

and clerks' sons. The *grandes écoles* continued to draw the vast majority of their students from the *notables*. *Arts et métiers*, which took students out of elementary, not secondary, schools, uniquely recruited students from the working or artisanal classes. Those schools allowed sons from these groups to climb the social ladder. In their first years, a majority of students were sons of the military or other public employees. From 1830 onward, they were directly linked to industrial society. Seldom sons of the impoverished, they were closely tied to the world of machine work.

Three patterns of mobility clearly emerge. The first is from father's occupation to son's first job. Most graduates began with modest positions in private industry—basically a shift from traditional occupations to those consonant with the growth of French industry. Their career mobility was dramatic. Beginning as mechanics or foremen, they became shop supervisors and, after about twenty-five years, plant managers. *Gadzarts* had skills and training that few others in the society did and they advanced within the company. Many assumed significant roles as industrial engineers, managers, or entrepreneurial pioneers. With success, the social level of the schools' clientele rose as manufacturers sent their sons to the schools for practical training. Modest but consistent mobility patterns meant that the grandchildren of workers became senior executives.

This history of the *écoles d'arts et métiers* has revisionist implications for fields beyond education. Specifically, it demonstrates that France was

producing a large number of technical specialists. The schools provided foremen and managers sufficient for the needs of French business and industry during the nineteenth century. French scientific and technical education was not lagging behind that elsewhere in Europe. Day's findings thus support revisionist studies of French science and industry.

*Education and the Industrial World* is meticulous in its research, sophisticated in analysis, and informed by the best and most recent research in a variety of areas. It is and will remain the standard history of technical education in France.

Patrick J. Harrigan  
University of Waterloo

**Reed Ueda. *Avenues to Adulthood: The Origins of the High School and Social Mobility in an American Suburb*. Cambridge: Cambridge University Press, 1987.**

By most accounts, public schooling has played a crucial role in American social organization for well over a century. For not nearly so long, but for several academic generations, American scholars of various disciplines and persuasions have attempted to identify the roots of the common school movement, to understand public schooling's place in sustaining the Republic, and to measure the importance of formal education for individual success and class formation. Today American historians of education seem engaged

in three pursuits: measuring the claims of the seventies' revisionists, studying the growth and impact of secondary education in the early twentieth century, and fighting over appropriate methodological and theoretical approaches to an American past which now seems only muddled by the strident claims of the past twenty years.

Perhaps unwittingly, Reed Ueda's *Avenues to Adulthood: The Origins of the High School and Social Mobility in an American Suburb* opens a window on all three historical debates. As well, it provides an empirical and conceptual bridge between the social mobility studies of the early sixties and contemporary concerns with the formation of an American middle class. Though Ueda himself stresses the modesty of his enterprise and the limits of his conclusions, *Avenues to Adulthood* is ambitious in its attempt to illuminate the intersection of American high schools, civic politics, and twentieth-century class formation. Though not entirely successful, it nevertheless both elucidates the close relationship between schooling and class formation, and alerts us to the limitations of one approach to the process.

*Avenues to Adulthood* is a carefully crafted analysis of secondary education in Sommerville, Massachusetts (a suburb of Boston) from 1850 to 1930. It traces the birth of a free public high school in 1852, the later construction of both an academic and a mercantile school (Latin and English High Schools), their subsequent merger, the emergence of an identifiable high school youth

culture by the turn of the century, and the political fight over junior high schools, eventually won by the ascendent Democrats in 1916; and, through a systematic analysis of state and federal censuses, city directories, and school records, Ueda outlines the make-up of successive high school populations and their occupational destinations.

Ueda wants to add to our understanding of secondary schooling and civic politics, and secondary schooling and social organization and formation. He argues that from 1850 local Republican politicians consistently promoted secondary education, and that more generally, education was always closely related to civic virtue and civic political life. Unlike in other towns, notably Michael Katz's Beverly, Massachusetts, Sommerville's Republican commercial elite voted unanimously at mid-century to build a free high school.<sup>1</sup> They were motivated, Ueda claims, by a desire to create avenues of opportunity for their own and their neighbours' children and by a desire to create a community as institutionally complete as surrounding towns, to provide avenues to the emerging white-collar American middle class. But as a booming job market, especially for boys, dictated that respectable employment could still be secured without high school education, enrolment remained low until the last quarter of the century. Indeed, to 1870 the Sommerville high school retained its traditional role as a finishing school for a privileged minority.

However, as the Republic recovered from the Civil War and Sommerville grew rapidly into a fully incorporated city of more than 10,000, the structure, role, and prestige of the high school changed markedly. Middle-class schoolmen enthusiastically and consistently promoted the school as the "College of the People" and emphasized the increasing occupational opportunities afforded by a high school degree. In 1870 they widened its appeal to the sons and daughters of all white-collar and artisanal families by introducing two streams, one leading directly to white-collar jobs and the other to college. Enrolment soared, especially in the "mercantile" stream, and by 1895 a new building was necessary, and built, again, with only limited opposition. Sommerville's dual high school system was so successful, and so widely praised, that in 1900 it was included in the American display at the World's Exposition in Paris.

After 1900 the system continued to prosper, but in slightly new directions and under new leadership. Most importantly, as Sommerville grew, the old Yankee-Republican dominance broke down. As the town was flooded by waves of immigration, local politics came to be dominated by Democrats. On school matters, these Democrats allied themselves with reform-minded progressives and championed, against the Republican-business opposition, junior high schools. In 1916 four junior highs were built, promoted because they promised greater opportunity for immigrant and working-class children to gain a secondary education and

proceed along their own avenues of opportunity; they were opposed by the Republican establishment as unnecessary, expensive frills.

Thus for Ueda, nineteenth-century high schools were promoted and dominated by the Republican middle class, and allowed and sustained middle-class inheritance and upward mobility; the early twentieth-century junior high schools were in turn the product, the symbol, and the proposed occupational avenue of a burgeoning, aspirant, immigrant class.

Ueda supports this contention with substantial systematic data. From his analysis of occupational strata, school enrolment, and career paths, Ueda argues that increasingly, from about 1870, Sommerville's high school became the desired and most popular path to middle-class occupations (albeit not the only one). By 1905, for instance, 30% of high school-age youth enrolled in one of the two streams, about equally balanced between genders. Though enrolment remained biased towards white-collar children throughout his study, Ueda argues that in Sommerville, high school enrolment was within the grasp of most social groups. Though they were disproportionately enrolled in the mercantile school (until the merger), and their chances of obtaining white-collar jobs were never as great as those of the children of white-collar parents, the children of blue-collar workers increased their share of enrolment steadily from 1870 through to 1930, paralleling the growth of white-collar labour in Sommerville and surrounding areas.

While Ueda recognizes and plots the consistent occupational biases of the student body, he takes pains to emphasize that by the turn of the century even working-class youth perceived the high school in middle-class ways. That is, just as the established middle-class utilized high school to enter white-collar and professional occupations, so too did some working-class youth. Though the two streams retained distinctive occupational profiles, Ueda argues that the values, manners, and individual occupational aspirations of the middle class were increasingly shared by all high school students. Indeed he asserts that the relative presence of middle-class values in blue-collar youth separated them from their own class, and that the relative lack of such qualities (and connections) continued to undermine their ability to translate a degree into respectable employment.

Ueda concludes that the Sommerville data provide support for the theses of both Samuel Bowles and Herbert Gintis, and John Goldthorpe.<sup>2</sup> On one hand he recognizes that high school enrolment was consistently circumscribed by social structures, and that for blue-collar kids, even a degree did not guarantee opportunities equal to those of their middle-class contemporaries. Children of advantageous social position consistently moved from high school to college and then to professional jobs, or from high school to white-collar jobs. Even with high school degrees many blue-collar kids were blocked from the satiable white-collar market. On the other

hand, Ueda argues that, increasingly from 1870, secondary schooling was crucial to the sustenance of the middle class, and to the sustenance of mobility opportunities, especially, but not exclusively, for the sons of the middle class. In the end, however, he aligns himself more with Goldthorpe than Bowles and Gintis. Ueda believes that from the late nineteenth century Sommerville high schools operated semi-independently of social structures, were increasingly meritocratic, and provided wider and wider, not narrower, avenues of opportunity.

Many historians will be satisfied with this conclusion, as many will be with his clear, two-stage political schema. Indeed, aside from Joel Perlman's investigation of Providence, Rhode Island, for a similar period, we know little about the importance of secondary education for the life course.<sup>3</sup> And Ueda's linking of school promotion with civic virtue and with the making of the middle class supports, and is supported by, most recent musings on the rise of an American middle class. But despite the detailed statistical analysis, a sympathetic reading of often unused sources such as school newspapers, and the integration of other historical studies, *Avenues to Adulthood* has limited explanatory power, and leaves unanswered as many questions, perhaps the questions that most need to be addressed, as answered. As historians are wont to do, Ueda himself emphasizes the limits of his book, calls for more study, and eschews any claim to an historical or social policy triumph. What this disclaimer

disguises, however, is the limits of the approach, as opposed to the modesty of the conclusions.

Perhaps paradoxically, at the same time as *Avenues of Adulthood* looks forwards to reproduction theory and recent analyses of an American middle-class-in-the-making, it looks backwards to the fifties and early sixties for concepts of occupation, stratification, social mobility, and progressive-era politics. As the title declares, the study is grounded squarely in the language and categories of occupation and social mobility best made known by Ueda's doctoral supervisor, Stephan Thernstrom. As a result, *Avenues to Adulthood* constructs a past similar in some ways to the functional analyses of the late 1950s and early 1960s, what Randall Collins has labelled the "technical-functional" approach.<sup>4</sup> In this conception secondary schooling was extended in the late nineteenth and early twentieth centuries in response to a quickly rising aggregate skill level demanded by industrial America, both in traditional occupations and in the new white-collar sectors: promoters perceived a need for an increasingly literate society; families and students perceived the need to carry greater literacy and numeracy skills to the modern workplace; and American opportunity structures were sustained, even increased, by increased educational opportunity.

While Ueda's Sommerville is admittedly not that tidy, at the end we are left with unanswered, often unasked, questions. Most importantly, Ueda only develops a sketchy local labour market, and

largely fails to link it closely to high school enrolment or leaving. We learn nothing about hiring and firing, labour market segmentation, internal labour markets, or change over time. Similarly, despite recent sociological and historical insight into an America informed by ethnic, gender, and social class cultures, Ueda leaves underdeveloped their influence on school attendance, school leaving, and class formation.

Likewise, *Avenues to Adulthood* fails adequately to grapple with an interpretive debate over the impetus and meaning of rapidly enlarged secondary education. Was increased enrolment in Sommerville really driven by labour market demand and representative of the spread of meritocratic structures? Or was it, as Collins and Lester Thurow and others have argued, driven by some blend of status and class competition that drove up formal credentials unnecessarily, and demanded that America become an overeducated society at the same time as it retained its inequitable and largely immutable social structures?<sup>5</sup> Admittedly, Reed Ueda did not set out to answer all these questions. Moreover, the detailed analysis he has produced will be well received as an early, detailed analysis of the intersection of the American high school and the making of an American middle class. To his credit, Ueda has probably stretched the concepts and language of social mobility as far as possible. But the avenues to adulthood in Sommerville were undoubtedly bisected by more currents, structures, beliefs, and aspirations than his framework allows.

To engage more properly both the revisionist and contemporary literature historians need more fully to utilize the language and theory of contemporary sociology and social science, and of social and labour history. And as we grope for appropriate approaches to the past we might reacquaint ourselves more fully with the great debates of the seventies. Because the revisionist historians seem not to have answered their questions satisfactorily, it doesn't mean that these were the wrong ones to begin with.

With a few others, Ueda has well begun to plot the avenues to adulthood in the twentieth century and the centrality of schooling to that process. As we begin to study class formation in twentieth-century Canada we should profit from Ueda's lead and ask what streets led through high school, and why some students yielded and some stopped. In the process we might begin to fill our post-revisionist lacuna, and begin to sketch an indigenous picture and theory of Canadian class formation. Properly in gear on the avenues to adulthood, we might even ask—who was driving?

1. Michael Katz, *The Irony of Early School Reform* (Cambridge 1968); Maris Vinovskis, *The Origins of Public Schools: A Reexamination of the Beverly High School Controversy* (Madison 1985).
2. Samuel Bowles and Herbert Gintis, *Schooling in Capitalist America* (New York 1976); John Goldthorpe, *Social Mobility and Class Structure in Modern Britain* (Oxford 1980).
3. Joel Perlman, "Who Stayed in School? Social Structure and Academic

Achievement in the Determination of Enrolment Patterns, Providence, Rhode Island, 1880-1925," *Journal of American History* 72 (1985).

4. Randall Collins, "Functional and Conflict Theories of Educational Stratification," *American Sociological Review* 36 (1971).
5. Lester Thurow, *Generating Inequality* (New York 1975).

Dan Hawthorne  
Malaspina College

David F. Labaree. *The Making of an American High School: The Credentials Market and the Central High School of Philadelphia, 1838-1939*. New Haven and London: Yale University Press, 1988. Pp. 208, index. \$30.00 U.S.

David Labaree's study of the pre-eminent high school of Philadelphia is a major contribution to our understanding of the tensions between democratic opportunity and meritocratic credentialling in education. Labaree's thesis is that the success of the high school in providing access to occupational markets through diplomas and credentials inevitably brought political pressures to widen access to secondary education. However, the widespread availability of education then lowered the market value of the credential which, in turn, led to pressure either to curb access or to develop stratification strategies like tracking and curriculum differentiation to distinguish among students. This process affected Central and, Labaree argues, it is