Book Reviews

An Academic Transformation

The American College and the Culture of Aspiration, 1915–1940. DAVID O. LEVINE. Cornell University Press, Ithaca, NY, 1986. 283 pp. \$29.95.

In The American College and the Culture of Aspiration, 1915-1940, David O. Levine provides us with the first comprehensive study of the history of higher education between the World Wars. In arguing that it was during these years, for the first time in American history, that the newly forged links between education, government, and economy enabled a large part of the population to see the relationship between college attendance and individual mobility and thus to bind the classically American culture of aspiration to institutions of higher education (rather than, say, to the "frontier"), Levine fills an important gap in the literature. In addition, deviating considerably from those histories of higher education that employ the market as the matrix that structures all change, Levine properly sees the market as a source of opportunity and constraint for specific institutions of higher education, which then respond to those opportunities and constraints in different ways. Thus, Levine's book blends together an analysis of changes in individual mobility patterns with an understanding of institutional change within higher education.

World War I, according to Levine, tied the government and higher education together in a way that, previously, would have been impossible. Not only were colleges providing army training through the Student Army Training Corps program-a program that led to increases in enrollments, increased college pride on the campus, and increased pride in colleges off-campus-they were institutionalizing practical training (for example in engineering) and educating new cadres for the postwar industrial world. According to Levine, this "accelerated the emergence of a new privileged class in American society-the college-educated man" (p. 31). The basis of this privilege was the expanding administrative apparatus of the newly technologized corporation, which provided employment for the recently anointed graduates. Whereas before World War I medicine and the law were able to gain a foothold and legitimacy within the university, business education consolidated its position only after the war. Business provided research and endowment funds to universities and the universities provided academic legitimacy and a trained workforce

to an emerging profession. At the same time, Levine emphasizes, institutions of higher education opened these mobility opportunities to only a very small part of the population: the upper middle classes.

The social context within which this sea change in higher education was occurring was characterized by the end of the era of massive immigration, the rise of new professions, and the transformation of the economy from prosperity to depression in just a few short years. Levine shows how this context fostered the development both of the urban college and of curricular reform. The large immigrant population and the public sector of higher education, both interested in upward mobility and located in cities, were able to use each other to their mutual benefit. The lure of professional respectability and the fact that higher education was the sole route to that respectability made the urban college particularly attractive to the local population. With the more prestigious colleges tied to an entrenched WASP upper class and seemingly committed to the exclusion of Jews, other immigrants, and the lower socioeconomic classes in general (as is very well documented by Levine), the urban colleges provided an institutional locus for the immigrants' mobility aspirations. In higher education more generally, from the most elite institutions to the burgeoning junior colleges, college administrators attempted to insure that the changing economy was inextricably linked to the new practically oriented curricula now available in the colleges. Levine sees these changes in higher education, then, as rooted in the vocational aspirations of its clients and the new administrative structures and industrial process of its patrons.

Though this metamorphosis was indeed radical, it had no revolutionary transformative effects on processes of social stratification. Levine persuasively argues that the overall increases in higher education enrollment during this period helped preserve the status quo ante in terms of occupational outcomes: upper-class WASPs enrolled in the most prestigious colleges en route to the most prestigious professions; middle-class and working-class ethnics distributed themselves in public and two-year institutions to gain entry into the lower and semi-professions. Levine buttresses our knowledge of discrimination in admissions at Columbia, Yale, Princeton, and Harvard with a very amply documented case study of Dartmouth, arguably the most popular college of the 1920s. He shows how discrimination against Jews was part of a concerted effort to preserve upper-class WASP domination of elite colleges and, through them, the elite professions, even in the face of declining enrollments due to the Depression.

Levine's penultimate chapter, "Higher education during the Depression," is, perhaps, the most interesting in the book. Though not entirely original, Levine argues convincingly that: (i) the federal government, in attempting to alleviate some sources of unemployment, buttressed for the first time a declining higher education sector by providing student aid to the poor; (ii) though access to higher education was by no means democratized (in fact, socioeconomic divisions widened as even more middle- and upper-middle-class students enrolled), federal programs universalized access to higher education in a way that was not possible till then and that was surpassed later only by the GI Bill; and (iii) to deal with this great increase in access, higher education both expanded and differentiated in a way that preserved relative inequality. Although he does not say so explicitly, Levine shows how the "solutions" seized upon in the interwar years in the face of demands for access from previously excluded groups were embraced again during the 1960s in similar circumstances.

Levine's book, then, succeeds in covering an era in the history of higher education that has heretofore received scant attention. His attention to discrimination within the elite sector of higher education while assessing the overall shape of higher education is a major corrective to the idea that colleges and universities simply evolved toward more democratic forms. At the same time, the analysis could have been more broadly conceived. In his attempt to highlight the interwar years as the critical period in the history of American higher education, Levine tends to underestimate the changes that had occurred in the preceding few decades. The facts that legal, medical, and business education took on new forms and that college enrollments had already taken off before World War I are not addressed. In addition, Levine never articulates his argument in coherent theoretical terms, which leads to both internal contradictions and a lack of clarity in argument. For instance, at various points he seems to suggest that higher education provided the necessary training for key positions in the social structure and that those with knowledge had power; this seems incompatible with his view that elite institutions of higher education were run by and for a business-based WASP upper class. Had he cast his argument in more theoretical terms, Levine could have more easily

drawn implications for the present; analytically, rather than descriptively, conceptualized market-organizational relations within the higher education sector; and avoided invoking the "public" as an unsubstantiated causal factor in explaining change (as on p. 215). Nevertheless, Levine has written a fine book, one that will and should be read by those interested in the past *and future* of American higher education.

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Educational Deficiencies

Low Tech Education in a High Tech World. Corporations and Classrooms in the New Information Society. ELIZABETH L. USEEM. Free Press (Macmillan), New York, and Collier Macmillan, London, 1986. x, 278 pp., illus. \$19.95; to AAAS members if ordered from AAAS, \$15.95. AAAS Issues in Science and Technology Series.

The decade of the '80s has been characterized by a morality play in which the United States is threatened by the evils of international competition in the age of high technology. The only weapon to assure survival is something called education. But our competitors have also discovered this weapon and have learned to develop and exploit it far better than we have. While our children have been preparing for economic battle for six hours a day and 180 days a year, theirs have been training for seven and more hours a day and 220 days a year. And allegedly the quality of their training for economic combat has been much higher than ours.

In the last few years a plethora of commissions have urged us to mobilize for longterm economic warfare through school reforms that will raise standards, improve teaching, and increase scientific and technological competencies. States and local school districts have responded to the task with patriotic zeal. New laws have been passed, school budgets have been raised, and many recommended changes are taking place.

Elizabeth Useem has chosen to explore the mobilization efforts by examining how well the schools and universities are doing in preparing for present and future skirmishes on the high-technology battlefields of the world. Although she has engaged in a general exploration, she has focused especially on education in the two high-technology meccas of the nation, Silicon Valley (Santa Clara County, California) and Route 128 (Boston metropolitan area). Just as these two areas have provided our most advanced technologies for the international competition, perThrough interviews with industry leaders, educators, engineers, and government policy-makers as well as reviews of school curricula, funding, and performance, Useem collected data on efforts to improve education for the high-tech challenge. She also evaluated progress toward forging partnerships between education and industry to raise educational performance and to make it pertinent to technology. Finally, she reviewed the response of higher education to the economic problems that confront the nation.

As the title of the book suggests, Useem comes away unimpressed with the educational response. At all levels she finds little encouragement.

At the public school level, the shortage of qualified mathematics and science teachers (and newly trained competent teachers of all subjects), the outdated science curricula, and inadequate budgets and supplies and equipment are hindering the development of first-class educational programs. Attempts to upgrade these programs are focusing primarily on the secondary schools, ignoring the general lack of science education in the elementary schools.

Though she is heartened by the increase in required high school courses in mathematics and the sciences, she concludes that these efforts are underfunded and will result in the assignment of many underqualified teachers to meet the demands of additional courses. Even higher education is characterized by shortages of faculty and needed equipment for teaching technical and scientific subjects.

Nor is it clear that help from industry or future progress will solve the problems. At best, Useem asserts, business and industry can increase awareness of employment needs and educational priorities among educators, students, and parents and can provide a powerful constituency favoring more educational funding. In large measure, this can be done out of self-interest, since business and industry have much to gain from both outcomes.

The book is the best available representation of the present focus on improving the schools to make the economy more efficient. It also provides an accurate and detailed picture of the dynamics of recent school reforms that were designed to recapture the U.S. economic role in world trade. Useem's descriptions and analyses paint a troublesome picture of American education at a time when many are depending heavily upon the schools to maintain economic competitiveness and respond to the promise of high technology.

But, in the opinion of this reviewer, the work fails to raise the most important chal-

lenge facing the educational system with respect to occupational preparedness. It accepts too readily the aphorisms of "high tech" and the "information age" in asserting that the labor market will require workers with higher levels of technical skills. Technologically oriented jobs that require two years of college or more account for only about 5 percent of all jobs in the U.S. economy at present, with projections to 6 percent by 1995. Most employment growth has been and will continue to be found in low-level service jobs such as custodian, clerical worker, fast food worker, nurse's aide and orderly, and retail clerk. These jobs are characterized by relatively low wages and low educational requirements. Further, case studies in which microprocessor technologies have been applied to traditional occupations have shown strong evidence of reduced skill requirements for those jobs. The power of microprocessors has lessened the need for analytical and technical skills among large categories of workers in printing, mechanics, computer programming, financial analysis, electronic machine repair, and a host of other occupations, and this may be just the beginning.

It is difficult to find any evidence that the laggardness of our manufacturing sector and our massive foreign trade deficit are due to a problematic labor force. Rather, there is considerable evidence that among domestic policies it has been poor management decisions, inadequate sensitivity and orientation to foreign markets, an overvalued dollar, and U.S. multinational investment in lowwage economies that account for the decline in our economic position relative to other nations.

If there is a major threat to the American economy that can be attributed to an educational system that needs overhauling, it has to do with the increasing number of disadvantaged youngsters entering the schools. Such students make up 30 percent of the enrollments in U.S. schools at present and will account for half in 20 years. Owing to poverty, non-English-language backgrounds, and cultural differences, they do not benefit substantially from their schooling. Many of them leave schools without the skills to work productively, even in low-level service positions that require at least some skill in reading, writing, computation, and elementary reasoning. This may be a less romantic challenge for the schools than that of the "information age," but it will have far more important economic and social consequences.

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