oldest and original campus at Berkeley, and to identify special turning points or features in the "long century" of the University's evolution.



South Hall Annex University of California Berkeley, California 94720-4650 510 642-5040



Institute of Governmental Studies 102 Moses Hall University of California Berkeley, California 94720-2370 510 642-6723

Cover Design: Maria Wolf