ED 428 588	HE 031 905
AUTHOR	Lazerson, Marvin
TITLE	Discontent in the Field of Dreams: American Higher Education, 1945-1990.
INSTITUTION SPONS AGENCY	National Center for Postsecondary Improvement, Stanford, CA. Office of Educational Research and Improvement (ED), Washington, DC.
REPORT NO	NCPI-3-01
PUB DATE	1998-00-00
NOTE	44p.
CONTRACT	R309A60001
PUB TYPE	Opinion Papers (120)
EDRS PRICE	MF01/PC02 Plus Postage.
DESCRIPTORS	Access to Education; Cost Effectiveness; Economics; Educational Benefits; *Educational Demand; *Educational History; Educational Philosophy; *Educational Supply; *Educational Trends; Epistemology; *Higher Education; Intellectual Disciplines; Interdisciplinary Approach; Philosophy; *Role of Education; Sciences; Sociocultural Patterns; Trend Analysis; Values

ABSTRACT

This paper reviews the history of higher education since 1945, emphasizing its rapid growth in a changing American culture which has demanded greater access to higher education. Following an introduction, part 1 focuses on the period from 1945 to 1970, characterized by explosive. It discusses veterans and equality of opportunity after the war, influences of the pre-war period, and the reasons for increased demand for higher education. Part 2 considers the period from 1970 to 1990, seen as a time of increasing stresses in higher education, including a trend toward questioning the worth of college, decreases in the proportions of entering students completing a degree, and a "price-income squeeze" experienced by institutions. Part 3 addresses trends in learning and the organization of knowledge over the entire period 1945-90. These trends include the separation of science and morality, the triumph of research and methodology, the growth of economics as a discipline, and major changes in the discipline of philosophy. The paper concludes by discussing some current issues in the ongoing learning conversation between faculty and students, such as the increasing intrusion of values into scholarship, the growth of ethnographic research, and interdisciplinary research and teaching. (Contains 62 references.) (DB)

********	************	********	* * * *	*****	****	****	*****	****	* * * * *	****	****	*****	**
*	Reproductions	supplied	by	EDRS	are	the	best	that	can	be	made		*
*		from t	he	origi	nal	docu	ment	•					*
**********	* * * * * * * * * * * * * * *	*******	****	*****	****	****	*****	****	* * * * *	****	****	*****	**





Discontent in the Field of Dreams: American Higher Education, 1945-1990

MARVIN LAZERSON

National Center for Postsecondary Improvement 508 CERAS School of Education Stanford University, Stanford, CA 94305-3084 U.S. DEPARTMENT OF EDUCATION Office of Educational Research and Improvement EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

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

Minor changes have been made to improve reproduction quality.

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

The work reported herein was supported in part by the Educational Research and Development Center program, agreement number R309A60001, CFDA 84.309A, as administered by the Office of Educational Research and Improvement (OERI), U.S. Department of Education. The findings and opinions expressed in the report do not reflect the position or policies of OERI or the U.S. Department of Education. Publication Number NCPI-3-01.



KE 31 905

BEST COPY AVAILABLE

2

I want to thank Jesse Minier and Barbara Jaffe for providing much of the data, posing many of the most intriguing questions, challenging the interpretations, and aiding in the writing. This essay was stimulated by two sets of questions about higher education at the end of the twentieth century. The first involves the relationships between the costs and returns of higher education. Will Americans continue to pay the high costs of higher education in terms of their tax dollars and as individuals in terms of tuition and other expenses to attend or send their children to college? Will the social and individual returns suffice to overcome resistances to the costs? The second set of questions involves the relationships between teaching and learning. How can teaching in the nation's colleges and universities be improved? How can the quality of the student learning be increased? These are not a historian's questions nor are they obviously linked. I have thus modified and recast them in order to look at the historical period between 1945 and 1990 and in doing so have concluded that the questions about why students came and Americans paid for a massive higher education system and what and how undergraduate students were taught and learned are both parallel and connected stories. My historical answers are tentative, cast in the form of an argument to be debated, challenged, reassest, and revised.

Foreword

This is a story of success and its discontents. In the half-century after World War II, higher education in the United States triumphed. Few industries grew as fast, gained such prestige, or affected the lives of so many people. It received remarkable sums of money from federal and state governments; alumni and foundations gave generously to it. Families reached into their savings, postponed purchases, and went into debt so that their children could go to college. Higher education, even more than elementary and secondary schools, simultaneously embodied both a public good—beneficial to the nation's economy, protective of its national defense, opening up new avenues of knowledge, and able to realize equality of educational opportunity—and a private benefit such that each individual who possessed it substantially improved access to higher income, status, and security.

The professors at the center of higher education gained public stature and authority barely imaginable before the war. Gone were the stereotypes of the absentminded, befuddled professor, replaced instead by government advisors, policy analysts, and corporate consultants. An academic revolution occurred, to use Christopher Jencks and David Riesman's term (1968), with professors gaining authority over hiring and promotion, curriculum and teaching, and, for those with fundable research agendas, becoming free agents in the job market. Using the canons of shared governance, faculty made things happen and could also prevent them from happening. Professors attached their primary allegiances to the academic disciplines; success at gaining funding for their research became the route to stature and power. Once primarily responsible for teaching undergraduate survey courses, general education, and relatively simple incursions into the disciplines, professors at the highest status institutions made graduate education their primary interest.

These changes occurred neither everywhere nor to the same degree. Professorial authority was often shaky; research and external funding played a lesser role outside the research universities. But the new authority of the professoriate and their academic disciplines set the terms of status, power, and identity. Rarely anywhere, in the decades after World War II, did professors call themselves teachers. They were physicists, historians, linguists, and economists. Administrators everywhere routinely articulated the basic principle of the revolution: the faculty was the heart of the institution.

Most remarkably, higher education built upon prewar trends to do what almost no one would have predicted: it achieved a virtual monopoly on middle class status. It became the licensing agency for Americans who wanted to enter the professions. Every occupation seeking to increase its prestige and income made going to college (and beyond) the requirement for entry. For countless Americans, going to college was the route upward; they expected their governments at every level to help make that happen—grants and loans to students, branch campuses of the state university, local community colleges. Even when income returns to higher education reached a plateau during the 1970s and 1980s and the costs of going to college escalated, converting college from the land of



opportunity to a necessity to keep from losing status, families and students—especially older students—dug down into their savings and took out loans in order to attend.

But higher education became a victim of its own successes. Able to assume a continuing clientele, capitalizing on the aspirations for upper mobility that so strongly marked American society in the postwar era, attracting a seemingly unending stream of government funds, finding every region, state, and locality wanting its college or university, higher education charged what the traffic would bear. By the 1980s, those costs would so substantially outpace inflation and the growth rate of median family income that higher education looked like yet another greedy industry.

The professoriate's success also came to haunt them. As they succeeded in making research the mark of status, their connection to teaching withered. As they became prominent consultants, they became caught up in the political conflicts their activities engendered, as in the role of the "best and the brightest" during the Vietnam War and in the contests over civil rights. As the costs of college increased, as downsizing and restructuring hit American industry, and as public subsidies came under fire, professors' responsibilities came into question. The academic freedom professors had gained became caught up in the snares of political correctness, obscene speech, and the entitlement of tenure. The academic disciplines they had so carefully crafted now looked like walls against new approaches to learning; the academic departments effective at undermining decisions for the benefit of the college or university as a whole. The professors' very prominence, combined with the megasize of the industry, propelled higher education into an easy target for media criticism.

By the 1990s, higher education came to look like other monopolies and powerful industries of postwar America. Like the U. S. auto industry before it, it dominated the market, produced the best products, and rewarded those who invested and worked in it. But like the auto industry, higher education failed to recognize its hubris and the environmental changes occurring around it. Even the complaints about higher education mirrored those hurled at corporate monopolies: offering overpriced, poor-quality products and poor service; inefficient and bureaucratic; unwilling to adapt to new markets; technologically backward; administratively bloated; more concerned with frills than the core product. Shocked and confused by criticism and reluctant to change, higher education at the end of the century faces a new world. It is still unclear whether it would be routed by the imports and alternatives or made better for the competition.

ERIC National Center for Postsecondary Improvement

Introduction

Higher education: a wonder of postwar America. Fueled by a democratic ideology that demanded more educational opportunities and greater access to educational institutions, by growing income returns and higher status to those with college and professional degrees, and by regional competition that impelled states and localities to build new campuses and expand existing ones, higher education escaped its minor role in the nation and people's lives and became a mighty industry. Images of absentminded professors, raccoon coats and fraternities, quiet out-of-the way campuses, of Cary Grant and Fred MacMurray, Mickey Rooney and June Allison, with an occasional Katherine Hepburn to leaven the mix, were replaced by studious professors in laboratories and academic consultants advancing knowledge, protecting the national defense, and improving the economy. Minorities clamored for access, student rebellions shook the conscience and angered many, and politicians debated over higher education policies and budgets.

In almost every regard, the half-century since 1945 has been good for higher education, even with the strains of the 1970s and 1980s. Two kinds of data tell the story: institutional and enrollment growth and fiscal growth. Between 1950 and 1990, the number of colleges and universities almost doubled, from 1,851 to 3,535, growing by 26 percent in the 1960s and again by 24 percent in the 1970s (National Center for Education Statistics, 1994, Table 168). Americans accepted their colleges and universities as yet another illustration of what made the United States great, tapping into the foward-looking mindset that produced the opportunity to "See the world in your Chevrolet" with Dinah Shore and had future president Ronald Reagan explaining that "at General Electric, progress is our most important product."

The progress was not smooth, however. Just as American industry would find itself troubled by foreign imports and global competition, managerial miscalculations, worker demands for higher wages and shorter workweeks, so too did higher education find itself troubled. The immediate postwar period witnessed the McCarthyism of anticommunists convinced that the Reds and their fellow travelers had invaded the campuses. The Soviet Union's launch of Sputnik in 1957 raised doubts about whether American standards of academic achievement were stringent enough for the Cold War era. Demonstrations, strikes, and violence during the 1960s and early 1970s divided higher education from within and diminished enthusiasm for it among politicians and the public at large, as they questioned whether higher education had become yet another mistaken entitlement of the welfare state. A slowdown in income returns to college education during the 1970s combined with the rising costs of going to college. The industry seemed unable or unwilling to rein in its expenditures, opening higher education to more strident criticism than ever before, this time matched by legislative efforts to reduce federal and state expenditures. During the 1980s, state appropriations, the largest source of government funds for higher education, increased only slightly per student, but was remained constant when measured in constant dollars. Overall, government funding as a percentage of funding for higher education declined during the



1980s. Questioners challenged whether colleges and universities were teaching students anything, whether the notion of "higher education" was a misnomer as remedial programs proliferated. And the media found itself with yet another institution that seemed corrupt—misusing funds and spending on luxuries—leading higher education to become more defensive than at any time in its history.

And yet until the end of the 1980s, the times of trouble were mere blips on the radar, by turns threatening, annoying and confusing, raising questions, and sometimes lessening the flow of dollars. But they were almost always transitory. Each rocky moment was followed by renewed enthusiasm, more applications for admission, expansion, and money. McCarthyism shook some campuses, frightened many faculty, and ruined careers, but it hardly made a dent in the industry's growth or prestige. Sputnik produced considerable criticism and a great deal of handwringing, but out of it came the National Defense Education Act of 1958 which gave unprecedented fiscal support for the sciences, foreign languages, area studies, and campus growth. Campus rebellions shocked a nation, leading to angry diatribes directed at overly entitled youth, but the public's shifting attitudes toward the Vietnam War ultimately gave greater legitimacy to the demonstrations. Few if any students turned away from attending college because some of their peers had protested. The most obvious direct impact of the student demonstrations was to give everyone more freedom. Campus restrictions to student life practically disappeared as in loco parentis became a dirty word. The number of required courses declined; the size of the overall curriculum increased. Students and faculty had more choices in what to take and what to teach. Income and status returns to college attendance remained high, and if the rate of growth slowed and may have even trailed off after 1970, attending college was still a wise decision in comparison to not going beyond secondary school, especially in the 1980s when the job market for high school graduates collapsed.

When it seemed, as the 1980s began, that the declining number of 17- to 21-year olds in the population would substantially diminish the market for students, higher education discovered the nontraditional student who, in turn, found that it was never too late to go to college. During the 1980s, it became more and more difficult for families to pay for a college education, as tuition costs rose faster than the rates of inflation and the average income of workers. Yet the numbers scrambling to get into college kept going up; community colleges, in particular, burst their seams enrolling high school graduates and dropouts, adults seeking job preparation, and others simply wanting a place to learn more about the world and themselves.

Despite the ups and downs, during almost a half-century after World War II, higher education remained a field of dreams. Build it and they will come. One had to let the public know the field was there, compete with other products, adjust the parking area and playing conditions so that more people could find places, and create a number of different leagues so that everyone had a team to join. Sometimes rain fell and conditions were poor; some teams operated in the red and folded. But like the newly constructed domed stadiums, higher education's field of dreams was a remarkable invention. Its creators could be proud.

Part One: Building the Dream, 1945-1970

The times for higher education were so good that the management guru and social commentator Peter Drucker proclaimed in 1958 that "we cannot get enough educated people.... In the past the question had always been: How many educated people can a society afford? Today it is increasingly: How many people who are not highly educated can a society afford?" (Blumberg, 1980, p. 26). In 1992 a historian would simply refer to the two and one-half decades after the war as "academia's golden age" (Freeland, 1992).

Veterans and Equality of Opportunity

The Servicemen's Readjustment Act of 1944 (the G.I. Bill) and the President's Commission on Higher Education in 1947 (the Truman Commission) set the terms of postwar expansion. Although many Americans had, by the 1930s, come to see college enrollment as an important ingredient of the "culture of aspiration" (Levine, 1986), the veterans' determination to go to school was mind boggling. Under the G.I. Bill, between 1945 and 1949, 2.2 million veterans enrolled in college and postsecondary institutions, three times more than the maximum projected during the act's passage. Older than the traditional college students, more explicitly vocationally oriented, and impatient with the traditions of college life, the veterans dramatized and reinforced the inextricable link between getting ahead and college enrollment and, in the process, linked federal largesse to higher education's expansion and educational opportunity.

The Truman Commission made the links explicit and provided them with ideological sustenance. The G.I. Bill was, in its origins, not viewed as an aid to higher education; it was designed to prevent labor unrest and a postwar economic recession. Few in Congress saw it as an affirmation of the federal government's enlarged role in higher education. The Truman Commission, however, articulated a substantially different language, asserting that equality of higher educational opportunity was essential to economic growth and the fulfillment of the American dream of opportunity for all Americans. By forcefully arguing for active federal involvement and investment in postsecondary education—indeed, even calling for free, tax-supported thirteenth and fourteenth grades for everyone—the Commission put into words what the veterans asserted by their behavior.

Dimensions of the Past

The G.I. Bill initiated and the Truman Commission blessed the postwar expansion, but the directions higher education took evolved in ground that had already been wellprepared. Over the course of the previous decades, three basic themes laid the foundation for the postwar era: vocationalism, public higher education, and multiple sectors of postsecondary schooling.



The battle over vocationalism—the direct application of schooling to jobs and economic opportunities—had been joined since the nineteenth century. Seeking students and public approbation many nineteenth century colleges adapted their liberal arts traditions to become multipurpose schools, diversifying their curricula and becoming sensitive to local and regional economic needs and job opportunities (Geiger, 1995). For women especially, vocationalism was always central; overwhelmingly, female college students prepared for teaching. At the University of California, Berkeley, early in the twentieth century, 90 percent of the women students expected to become teachers (Gordon, 1990).

Between 1880 and the 1930s, vocationalism took full form, with the development of professional schools and programs, the creation of an educational ladder between high school and college, and increasing reliance by employers upon college credentials as a criterion for hiring. Each of these was important. The appearance of schools of business, engineering, education, social work, nursing, and dentistry and the growth of law and medical schools defined higher education in terms of its direct application to specific occupations. The creation of an educational ladder that went from elementary and secondary schools through college and then to graduate school sharpened the distinction between college and other educational institutions, and it reduced the undergraduate college's nineteenth century competitors—academies, high schools, one and two-year normal schools, private proprietary schools, and apprenticeships—to institutions merely preparatory to college, or to even lesser status. By the 1930s, the high school no longer paralleled the college, but had become its subordinate; without a high school degree there was no entry to college. Entry to the professions meant extended schooling.

The shift in the criteria for employment, generated in part by the growth of white collar jobs within corporate and public agencies that seemed ideally suited for the kinds of learning and socialization that occurred at college and by the growth of professional occupations, generated much of the consumer-driven higher educational growth in postsecondary enrollments in the first decades of the twentieth century. What David Levine has called "the culture of aspiration," a variation of the Horatio Alger story of rags to riches—or perhaps at least to middle class respectability—was connected to higher education (Levine, 1986). The movement was hardly massive; too many obstacles still lay in the way of near universal higher education, especially the continuing low proportions of youth graduating from high school, but the foundations of the postwar expansion had been laid. Going to college meant greater income returns and status than not going. The veterans of World War II recognized that before anyone else did.

A second critical ingredient of postwar expansion had also been put in place earlier, namely, the growth of the public sector in higher education. Although we tend to associate public higher education with the post World War II period, large proportions of young people had always attended publicly supported colleges and universities, and indeed, the perception of a separate private versus public sector was an invention of the nineteenth century. The Morrill Acts of 1862 and 1890 furthered the notion that higher education was a public responsibility. While there was a private gain to the individual from going to college, the primary gain was to the public good. Whatever the obvious differences between elementary/secondary schooling and college, an argument was well established before World War II that all levels of education enhanced the social and economic needs of the nation, state, and locality.

This view of higher education as a public good also laid the basis for its politicization. Before the postwar expansion, the number of students going on to college and the amount of public funds invested in higher education had been small enough to mute political antagonisms. As higher education became a mass system in the postwar decades, however, the politicization inherent in its public character intensified.

The third critical ingredient of postwar expansionism was the organizational forms earlier established, principally decentralization and segmentation. Because higher education was always a decentralized industry, made up of relatively autonomous institutions competing within a deregulated market, it expanded in whatever ways it thought necessary. Often this meant changing admissions requirements to attract more students (or, in a few cases, to become more selective), providing fiscal incentives to students to attend, revising the curriculum to make it more attractive, expanding student life activities, and seeking funding from alumni and philanthropists. Higher education had thus established its entrepreneurial orientation in its relationship to students and funders before the mid-twentieth century.

Segmentation was also important. Higher education accepted the equation that access to college could be widespread if the system was segmented. A complex web of different kinds of postsecondary institutions was already formed by the late 1930s, from junior and community colleges to a small number of selective liberal arts colleges and research universities. Providing for gradients of status within a system of increasing access to higher educational opportunity, the web of sectors joined equality of opportunity, meritocracy, the preservation of institutional status, and market sector competition to lay the basis for extraordinary growth.

With the war's end, then, Americans could build upon the organizational forms, vocational expectations, and public commitments to higher education. The veterans' response to the G.I. Bill served notice just how effective the prewar developments had been; the Truman Commission gave voice to the expansive behavior of the veterans, pushing the ideology of higher educational opportunity further than it had ever gone before. Few understood it at the time, but the rush for places was on.

Why Did They Come?

Why higher education expanded and why students went to college has been the subject of countless interpretations. The most commonly held view of why the system ex-



National Center for Postsecondary Improvement

panded during the early postwar years—and one that remains essential to those calling for the continuing expansion of higher education—is that the modernization of American society, especially its adoption of advanced technologies, made advanced education necessary. In this human capital model, technical and literacy skills increase an individual's productivity, making that person a greater contributor to the national economy and worth more in the marketplace. Higher education grew to provide worthwhile and technically necessary skills. Almost every discussion of the need for a mass higher education system repeats these arguments, supplemented in the 1990s by calls for greater emphasis on the quality of skills learned.

A second broad interpretation of expansionism has been less positive—that higher education expanded in a segmented and hierarchical fashion in ways that preserved the social structure of inequality. Persons went to those colleges that roughly paralleled the social class from which they came and, if they experienced some upward mobility, the overall effect was to leave the nation as socially divided as in the past. In particular, the lengthening of educational requirements for jobs made it easier for those who could afford to stay in school longer to rise to the top of the occupational hierarchy. Almost every advocate of the shift the emphasis in higher education toward more open admissions, affirmative action, greater commitment to remedial programs, and the priority of equity draws upon this interpretation.

A third interpretation has focused on the way credentialling served to accentuate the expansion of educational opportunity. This view suggests that higher education provided a cultural currency that status-driven employers found especially attractive, less because of the technical skills learned in college (the human capital model), and more because of the organizational and behavioral attributes necessary to be successful in college. The college degree was a credential that certified a modest level of knowledge and literacy, but also certified the kind of person who could work within a complex organization or as a professional. In that sense, to many of the critics of the ways higher education is connected (or disconnected) to the workplace, it contributes very little in terms of real skills.¹

The remarkable expansion of higher education in the first two and one-half decades after World War II can be easily stated, in much simpler fashion: First, large numbers of Americans were willing to subsidize higher education, convinced that it was a public good which substantially furthered national defense, economic growth, and equality of educational opportunity. Second, students and their families read the postwar labor market correctly; going to college got them better jobs, more income, higher status, and greater security (Gumport, 1997; Zemsky, 1997).

It is hard at the end of the twentieth century to imagine the extraordinary enthusiasm for the postwar growth. Even elite private universities, initially worried that high levels of public investment would diminish their place and would open the doors to unqualified students, soon found themselves caught up in the opportunities of expansion. The Cold War, the ideology of equality of opportunity, state and local pride, the high stature of research, and federal investments all fueled an expansion inconceivable a few decades earlier. In particular, by providing direct grants to institutions to be redistributed primarily in student aid, the federal government helped keep the opportunity costs of attending college low, while allowing colleges to increase their charges, a situation in which everyone seemed to win.

Perhaps no series of events encapsulated the postwar faith than the reaction to Sputnik and the subsequent passage of the National Defense Education Act of 1958. What began as a technological and national defense crisis quickly became translated into an educational crisis; what were initially harsh attacks on education was converted into the first substantial all-purpose federal legislation and financial support for higher education. As Barbara Barksdale Clowse writes, "The Sputnik crisis transformed the politics of federal aid to education; it altered the terms of the debate and temporarily neutralized much of the opposition. The Cold War rivalry seemed to dictate that the nation mobilize her brain power, including schoolchildren and undergraduate and graduate students, on an emergency basis" (Clowse, 1981, p. 4; Divine, 1993).

Sputnik's launch on Friday, October 4, 1957, followed by a second orbit a month later, shocked the nation. If there was one seemingly immutable assumption that had come out of World War II, it was that the United States was scientifically and technologically ahead of the Soviet Union. That faith was tested when the U.S.S.R. exploded its first atom bomb, but even if the U.S. was no longer the only scientific superpower, it was still nonetheless the most advanced. With the Soviets first in space, nothing seemed secure anymore.

Higher education quickly jumped into action, converting a wave of criticism about its failures into calls for federal financial support. Success was almost instantaneous. Three weeks after the launch, the *New York Times* ran the headline, "Eggheads Called Hope of Country" (Oct. 26, 1957, p. 6). Less than a year later, the Congress passed with presidential approval the National Defense Education Act, which authorized \$635 million, more than 55 percent of which went to colleges and universities to aid students in the form of loans and graduate fellowships.

Much the same phenomenon occurred in the mid-1960s, when the War on Poverty replaced the Cold War as the basis for federal action in education. The Higher Education Act of 1965 brought together and expanded existing financial aid programs—work/study, student grants and loans, college facilities funds—and joined them to a new focus on access through grants for the financially needy. The Act provided guaranteed student loans for moderate income families and established Upward Bound to improve access for the poor and minorities. Seven years later, the Higher Education Amendments of 1972 went even further, making equality of opportunity the core of federal higher education policy.

The effect of the federal legislation of the late 1950s through the early 1970s, as well as parallel efforts at the state and local levels, was to dramatically increase the stature of



National Center for Postsecondary Improvement

higher education, to fund its expansion, and to contain the opportunity costs to individuals seeking college and graduate study.

Students and their families responded. College going was truly a field of dreams, providing opportunities for young people to do better than their parents. In absolute terms, between 1950 and 1970 income returns to college graduates increased in a steady fashion. Each annual cohort of college graduates was likely to earn more money than the previous cohorts, as employers heavily recruited college graduates. Relative to high school graduates and high school dropouts, returns to college graduates during those twenty years grew or remained stable annually, again peaking around 1970. As Richard Freeman, who would later criticize the high levels of college enrollment, put it, "jobs sought graduates" (Gumport, 1997; Hecker, 1992).

There was, it seemed, in those twenty-five years after the war, little restraint on the possibilities for higher education. Although the 1960s student rebellions provoked substantial criticism, the decade ended with the largest growth higher education had ever seen. Substantial state and federal funding existed; the commitment to civil rights and educational opportunity opened doors for minorities; women were a growing proportion of the college population. Income returns to college graduates were high and had been growing in a seeming unending progression. There was little reason to think that the doubts now surfacing would become any more than that, little reason to believe that the field of dreams was about to be challenged.

Part Two: A Field Unsettled, 1970-1990

The world of higher education changed after 1970. The rise had been meteoric and substantial. Higher education had become self-confident, assured that it was a public and a private good which strengthened the nation and provided high rates of return to individuals. The emerging criticisms were a surprise, the disenchantments unsettling, the anger a shock.

As early as 1971, commentators like Earl Cheit, in *The New Depression in Higher Education*, worried that higher education had lost its capacity to manage itself and suggested that a number of colleges and universities were in serious fiscal trouble. Others criticized the continuing lack of access for minorities despite substantial gains, the neglect of undergraduate teaching, the uniformity across institutions, the remoteness of higher education from society, and its excessively close association with government and social concerns. That there were contradictions among the various criticisms was more or less irrelevant. The critics' voices coalesced in the public's mind around the notion that there was something terribly wrong with higher education (Freeland, 1990, pp. 97-115).

Initially, the sourest notes were sounded around the behavior of students. The 1960s and early 1970s protests, the in-your-face dress and language, and the violence raised questions about whether the entitled were worth the expenditure. President Nixon's

urban and domestic affairs advisor, Daniel Patrick Moynihan, may have spoken for countless other Americans when he proclaimed to one of his former graduate students that "even the mathematics students were protesting" and, in the wake of the demonstrations and violence at Columbia University, he was apoplectic that parents were bailing their children out jail and protesting against undue violence on the part of the police. Why didn't these parents, he fumed, let their children take responsibility for their illegal and uncivil actions?

But there was also a deeper malaise affecting higher education after 1970, one that would have an even more substantial impact: the intersection of the costs of college and the income returns for attending. Higher education presumed that its importance allowed it to increase its expenditures substantially faster than the gross national product and the rate of inflation. That thinking quickly became an albatross. As the U. S. economy in the 1970s and 1980s faced soaring inflation, high unemployment, oil crises, wage and price controls, loss of markets to Japanese and German goods, and corporate downsizing, the seemingly unconstrained costs of higher education began to look obscene.

Concern about costs coincided with uncertainties about the income returns to higher education. After 1970, depending upon the source, income returns to college graduates either flattened, declined, or increased only modestly over the next two decades (Zemsky, 1997; Levy and Murnane, 1992).² A consensus quickly emerged that going to college was no longer "paying off" in the ways that it had over the previous decades. Why this is so is the source of intense controversy, with interpretations pointing to an oversupply of college graduates, the deskilling of many managerial and technical jobs, corporate downsizing, the poor quality of elementary and secondary schools, declines in the quality of academic and technical skills possessed by college graduates, lowered admissions standards to college, the larger proportion of female college graduates entering the labor market, and a mismatch between the skills college graduates possessed and those required in the advanced labor market.

If the field of dreams began to unravel in the 1970s and 1980s, it also became even more imperative to play the game. Relative to high school graduates, the differential to college graduates declined during the 1970s. In 1971, male college graduates aged 25-34 earned 22 percent more, on average, than male high school graduates of the same age. In 1979, the earnings differential had shrunk to 13 percent. For women aged 25-34, the changes were similar, with the earnings premium associated with college education declining from 41 percent in 1971 to 23 percent in 1979 (Levy and Murnane, 1992, pp. 1354-1357). It was thus reasonable to have doubts about going to college in the 1970s.

During the 1980s, the world became even more complicated. The educational premium for male college graduates aged 24-35 over the same aged high school graduates jumped from 13 percent in 1979 to 38 percent in 1987; for women in the same categories, the premium rose from 23 percent to 45 percent, but with a substantial difference. Whereas the median real earnings of male high school graduates working full-time



declined by 12 percent in the 1980s—as did the likelihood of even working full-time—it did not decline for female high school graduates working full-time (Levy & Murnane, 1992, pp. 1356-1357). In the case of both women and men, the gap between high school and college earnings was even greater, since the likelihood of high school graduates holding full-time jobs year round declined considerably during the 1980s. With women entering new professions and with the income inequality gap between men and women closing, the experiences of college-going for the two sexes had shifted. For men, graduating from college after 1970 was considerably less positive than the golden era between 1945 and 1970; for women, college graduation had become, at least in earnings, much more positive. For both, however, the gap between going to college or not going was huge. It paid to go to college, but it cost more and more to attend.

The psychology of college attendance was also changing. The postwar generation of college students went with great expectations, promises that were fulfilled. From the 1970s on, however, an increasing number of students went to college so as not to suffer the fate of high school graduates. It was a subtle shift in social psychology, from optimism to defensiveness. One went not to get ahead, but to avoid falling behind (Zemsky, 1997).

Questioning Worth

Academic scholars and the popular press during the 1970s and 1980s raised the same question: Did it pay for students to go to college rather than enter the workforce directly out of high school? The question had been around for some time. Just after the publication of the Truman Commission report in the late 1940s, a Columbia University economist had warned against the potential unemployment and underemployment of too many college graduates in an economy that was not producing college-skilled jobs fast enough. Others complained that parents were pushing their resistant children into college. At the height of the Vietnam War, Yale University President Kingman Brewster worried about "involuntary students," those males in college solely to avoid military service.

But doubts about whether one should go to college represented only a minor theme. The pervasive view through the 1960s was summarized in the responses to a 1965 national survey of public attitudes toward higher education. When asked how they would advise a young man or young woman who could finance only two-years of college but who had a good job offer, 90 percent of the respondents recommended that the young man pass up the job and pursue college and 77 percent gave the same advice to the young woman. "Our responses," the survey's authors concluded, "correspond to the findings of earlier research—that Americans think of higher education in terms of income. Newspaper stories and magazine articles from time to time remind the public that every year of education adds so many dollars to income, and it is easy to see that the college graduate has an advantage in the job market" (Survey Research Center, 1965).

RIC^{National Center for Postsecondary Improvement}

In 1975 and 1976, however, doubts erupted with the publication of Caroline Bird's *The Case Against College* (1975) and Richard Freeman's *The Overeducated American* (1976). Bird argued that college had become a "holding pen" for high school graduates who could not find jobs other than unskilled and poorly-paid ones. Having established that many young people did not want to be there, she concluded that it was not worth the cost for many of the students and their parents, especially for those youth who were likely to wind up at the economically lowest quartile of college graduates.

Freeman, a Harvard professor with a growing reputation as an economist of higher education, had earlier argued that there was an overall decline in return on investment in a college degree between 1969 and 1974, from 11 to 12 percent return in the 1960s to 8 percent in the early 1970s, suggesting that the investment in college going was not paying off as much as it used to (Freeman, 1971, 1975). Adopting a much higher profile and more controversial stance a year later, Freeman concluded that the United States had become "a society in which the economic rewards to college education are markedly lower than has historically been the case" and that further investments in higher education are likely to earn decreasing rates of return (Freeman, 1976, pp. 4-5). Because there was now an oversupply of college educated people, jobs no longer sought college graduates. That Freeman's overall conclusion was limited to white males got lost in the hyperbole. His own evidence suggested that relative to white males, the returns to higher education would increase for African-Americans and women. Lost in the resulting discussion was more than half the American population (Levin, 1977).

The argument over whether it paid to go to college or, more accurately, whether it paid as much as it used to, quickly became tied to an argument about learning: college students were graduating without knowing very much. To those who reached this conclusion, almost anything could serve as evidence: virtually open enrollment (a place for everyone) and affirmative action allowing too many unqualified students to enter college, employer complaints that poor employee skills were responsible for the economy's troubles, grade inflation and the takeover of higher education by political correctness, declining SAT scores, and the failure of elementary and secondary education to educate. What was relevant in the public and political realms was that doubts about the worth of degrees coincided with doubts about whether anyone was learning anything.

The attacks on higher education's economic worth hit like a bombshell. Its most popular manifestation were the countless stories of Ph.D.s driving taxicabs in major American cities, as the media probed such questions as "Who needs college?" the title of a 1976 *Newsweek* article that included a picture of a University of Colorado Phi Beta Kappa student working as a day manager in a restaurant (*Newsweek*, April 26, 1976, pp. 60-69).

Yet there was something surreal about the controversies over income returns to higher education during the 1970s and 1980s. Although the handwringing was persistent and the criticism intense, economists and the media agreed that there were still substantial



economic advantages to graduating from college with a baccalaureate. Or, as Ernest Pascarella and Patrick Terenzini concluded in an extensive review of studies done primarily in the 1970s and 1980s, "The evidence in support of this, based on the simple lifetime earnings differential between college graduates and high school graduates, is dramatic and unequivocal." Indeed, they believed, "the evidence on earnings is consistent with that on occupational status in suggesting that completing the bachelor's degree may be the single most important educational step in the occupational and economic attainment process." The controversial scholarly questions were why this was the case, what the differences were by ethnicity, gender, and class, and how much difference the college you went to and the major you studied made in terms of future earnings and status (Pascarella and Terenzini, 1991, ch. 11; Grubb, 1992).

The media stirred the controversy, using provocative headlines and lead-ins, like "Is College Worth It?" (*Newsweek*, April 29,1985, pp. 66-68). Nonetheless, it almost always concluded that the answer was "Yes." The media raised doubts about the worth of a degree and complained about rising costs, but invariably concluded, as in the 1985 *Newsweek* article, that "it would be a mistake for any student—or for the nation—to begin believing that the whole enterprise is a waste, that less schooling is better for anyone's child." Commentators argued that going to college was not as profitable as it once was and that it was socially irrational to have so many people attending college, but they rarely, if ever, recommended that young people not go.

The evidence suggests that students and their families agreed that college was, if not a good thing, necessary to getting ahead. The percentage of recent high school graduates enrolled in college, which had climbed from 45 percent in 1960 to a high of 55.4 percent in 1968, slid down during the 1970s, but then began to rise again in the 1980s. While there was a brief drop in full time undergraduate enrollments in the early 1970s—partly as a result of the elimination of the draft deferment for college students—and again around 1977 and between 1983 and 1985, the trajectory was up, sharply between 1973 and 1975, then more gradually between 1977 and 1983, and again after 1985. The number of part-time undergraduates showed a slightly different profile, but the overall trend between 1971 and 1991 was decidedly up. Among African-Americans, participation rates increased in the 1960s, declined in the early 1970s, increased briefly and then flattened or declined until the mid-1980s, and turned upward again. Among African-Americans, sharp differences by gender appeared with female enrollment increasing between 1976-1985, while male rates went down. Between 1986 and 1990, when participation rates went up for both sexes, they did so by almost 16 percent among African-American women and by about 9 percent for African-American men. Between 1976 and 1990, participation rates for Hispanics and Asian-Americans also increased, with female enrollment in each group increasing more rapidly than male enrollment (Hauptman & McLaughlin, 1992, pp. 168-178).

Despite the unsettlement in the field of dreams, higher education seemed to flourish. In the 1980s college costs outpaced inflation while median family income stagnated. Yet enrollments grew from 12.1 million in 1980 to 12.8 million in 1987 (Breneman, 1994, pp.

31-32). For all the expressions of concern about costs and income returns and the doubts about whether it was worth it, tuition at private colleges skyrocketed and grew substantially at public institutions. Endowments flourished as the stock market went upward (broken only by the extreme but short-term crash of 1987). And most surprisingly, federal and state funding kept on growing. Despite the avowed intent of the Reagan administration to reduce federal commitments, federal funding of higher education increased in real dollars between 1980 and 1990 by 42 percent, while state and local funding increased in real dollars by 27 percent (Hauptman, 1992; Hauptman and McLaughlin, 1992).³

Much of this came as a surprise for, as David Breneman has pointed out, the 1980s had begun on a dreary note. The 1970s witnessed substantial concerns over higher education's ability to balance its budget, public debate over quality and political correctness, and, as we have seen, questions about the "over-educated American." Most importantly, the 1980s had begun with demographic fears: an anticipated 25 percent decline in the number of 18- year olds over the next 15 years. Even if larger proportions of high school graduates enrolled in college, the likelihood of actual enrollments dropping by 5 percent to 15 percent was substantial. Combined with high inflation, unemployment, little if any productivity gains, and anticipated drops in real income, the situation had looked bleak.

The catastrophic projections at the beginning of the 1980s did not come true, but three things did happen during the decade which would effectively shake higher education's foundations. First, higher education expanded because older, nontraditional students enrolled, many of them attending part-time. Although their participation had been growing since the 1960s, between 1970 and 1975 the number of students aged 22 or older increased by more than 50 percent, while the number of traditional-aged students remained relatively constant. Between 1978 and 1989, the number of college students aged 25 and older grew by 44 percent, while the number of 18-24 year olds in college increased by only 7 percent. The number of female college students in that same period grew by 26 percent, accounting for the largest growth among older students.⁴ After 1975, students aged 22 or older became the majority of the college-going population; in the late 1980s, those 30 and older were the fastest growing percentage of matriculates (Gumport, 1997). Older students were also much more likely to enroll part-time in the 1980s, accounting for almost all the growth in part-time attendance. In their determination to enroll in college, older students affirmed what was higher education's greatest triumph: college was the necessary license for middle class status.

Second, as my colleagues at the National Center for Postsecondary Improvement have highlighted, the expansion of enrollment in the 1980s was not matched by a parallel expansion in degree attainment. As Robert Zemsky points out, between 1950 and 1982, "the proportion of those who started, but did not complete, a college education declined from more than half to less than 30 percent. By the 1990s, however, the gap was again widening, as more than 40 percent of those students who started college quit before receiving a baccalaureate degree" (Zemsky, 1997; Gumport, 1997). Americans became



convinced that it was necessary to go to college, an especially striking phenomenon among those over age 30, but they were not receiving the degree they so desperately sought.

Third, higher education got caught in a "price-income squeeze" that was more serious than at any time in the previous half-century. The direct costs of going to college—tuition, fees, room and board—increased dramatically during the 1980s, especially at private universities (the increases hit the public in the late 1980s and early 1990s), substantially outpacing inflation and the family incomes of most Americans. At the same time, as we have seen, median income in constant dollars either stayed the same, declined, or increased only slightly for male college graduates aged 25-34.

Taken together these developments revealed both higher education's continuing success and its vulnerability. As the 1980s ended, the field of dreams was still operating and, in many ways, was flourishing. The proportion of high school graduates aged 18-24 going on to college had grown once again, from a low in 1973 of 30 percent to 34 percent in 1986. New populations were attending in record-breaking numbers, signifying how powerful higher education's license to middle class respectability and status had become. For the selective colleges and universities, which promised entry into the upper class, the fight to get in had all the characteristics of a gold rush. Income returns to college as compared to high school grew dramatically. As David Breneman has written, "Largely because the bottom fell out of the job market for high school graduates [especially for males], the economic returns to a college education reversed itself, with the wage premium for college graduates increasing between 1979 and 1986 to larger than those found in any earlier period" (Breneman, 1994, pp. 31-32).

And yet it was all so shaky. A greater proportion of those who believed it was necessary to go to college were finding it harder and harder to attain a degree. Those who hoped that higher education would translate into high incomes were finding just paying for college harder and harder and, when they got out, worried about finding or holding a job and paying their debts. And without a college education, one would be in even bigger fiscal trouble. At a time when "choice" was being trumpeted as the new American ideal, higher education's monopoly over access to the middle class—its greatest triumph—was becoming an incitement to condemn it. The public stood ready to unleash a critical onslaught beyond anything higher education had ever witnessed. The field of dreams was unsettled.

Part Three: Learning and the Organization of Knowledge: 1945-1990⁵

For America's professors, the great triumph of the postwar era lay in the dominance of the academic disciplines. The disciplines gave faculty intellectual authority as they searched for new knowledge, trained graduate students, and shaped the undergraduate curriculum. Organizationally, the disciplines were centered in academic departments which overwhelmingly controlled their own hiring, promotion, and tenuring, as well as becoming the most influential entities in the governance of individual colleges and universities. The triumph of the academic disciplines built upon the previous decades' trends, but neither its strength nor the shape the disciplines took was inevitable.

As the war ended, debates about the purposes of higher education came to the fore, with three themes receiving primary attention. The first came out of the immediate success of theoretical and applied research, as scientists who had been active during the war made an effective case for continuing federal investments in research on university campuses. Those debates ultimately led to the creation of the National Science Foundation and increased foundation support in the service of graduate education and advanced research, preparing the next generation of scholars to expand the boundaries of knowledge (Geiger, 1986).

The second theme extended the historic emphasis on higher education's vocational purposes, in particular tightening the connection between college and economic outcomes. As it had done earlier, vocationalization increased the pressure to democratize higher education, to make it available to more and more Americans. And, as it had earlier, vocationalization had the effect of expanding the curriculum as the number of occupations "requiring" a college degree rose, as the definition of how much each professional had to know broadened, and as degrees of specialization within each profession grew.

The third theme in the debate about the purposes of higher education centered on general education. The movement for general education stressed a common core of learning, building upon prewar activities to stem the tide of curricular fragmentation and disciplinary specialization that was nascent since the turn of the century. Both in its prewar and postwar manifestations, general education drew upon nineteenth century traditions of the liberal arts and the belief that knowledge had moral and humane ends. World War II boosted the latter view as general education took on the mantle of teaching common social values. General education's aim after the war, as Douglas Sloan writes, "was viewed primarily as one of training up intelligent and capable citizens committed to the values necessary for a full and responsible participation in democratic society" (Sloan, 1980, pp. 42-51).

These purposes were not easily compatible; they created innumerable tensions. Yet each effort grew during the early postwar period. Even general education, which quickly ran out of steam and was essentially routed after 1960, found a home on probably half of America's colleges in the 1950s (Sloan, 1980, pp. 47-49). The two victors—research and vocationalization, as different as they seemed—had something in common: each pointed higher education toward a greatly expanded curriculum to accommodate the desires of the faculty and the goals of the students.

Debates about purposes thus quickly drove faculty into questions of curriculum. What is the curricular content of an education for citizenship? What should be the relation-ship between the liberal arts and vocationalism? How should research and graduate



education connect to the undergraduate curriculum? What should be the balance between required courses and electives? What defines a major? Too often, however, faculty questions about purposes became questions about curricular modifications rather than about knowledge and learning: What courses should students take? When should they take them? How many courses can students choose and from what menu? What should students read? Ironically, what was supposed to be an effort to connect the purposes of higher education to what students should learn, understand, and make meaningful was converted into decisions about what each department would require of its students, into negotiations over how much each department had to "service" (a commonly used phrase) general education goals, and into a fixation by individual faculty members on the courses they had to teach and their course reading lists.

During these debates, little attention was paid to learning itself, how students learned, what kinds of knowledge and for how long they retain it, how applicable the knowledge was for student lives, or whether the methods of teaching and of assessing student learning were the best available. Curriculum was of central importance to professors since most faculty spent their time on teaching and put substantial efforts into reading lists and testing students' course knowledge. Yet learning and the nature of teaching were rarely addressed. Studies undertaken to assess the impact of teaching on student learning had little effect on how professors went about their business.

Not until the widely publicized decline in SAT scores in the late 1970s did the question of learning begin to occupy a noticeable place in higher education, and even then the initial reaction was to blame forces external to postsecondary education—low academic standards in elementary and high school, television, the breakdown of the family—or to complain that open and low college admission requirements had reduced student incentives to learn. The academy itself did not take seriously questions about the relationship between what was taught and how it was taught on the one hand, and student learning on the other. Only with the challenges to higher education in the late 1980s over the price-returns squeeze did the student learning become a serious agenda item, especially as public and political criticisms of the amount and quality of teaching mounted.

Throughout most of the postwar era, the faculty's concerns with learning and teaching were translated into questions about what to teach and when to teach it, questions which were primarily answered within the academic departments and in terms of each academic discipline. What constituted the discipline's most important scholarly questions? What were the discipline's most appropriate methodologies? What were the cutting edge specializations within the discipline and could the faculty teach them? These were useful and relevant questions, but they were not about issues of student learning.

In retrospect, it is not hard to explain the relative absence of discourse within higher education over student learning or of any sustained discourse on the effectiveness of courses or about how well students comprehended what they had been taught.⁶ Little

incentive existed for faculty and administrators or, for that matter, parents and students to worry about what students learned. As long as the system grew in numbers and wealth and everyone presumed that vocational success and income returns were tied to college graduation, the breadth, depth, and content of classroom learning took a distant second. And with faculty focused on their own disciplines—on their capacity to understand and teach the primary questions of their discipline—they saw little real need to ask questions about the relationship of student learning to citizenship or vocational responsibilities.

There was a second reason that the student learning was so little addressed. Classroom teaching became associated with academic freedom. What professors did inside the classroom had to be defended against external threats—from McCarthyism, conservatives and religious fundamentalists, leftist radicals, administrators, and ultimately from the students themselves (Hofstadter and Metzger, 1955). The defense of academic freedom had the effect of making the classroom a "private" domain—as faculty responses to student evaluations often made clear. Any questions about what happened in the classroom, even whether students were learning anything, were viewed as threats to the faculty member's liberty. The transactions of the classroom, teaching and learning, needed to be excluded from serious observation and contention.

Instead of concentrating on learning, American higher education focused on organizing academic content and delivering it. College faculty experimented with technology and new approaches to teaching even less than elementary and secondary schools did. Lectures and seminars dominated, with the former often directed at large numbers of students during their first two-years at four-year institutions. After the 1960s greater informality between faculty and students occurred with professors and students similarly dressed and referring to each other by first names. Informality may have enhanced collegial feelings between professors and students, but it probably led to neither more student learning nor any substantial change in the delivery of information to students.

The lack of interest in pedagogical experiments reflected the dominance of substantive academic content over instructional values. The ascendant model of academic knowl-edge derived from the research universities. It was never uncontested, as evinced by the various efforts to introduce specially constructed general education courses or to involve students in hands-on clinical or practical experiences; yet the dominant notion of higher education's knowledge base was that students should learn what the professors knew and the most important kind of knowledge professors had was shaped by the research community and its disciplines. Whether through departmental structures, the organization of course catalogues, reading lists, or the requirements for majors, the patterns set by the research universities became standard for most of higher education, especially as colleges and comprehensive universities drew their faculty from those same universities. Alternatives continued to exist, but they were precisely that, alternatives to the dominant mode.⁷

The dominance of the research university in shaping the curriculum meant that while



most undergraduates entered the workforce directly from college, undergraduate education tended to focus on preparation for graduate education. As was true of high schools, most of whose students would not go directly to college, the dominant expectations at four-year undergraduate schools among those who controlled the curriculum the faculty—was that knowledge should be organized into disciplinary majors that prepared students for graduate programs.

At the two-year community colleges, this view of what knowledge mattered was clearly contested terrain, for it went to the colleges' purposes. The expectation that community colleges would be a locally-based, easily accessible, inexpensive route to the baccalaureate—fulfilling what was in essence a "transfer" function—meant that community colleges' curricula had to mirror the freshmen and sophomore years of the four-year schools. This flew in the face of another purpose, the vocational function to prepare students directly for jobs after a maximum of two-years. As the vocational function came to assume greater prominence in the 1970s and 1980s, shifting the balance away from the transfer function, the curriculum broadened considerably to offer courses that would certify students for jobs, give them access to four-year colleges, and appeal to an older population wanting to go back to school.⁸

Higher education's curriculum underwent broad, substantial change after 1970. Its size exploded and it became chaotic. Small college course catalogues made any notion of a focused curriculum anachronistic. Large schools had city telephone book sized course catalogues; in 1975 Cornell University needed 700 pages to present its undergraduate course offerings (Rudolph, 1977, p. 1). Size was paralleled by a new kind of chaos, not anarchy, for some requirements continued at almost every institution. But the orderly progression of courses from freshman- to senior-level that had previously constrained choices and demanded that majors in a discipline go through a set of hierarchically ordered courses, from introductory surveys to more specialized advanced seminars, gave way. By the 1980s the range of what a student could choose to satisfy degree requirements, the very quantity of courses offered, and the difficulties in distinguishing between elementary and advanced courses were frequently mind-boggling.

It is also clear that higher education in the postwar era accepted and even exaggerated the growth of the parallel curriculum in which student life flourished. Building upon a tradition of student interests separate from the academic interests of the faculty, colleges and universities increased the number and intensity of student services, built student centers, expanded residential facilities, provided health care and career counseling, and above all, created a megasized intercollegiate athletic juggernaut that frequently defined the image of what a university was about. So powerful was the extracurriculum which emerged in the last half of the century that it was soon renamed the cocurriculum, an extraordinary recognition of its role in student life. But the cocurriculum was not shared with the deliverers of the academic curriculum. It was a parallel and separate domain predicated on the absence of faculty to the mutual satisfaction of students and professors.

In ways we do not yet fully understand, these developments were tied to the triumph of

the faculty as the principals in higher education.⁹ With that triumph came an exaltation of the academic disciplines and their methodologies. While Americans committed themselves to the extraordinary growth of higher education for all sorts of reasons—national defense and economic development, an educated citizenry, local and regional pride, personal income and vocational gain, the expansion of educational opportunity—the professoriate made the academic disciplines the organizational center and intellectual heart of universities and colleges.

The triumph was not *de novo*; it did not just happen after 1945. It had been evolving since the turn of the century, part of what Julie Reuben calls "the making of the modern university," as the disciplines made scientific research and the methodology of science their *raison d'etre*. The story of that evolution is worth recalling because it reveals how higher education changed at the turn of the century and provides insights into the continuities of the post-World War II period, as well as the shifts occasioned by the 1960s.

The Separation of Science and Morality¹⁰

For most of the nineteenth century, American higher education assumed that the unity of truth combined science and religion in the service of one another and that religion was the basis of morality. Higher education's purpose was to reinforce this unity, training the intellect and moral character simultaneously. The curriculum exemplified this especially with its culminating course, required at almost every college and university, in moral philosophy, in which students explored the literature of philosophy and theology to confirm their obligations to family, community, nation, and God and to reconcile religion and secular studies (Reuben, 1996, p. 3).

As universities and colleges became connected to national and regional interests and economic development—marked at the federal level by the Morrill Acts of 1862 and 1890 which explicitly articulated the utilitarian aims of higher education—criticism of the curriculum's neglect of modern and practical subjects mounted, as did the failure to offer advanced instruction and the limitations that theology placed on scientific research. Colleges developed a much broader set of purposes than the traditional one of preparing for the learned professions. New private universities—like Johns Hopkins, Cornell, and Chicago—and older ones—Harvard, Columbia, and Pennsylvania—as well as state universities like Wisconsin and Michigan, capitalized on the intensified interest in utilitarian and vocational outcomes, advanced research, and science to become the dominant players in higher education, even as the liberal arts colleges both adjusted to the new climate and justified their more traditional ethical and community responsibilities (Geiger, 1986, 1995; Leslie, 1992).

Initial strategies to reform the curriculum and to advance research reaffirmed the historic connection between religion and science and thus between higher education and morality. The generation of "great university presidents"—Charles William Eliot



(Harvard), Daniel Coit Gilman (Johns Hopkins), Andrew White (Cornell), William Rainey Harper (Chicago), and Nicholas Murray Butler (Columbia)—assumed that scientific research would continue to support religion. They hoped to show this by making religion a focus of scientific study.

They failed. By the first decades of the twentieth century, efforts to put universities at the service of the moral goals of the classical college while advancing knowledge were in retreat, "the ideal of the unity of truth did not seem plausible to younger intellectuals trained in the new universities" (Reuben, 1996, pp. 3-4). Over the next decades academics came to embrace the separation of facts and values. The former was what scientists—natural and social—engaged in discovering and articulating. Teaching values and having them implemented behaviorally was neither the responsibility of scholars nor the goals of classroom instruction. While liberal arts colleges continued to hold to the validity of morally based instruction and responsibilities, the new generation of university faculty severed the connection between their search for knowledge and moral behavior, between their roles as professors and the institution's responsibility for student values and behavior. It was not simply the making of the modern university; it was a revolution that worked a fundamental change in American higher education.

By the 1930s, the dominant view of knowledge centered around research in the academic disciplines, structurally organized within academic departments. The advancement of knowledge occurred most effectively when it was specialized (even crossdisciplinary research was supported as a form of specialization), experimental (controlled as much as possible), quantitative, had replicable methodologies, and sharply distinguished between "pure" and "applied" research (with the former accorded higher status than the latter). Most powerfully, knowledge was best acquired and was most trustworthy when scholars removed ethical concerns from their research, achieving ethical neutrality or ethical detachment. Only then could scientific credibility be achieved; only then could research achieve stature and social influence (Reuben, 1996, ch. 6).

There were degrees and differences with which these views were held and implemented. They were held most insistently in the natural sciences which took seriously the need to separate research from religion and morality. But the new ideology came to dominate the social sciences also. Sociology saw the rise of a new scientism. The direct application to and involvement in social reform by social scientists was rejected, a phenomenon that at the University of Chicago pitted women faculty in a losing battle with their male counterparts for control over the social science disciplines (Bannister, 1987; Fitzpatrick, 1990). The humanities initially proved highly resistant to the separation of morality and science. The New Humanists critiqued the methodologies of science and its assumptions of progressive modernity. Potentially overwhelmed by the success of their social science and natural science colleagues, faculty in the humanities challenged the value and validity of morally neutral research and teaching. Among college and university administrators, few, if any, were willing to dispense with the view that undergraduate character and morality was an institutional responsibility. In the liberal arts colleges, the separation of fact and value, of science and morality, was especially contested (Reuben, 1996, ch. 7; Leslie, 1992).

Yet as higher education entered the 1930s, science as a value-free enterprise engaged in by ethically neutral researchers had become the dominating ethos of the faculty on university campuses. If teaching needed to acknowledge moral and normative values, if the college community had to provide for the character-building of undergraduates, so be it. There were places for such courses. But such concerns, the faculty was increasingly saying, were best taken up outside the realm of scholarship—except insofar as moral issues were themselves a subject of scientific research.

The dominance of value-free research was still incomplete before World War II. Colleges and universities retained their traditional responsibilities for shaping the character and moral behavior of undergraduates, although the growth of urban commuting universities during the interwar period strained those expectations (Levine, 1986.) Still the trend toward separating the work of the faculty from the character building of undergraduates was sufficiently strong to engage a counterattack. Liberal arts colleges and collegiate types within universities sought to overcome the disjuncture between the faculty as scholars and the moral responsibilities of teaching by urging an expansion of general education as a form of citizenship training. Unwilling to challenge the faculty's newfound freedom to specialize and to engage in potentially controversial research in the pursuit of knowledge, administrators stressed the importance of teaching and faculty advising, as well as the faculty members' moral character—the professor as personal model. They stressed the importance of the humanities in keeping open the dialogue between scholarship and morality (not incidentally, making the English department the academic home of such concerns). And, wherever they could, universities and colleges expanded on-campus housing and gained institutional oversight of the extracurriculum, especially the newly emergent athletics program. (Reuben, 1996, ch. 8; Sloan, 1980).

Ultimately, however, higher education settled upon a dual track educational program. One track involved the formal organization of knowledge—the curriculum—controlled and delivered by an increasingly powerful faculty. The second track—the extracurriculum—was the students' domain coordinated by student life professionals. While college and university administrators regularly stressed the complementary and overlapping nature of the curriculum and the extracurriculum, the stress was more rhetorical than real. On university campuses the two curricula existed as independent and noncollaborative enterprises. In the liberal arts colleges, faculty were asked to and often breached the divide, although the trend was toward separation. After World War II, the divide would achieve its apotheosis.

The Triumph of Methodology

If growth was the defining characteristic of American higher education after World War II, the elaboration of faculty authority was perhaps the most important internal devel-



opment. The story of faculty power and the growing stature of research tends to be told as an expression of the knowledge explosion and the potential contribution of knowledge to the national interest, stimulated by federal investment and institutional competition for prestige and dollars. But it is also useful to think of it in terms of the triumph of disciplinary methodology. Teaching a discipline to undergraduates meant training them in the methodologies relevant to that discipline. What this meant varied by each discipline, but in every field the pressure was toward a model of greater scientific methodological precision, a trend that had the effect of inhibiting the conversation between disciplinary scholars and their undergraduate students.

As should be clear, the process had been underway for some time, but the dramatic acceleration of efforts to achieve methodological precision after World War II was not entirely predictable. The early postwar years after all witnessed a tremendous outpouring of rhetoric about higher education and democracy, the importance of general education for an informed citizenry, equality of opportunity, and the utilitarian and practical purposes of postsecondary schooling—a sufficiently broad set of aims which could have tolerated enormous diversity in the organization of knowledge.

In retrospect, however, there was an eerie duality about the aspirations of the academy and the rhetoric of democracy. On the one hand, democratic and utilitarian purposes gave enormous boost to higher education's postwar growth. The combination of knowledgeable and productive citizens and the application of science to economic growth and national defense was irresistible. On the other hand, the academy's faculty, with their prestige enhanced by their role in wartime, sought to sharpen their disciplines' foci and to create methodological forms that separated their work from the citizens they were educating. The faculty, which in fundamental ways depended upon the postwar expansion of enrollments, were disinclined to make much accommodation to the calls for civic-minded education and the reality of greater student diversity. Even as the enterprise of higher education expanded, and even as higher education claimed utilitarian responsibilities—justifying investments in it and expanding enrollments—the knowledge that was being taught within the academic disciplines became narrower and narrower, more and more based on methodologies, and more and more disconnected from the everyday world of the students (Bender, 1997).

The way of the faculty had considerable merit. Given the organization of knowledge into academic departments based on the disciplines and the incentives to contribute to new knowledge, scholars were wise to construct technically grounded methodologies which earned them distinctive status within the academy. The bind they faced would have been difficult to resolve in the best of circumstances, for scholars were asked to speak to communities outside the academy as part of their civic and utilitarian responsibilities, yet were expected to create a distinctive community of discipline-based colleagues whose language gave them exclusionary status.

They chose to do the latter. In the historian Thomas Bender's words: "In retrospect it appears that the disciplines were redefined over the course of the half-century following

the war: from the means to an end [civic responsibilities] they increasingly became an end in themselves, the possession of the scholars who constituted them. To a greater or lesser degree, academics sought some distance from civics. The increasingly professionalized disciplines were embarrassed by moralism and sentiment; they were openly or implicitly drawn to the model of science as a vision of professional maturity. The proper work of academics became disciplinary development and the training of students for the discipline" (Bender, 1997, p. 6).

Put differently, when faculty in the 1940s debated the curriculum and its relationship to society, they were engaged in discussions about an educated citizenry and the best forms of knowledge to connect their students to their post-college lives. This was the essence of the debates over general education and vocationalism. By the early and mid-1960s, curriculum discussions among the faculty—even with growing controversies about "relevance"—were much more likely to be about how to provide a structured introduction to each academic discipline. Undergraduate education was less about faculty concern for knowledgeable citizens and more about the specializations of each faculty member or department (Freeland, 1992, p. 114).

It was an extraordinary phenomenon, for it produced an enormously expansive system of higher education built upon an exceedingly shaky foundation, shaky because the foundation was held together by two critical conditions. The first assumed that economic returns to students would grow, opportunity costs would continue to go down, and students (and their parents) would always feel satisfied that each year of college was an excellent investment. As long as these occurred, the actual classroom enterprise made only modest difference. What happened when professors and students met in the classroom was not all that consequential as long as there was substantial profit in acquiring the degree.

The second condition was related to the first: higher education depended upon the success of the extra- or cocurriculum to provide students with the learning students considered most relevant to their success—social skills, leadership, knowledge of the world around them, community and civic participation. As long as the cocurriculum was well supported and thriving, classroom learning was just not that important.

As the conditions of higher education's success eroded in the 1980s and 1990s, questions about classroom teaching, student learning, the nature of research, the costs of the cocurriculum and its relationship to the academic curriculum, and the responsibilities of the faculty were raised. Professors were unclear and confused about why they and the institution of higher education were being singled out. How and why this occurred is a complicated story, partially discussed in Parts I and II above. But at least some of the post-1980 conflicts involved the ways the academic disciplines evolved divorced from the experiences and concerns of undergraduate students. Two disciplines—economics and philosophy—serve as examples.



Economics: Queen of the Sciences

No social science or humanities discipline achieved higher acclaim and stature than economics after World War II, as the dismal science quickly became a beacon of American higher education, simultaneously able to assert itself as a science and to claim utilitarian value. During the first decades after the war, economics laid plausible claim "to the belief that economists had learned how to manage (if not plan) an economy; that the business cycle was largely obsolete. . . .that full employment was a possibility; economic growth could be maintained; and that the 'Keynesian revolution' had given economists the theoretical and practical tools to achieve all these goals" (Bell, 1982, p. 30). The discipline's great transformation lay in the application of mathematical model-building and statistical analysis to a broad range of economic problems. In David Kreps' words, "mathematical modeling, a small piece of the subject until the 1940s and 1950s, became the all encompassing (some would say suffocating) language of the discipline" (Kreps, 1997, p. 62). Economics in the postwar era was thus able to parlay its claims of utilitarian value with methodological rigor to become the queen of the sciences.

The ability and desire of academic economists to transform economic knowledge into an analytic toolbox and mathematical model-building was truly revolutionary, for it substantially broadened economists' ability to make their discipline a science and to understand and resolve complex economic and social problems. The model-building transformed the ways we understand all sorts of activities and behaviors. But it also subordinated economic history, ethics and normative judgments, and the direct observation of the messy world to theoretical mathematical models (Solow, 1997; Bell, 1982, pp. 23-30, 46-52).

For undergraduates, these developments meant that the study of economics was, on the one hand, attractive because of its potential utility, and on the other, focused on exposure to analytic tools and model-building which, in many cases, was more about technical skills than substantive economic issues. Economics for undergraduates became a version of the requirements of first year graduate students. The undergraduate's responsibility was *preparing* to do economics, learning the analytic toolbox rather than studying and understanding economic problems directly.

The discipline of economics thus successfully defined itself in the postwar period as a field of study under little obligation to engage in conversations with undergraduate students about economic institutions or about the economic issues that concerned students. The economic literacy necessary for an educated citizenry was not the responsibility of the discipline of economics. Undergraduates were required less to study such topics as international trade, labor markets, the historical development of economic conditions, or the relationship between politics and economics than they were to understand the language of mathematical modeling and the use of statistical techniques.

These conditions were not uniform. The day-to-day teaching in college and university classrooms, the need to mount a full range of courses to satisfy teaching responsibilities

and, not so coincidentally, justify the appointment of economics professors, and the academic limitations of students limited the exposure to the methodological toolbox. Economists at liberal arts colleges occasionally found themselves at odds with the emphasis on pre-graduate training within the undergraduate curriculum, since the teaching tradition at their colleges required a more comprehensive approach (Barber, 1997).

Nonetheless, the heart of the discipline, the path by which economics gained promotion and prestige, lay in an approach which was resistant and even hostile to what undergraduates expected economics would be about. Little wonder then that when given the opportunity, undergraduates flocked to economics-like courses in other disciplines and interdisciplinary programs, in business schools, and in other professional schools. Indeed, it is plausible to argue that for undergraduates the most interesting economics was being taught outside economics departments.

There are a number of caveats one could apply to my argument about the absence of conversation between the discipline of economics and undergraduates. One, commonly proffered by economists, focuses on the students and other faculty rather than on the discipline's development. The decline in academic skills among undergraduates and their disinclination to take academic work seriously after the 1960s made it difficult for students to learn the necessary tools to study economics. Often implicit in this view is that there was a decline in standards among the other academic disciplines and that the growth of economics courses for non-economists in professional schools and other departments further lessened the enthusiasm of undergraduates for serious learning. These arguments may have some measure of truth, but they are partial at best and tend to deny that economics itself played a role in the process.

A second caveat suggests that my description of an absence of conversation is romantic in its implied view that there ever was a conversation between economists and undergraduates prior to the dominance of mathematical modeling, and that it neglects the substantial widening of the field of economics since the 1970s. The former is probably correct and I do not mean to create an idealized notion of economics professors and their students before the 1950s. We know enough about the evolution of the disciplines and student cultures historically to disavow a golden age of universally curious and academically committed undergraduate learners (Horowitz, 1987). But I do think that the idea of conversation has to be understood within the context of the enormous growth in stature of economics and what I believe was a genuine thirst for knowledge about economic issues among students. The case is about opportunities to improve learning foregone.

Economics did broaden its methodological focus and substantive concerns in the two decades after 1970. The initial impact of mathematical modeling between 1950 and the mid-1970s was the elimination or narrowing of the range of topics addressed (Kreps, 1997, pp. 65-74). That reduction shifted, in part under the pressure of the 1960s to treat nonrational behaviors, uncertain goals, and disequilibrium with the same regard as the



trinity of assumptions about rationality, goal orientation, and systemic equilibrium that had dominated the previous twenty years and, in part, by the growth of "professional school" economists who focused on what they considered real world problems.

The development of economics as a discipline is suggestive of how disciplines within the academy could become methodologically more sophisticated, more precise, and grow in stature and at the same time become less and less available to students. That is not, of course, a remarkable insight. More revealing, as occurred with the absence of concern about what students were actually learning, is that there was little to prevent and little protest against the widening gap between the faculty in the discipline and the undergraduate students who were ostensibly the faculty's responsibility. Had it occurred simply in economics, such developments would have mattered little. But they occurred or were attempted in other disciplines with much the same impact: As the discipline became more technical in its methodology, it lost its connection to undergraduate students. The end result was the creation of a powerful discipline-based departmental organizational structure ostensibly designed to expand student learning but which failed to engender a conversation between faculty and undergraduate students on economic issues.¹¹

Philosophy: The Analytic (Non)Conversation

The discipline of philosophy took a path quite similar to economics, but it did so with considerably more devastating consequences for the conversation between itself and undergraduates.

From outside the discipline, it appeared that philosophy was poised for a substantial burst of enthusiasm and interest among students as the war ended. Such issues as the nature of evil, social purposes, civic responsibility, and the role of the individual and the state—all of which had historically fallen within the domain of philosophy—looked to find a ready audience. This did not happen.

Instead, philosophy opted for a narrowing of subject matter and methodological purity designed to separate itself from other, less rigorous disciplines and from philosophy's own history. The dominance of analytic philosophy was first and foremost a triumph of methodology with its stress on precision and clarity, on tidiness in observing, understanding, and explaining the scientific enterprise and the meaning of language. Its model was scientific precision and mathematical logic and it depended heavily on the "formal language of logical calculi," a language "that combined clear structures of logic, mathematics, and the empirical sciences" (Nehamas, 1997, pp. 212-214).

As had occurred with economics, the outcome built upon prewar developments, but it was not inevitable. In the half-century before the war, philosophers engaged in a ferocious debate over how to respond to the growing authority of science and the trends toward specialization and professionalization within the academy. The struggle, as Daniel Wilson notes, "set the stage for the rise of technical, professional philosophy, later embodied in logical positivism and analytic philosophy" and in the process, philosophers "unintentionally created the basis for philosophy's growing marginalization in twentieth century American culture, as the community of philosophic discourse contracted to a relatively small professional circle" (Wilson, 1990, pp. 1- 2).

That outcome appeared self-evident in the years following the war, but the prior struggle had been a genuine one and the minority view kept latent its questions about community and civics that connected John Dewey and other pragmatists to the social concerns of the late twentieth century. Yet the victors were clear; logical positivism and analytic and linguistic philosophy gave "substantive coherence" to the discipline, providing it with legitimate questions, values, and methodologies (Wilson, 1990).

This approach to philosophy was self-conscious in rejecting the primacy of values, emotions, or normative judgments. Nor were philosophers to think of themselves as part of the same enterprise as historians and literary scholars, scholars with whom they had once been linked. Rather, philosophers in postwar America came to think of themselves "as participants in the enterprise of science" (Nehamas, 1997, p. 212).

There was a lot to be said for this emphasis on the precise, the logical, and the verifiable for it brought to the unfocused, the vague, and the irrational, ways of thinking that potentially allowed for the clarification and resolution of differences. But, as with mathematical model-building among economists, analytic philosophy had a way of driving alternative methodologies to the side and seeking to deny the messiness of ordinary life. In doing so, the discipline of philosophy curbed its capacity to speak with wider audiences and, in the context of higher education, its conversation with undergraduates.

Academic philosophy retreated from the public domain; it observed the world but refused to engage in it. The irony of this was patent: Philosophy had the potential to (and often did) address issues of interest to diverse audiences, but it did so in extremely technical terms that excluded rather than invited participation—and analytic philosophers showed little inclination to open the conversation. As Stanley Clavell put it in 1964, "For any of the philosophers who could be called analytical, popular discussion would be irrelevant. . . .For the analyst, philosophy has become a profession, its problems technical; a non-professional audience is of no more relevance to him than it is to the scientist" (quoted in *Daedalus*, Winter, 1997, p. 224).

In the decades after 1970, philosophy broadened both the issues it addressed and its methodological approaches, in ways that parallel economics. To a substantial degree, Thomas Kuhn's *The Structure of Scientific Revolutions* (1963) initiated the process by reintroducing history into American philosophy. The turning point came with the publication of John Rawls' *A Theory of Justice* (1970), which had a profound impact across the social sciences and humanities, with the subsequent expression of interest by philosophers in issues of public policy, civic and ethical judgments, and feminist ideologies, and with the resurgence of John Dewey and Deweyan concerns with public life and



problem solving. These developments have affected the teaching of philosophy within philosophy departments, but, as has also been the case with economics, the greatest influences have been felt in the teaching of applied philosophy in other arts and sciences departments and in medical, business, education, and law schools where ethical issues and European continental philosophers like Habermas, Foucault, and Derrida have found homes (Nehamas, 1997, pp. 217-218).

For all their substantial differences, then, philosophy and economics have traveled parallel paths. The promise of discourse between the growing numbers and diversity of undergraduates of the postwar era and the two disciplines was short-circuited and left unfulfilled as the disciplines focused on methodologies that stressed mathematical models and mathematics-like logic showing little inclination to take into account the messy world that students experienced and the questions they posed about their lives and society. About the two disciplines, historian Carl Schorske writes, "The intellectual quest for scientific objectivity and the professional advantages of a value-free neutrality reinforced each other in the establishment of a new methodological consensus as the basis of the discipline [of economics]. . . . The analytic philosophers purged or marginalized traditional areas of concern where values and feelings played a decisive role. Ethics, aesthetics, metaphysics, and politics were all for a time equally excluded as the source of pseudo-problems that could not be formulated or addressed with the rigorous canons of epistemological reliability by and out of science" (Schorske, 1997, pp. 296-299).

Since the 1970s there have been efforts to broaden the conversation by expanding topics and acknowledging alternative forms of knowledge and ways of knowing, but these have affected teaching and learning more outside philosophy and economics departments than within them. For the most part, since World War II the failure of conversation between the two disciplines and undergraduates has been viewed as unimportant by those within each discipline and, in any event, was often ascribed to the failure of the students. Even Nehamas who is quite sympathetic to the need to broaden the conversation resorts to blaming others for its failure, writing that the public has "no patience for any position that is not virtually self-explanatory, refusing to take seriously any view that requires careful thought and that cannot receive practical application without serious and sometimes relatively long preparation" (Nehamas, 1997, p. 220).

Generating a Learning Conversation

A real and perhaps inevitable tension exists between the questions faculty pose about students' learning—how much do they know, how do they learn, how do their experiences connect (or not) to their learning, what issues might challenge their minds or transform their ways of thinking and doing—and the questions faculty ask about the academic disciplines—what is known, what are the disciplinary (or interdisciplinary) questions, how should the discipline generate its questions, what are its methodologies. The different questions point in different directions. Pursuing one set rather than the other leads to quite different understandings of what is important in the learning process.

Many professors weigh these differences seriously and, at their best, they synthesize the varied strands into a creative tension that brings them together. But higher education as an entity, colleges and universities as institutions, and academic departments as collections of discipline-trained professors, have not historically made the relationship between the questions posed by how students learn and the questions posed by the disciplines a center of attention. And that has made difficult, if not impossible, a sustained conversation about learning between professors and students. As the 1990s have evolved, the absence of such a conversation has made the academy itself vulnerable, for too few students believe that the faculty or academic learning is the soul of higher education.

Do not misunderstand me. The postwar evolution of the disciplines brought tremendous advances to our understanding of the world, substantively and methodologically. The disciplines have shown us that there are rigorous ways to ask questions, probe for answers, and summarize findings. In a relativistic world, they suggest that anyone's opinion is not as correct as anyone else's. The most important lesson we teach undergraduates is that some ways of analysis more effectively comprehend the universe than others (Bell, 1982).

That said, the evolution of the academic disciplines in the twentieth century, and especially after World War II, has tended toward a rather narrow definition of what Lindblom and Cohen (1979) call "usable knowledge." The language and methods with which the disciplines work make it difficult to appreciate that other languages and methods are also valid ways of knowing. The disciplines in this way have worked to exclude a broader public—in Thomas Bender's phrase, they have engaged in "academic enclosure" (Bender, 1997, p. 7)—thus denying access to their knowledge and diminishing what the public knows and experiences as not being worth very much.

At the same time, the disciplines in the postwar era misunderstood the discrepancy, in Charles Lindblom's words, "between widely accepted scientific ideals and actual feasible practice, a discrepancy that was not faced and intelligently dealt with but rather swept under the rug" (Lindblom, 1997, p. 233). Lindblom is referring specifically to the tensions within political science in the 1940s and 1950s between developing a science of political analysis and matching that to actual real world accomplishments. Similarly, Rogers Smith has argued that political science has historically wanted to be a pure science and contribute to buttressing democracy without recognizing that the desire has led to ideological blinders and has been impossible to accomplish in any event (Smith, 1997). Although their disciplinary reference point is political science, Lindblom's and Smith's arguments are applicable more generally. The academic disciplines sought scientific and methodological purity while neglecting to understand that ethical neutrality brought its own ideological baggage.



The process occurred over time, but was especially intense between the 1930s and the 1960s when the disciplines resisted more general conversations. As Schorske puts it, this was "the passage. . .from range to rigor, from a loose engagement with a multifaceted reality historically perceived to the creation of sharp analytic tools that could promise certainty where description and speculative explanation had prevailed before" (Schorske, 1997, p. 295). The road was turned toward rigorous analysis and it often resulted in the constriction of subject matter.

The irony is hard to overstate: Higher education came out of the war with an optimism never before seen in its history. Its most important premise was that it could engage in the education of large numbers of people. And yet, even as students flocked to it in droves, as governments expended vast sums in its support, and as communities battled for the establishment of new campuses, scholars defined their fields in ways that made it difficult for people to understand them and in ways which proclaimed that the lack of communication did not matter.

Not surprisingly, then, when faced with skepticism, even from within the academy, disciplinary scholars have rarely been able to convince skeptics. Even more telling, they have often viewed the skeptics as irrelevant. Debates about a discipline tended to be debates within the discipline, sometimes over findings but more often over methods, a form of debate that served even further to exclude and treat with disdain the students and to undermine any capacity to change skepticism into support or even neutrality—unless of course the discipline could convince students and the public at large that the subject matter was too complex for them to understand and they should, in effect, leave it alone.

The late 1960s and 1970s shifted some of this. It was impossible to ignore the civil rights movement and racial conflict, the discovery of poverty and inequality, the protests over Vietnam, and the counterculture, especially when students were bringing the issues onto the campuses and extending them to include the ways they were treated and taught. With the scandal of Watergate tarnishing the presidency, the shock of stagflation and a feared declining economy, the notion that scholarship and teaching should be immune from examination and revision was hard to sustain. Rogers Smith's conclusion about the impact of the 1960s and 1970s on political science is more generally applicable: "In that conflict-ridden era, political science could persuasively be accused of offering models that failed to reveal and challenge unjust inequalities; to produce any behavioral laws; or to predict, explain, or provide effective social guidance concerning the startling events then occurring. And most damning of all, to an embarrassing extent, the political science literature failed even to discuss these topics" (Smith, 1997, p. 260). The damnation affected many of the disciplines.

The result has been substantial shifts in the ways scholars go about their business, involving a genuine debate over knowledge, its relationship to culture and values, and its presentation to students (Kimball, 1988). Perhaps the most dramatic of these is the

assertion of normative claims and the intrusion of values into scholarship, challenging the neutrality of method that the disciplines held so dear. New topics have been invented, in part as a result of "normative claims" around inequality, justice, discrimination, the influence of gender, and the study of the previously unnoticed (Schorske, 1997, pp. 304-305). One manifestation is the willingness, indeed eagerness, with which philosophers contend over public issues of morality and justice, as in the recent brief to the Supreme Court by leading philosophers over the right to assisted suicide (*The New York Review of Books*, March 27, 1997). This shift to a more value-laden scholarship and to new topics that reflect normative concerns has provoked greater interest in the historical evolution of issues and of the disciplines themselves, in particular asking how things came about and why we study them in the ways we do, opening up still new approaches to fields of study.

Real world experiences and direct observation have become fashionable. Research on "natural experiments" has grown in importance. The most remarkable methodological development is the immense popularity ethnographic research has achieved over the last two decades. Some of the most interesting methodological debates involve ethnography: about the immersion of the scholar in the life of the community being studied, about the relationship between those being studied and the studier, and about replicability of findings. These attest to a methodological shift toward qualitative research that seemed unlikely a few decades ago. Undertaking scholarly research, quantitative and qualitative, on problems drawn from the experiences and dilemmas that people and institutions face has also increased the emphasis on the interaction between actors and structure, making indeterminacy and uncertainty a more prevalent conclusion than previously thought appropriate, wise, or scholarly (Lindblom, 1990).

Organizational changes within higher education have also occurred; two are of particular relevance. The first is the profound blurring of disciplinary boundaries by researchers. With so many of the scholarly questions generated by the dilemmas people and institutions face, research has involved pursuing whatever disciplinary approaches seem useful. Often this has had teaching consequences as more faculty than ever before teach in explicitly interdisciplinary undergraduate programs. More faculty who were trained within a discipline are doing research and teaching across disciplines; more undergraduates are enrolling in interdisciplinary majors; and more colleges and universities are establishing interdisciplinary teaching and research programs.

The growth of interdisciplinary research and teaching leaves higher education in an awkward organizational dilemma. Large numbers of faculty and students are engaged in interdisciplinary studies, but discipline-based departments remain the dominant organizational basis for decision making, with the departments often acting as if each discipline was an isolated and autonomous entity. With reference to literary studies and English departments, Catherine Gallagher writes: "[We] have applied ourselves to the building of interdepartmental, rather than departmental, institutions: humanities institutes, interdisciplinary journals, women's studies programs, ethnic studies programs, film studies, team-teaching programs, and the like. While we attended to these institu-



tional tasks, we avoided translating our ideas into coherent graduate programs. . . . This fact may indicate that we are in the midst of an enormous institutional shift away from the traditional departments even though we continue to locate our professional training inside those [departmental] structures" (Gallagher, 1997, p. 152). If this is confusing to graduate students in English, as Gallagher suggests, imagine the bewilderment of undergraduates for whom the discipline-based departmental structures have even less meaning.

The second organizational shift has involved the rise of the professional schools and professional programs to prominence and the consequent diminution of the arts and sciences, both within universities and within the liberal arts colleges. Some of this can be explained by the intensity of vocational concerns, the extension of the belief that higher education exists to get jobs, and that professional/vocational courses are the most direct route to that end. But I suspect the growing prominence of professional studies among undergraduates also has to do with the difficulties the arts and sciences disciplines have had engaging students in conversations about their work—the argument developed above.

One last development in teaching and learning is worth noting, although it appears to be having contradictory effects: the increased prominence given to theoretical concerns in shaping research and teaching. Current theories almost always bring issues of race, gender, social class, ethnicity, and culture into the classroom. They tend to emphasize the historical moment, power and authority, the interaction between actors and structure, and the relative nature of values. These theoretical interests have thus had the effect of making scholarly questions seem both immediate and controversial, a scholar's dream and a student's delight. And yet the fascination with theory has many of the same ingredients as the economist's mathematical model-building and the philosopher's insistence that only logical analysis matters: It communicates a view that only those who understand the theory and the language, who have, in effect, the right theoretical toolbox, can engage the debate. Without the theory, one cannot know.¹²

The developments described above have created tremendous uncertainty in scholarship and in teaching. What is the core of each discipline? Should there be a core? What do students need to know? Not all the disciplines have been equally affected by the debates. English departments are engulfed by them. History departments have diversified their understanding of what students need to know without being torn apart (Bender, 1986). Economics and philosophy departments have stood their ground, even as economists and philosophers in other parts of the university have taken up new methods and topics.

Yet for all the differences among the disciplines, questions in higher education about what is taught, what should be taught, and how much is being learned have become pervasive. Often phrased in ideological terms around issues of political correctness, and sometimes viewed as a conflict between the scholarly generations, the debates about the disciplines have become attached to questions about what and how much college students are learning. The debates themselves reflect a longer history of higher education, one in which similar kinds of issues have been addressed. For some scholars, the debate has generated mournfulness as the ordered world of the past is shattered, a time when history, not women's history or African-American history, was taught and learned. Sometimes it is anger, the deep personal wounding that comes when one's interests and methodologies are challenged or rejected. Sometimes there is enthusiasm about addressing the questions, an enthusiasm generated by the possibilities of change (L. Levine, 1996; Carnochan, 1993).

It is clear, not only from the unsettlement which overtook the curriculum in the decades after 1970, that questions about the disciplines and their relationship to undergraduate learning are not easily answered. Students had fewer required courses and more choice than ever before, the size of the curriculum at institutions was growing faster than the number of faculty or the number of students, and it was almost impossible to tell the difference between elementary and advanced courses, save perhaps by the numbers of students enrolled in them. While it is fashionable to argue that the dismantling of a once orderly curriculum was due to the failure of nerve and the collapse of faculty authority in the face of student protests during the 1960s and early 1970s, the curriculum disorder of the post-1970s was part of a disciplinary revision that began at least in the nineteenth century and was rooted in the dismantling of what had once been the core of each discipline. The canon may have been challenged from without, but its breaking occurred from within as discipline-trained faculty looked for new problems and alternative ways to resolve them.

One should not underestimate the complexity of generating a conversation about the disciplines and their relationship to student learning. It is not easy to determine what really matters within a discipline when almost anything can be studied and a variety of methodologies are appropriate to their study. We know incredibly little about the relationship of knowledge to how students learn. Nor is it easy even to hold on to the notion that any discipline is a unique entity when so many of the same or similar issues are studied in multiple disciplines and in similar ways, whatever the professional training of the scholar. Add to these genuinely complex dilemmas the current tendencies to phrase everything in politically-charged terms or as a cover for fiscal cutbacks, and the enormity of the problems are apparent.

But when looked upon from the perspective of undergraduate students, the current situation raises marvelous opportunities, for it suggests ways of looking at scholarly dilemmas that can and ought to be appealing to students, especially as the undergraduate student population itself now runs the age and experiential gamut. The possibilities of a genuine and vigorous conversation to occur between students and faculty, however, will require both a commitment on the part of the faculty to that end and a willingness to acknowledge that conversation between students and the disciplines requires a shared sense of participation and worth. And that is not easy to come by.



<u>Endnotes</u>

¹ I have drastically oversimplified complex arguments, but my purpose is to suggest that whatever the nature of the theoretical bases for understanding higher education's expansion, individuals saw the issue in relatively simple terms: Did it pay for me to go to college? Was it a wise investment to expand the system through public subsidies?

² The measurement of earnings returns on education is one of the most technically complex areas in the economics of higher education. Zemsky (1997), and Gumport (1997) argue that returns to higher education for men have been declining in constant dollars since the mid-1970s. Levy and Murnane (1992), in contrast, argue that between 1979 and 1987, there was "an eight percent increase in the median earnings of 25-34 year old male college graduates" and a "21 percent increase in the median earnings of 25-34 year old female college graduates," in both cases based on working full-time for the entire year (pp. 1355-1357). Every analyst agrees that the most significant development of the 1980s was the decimation of the labor market for high school graduates. For a summary of studies on returns to college, see Pascarella and Terenzini (1991).

³ Increased financial aid and tuition discounting helped the flow of students continue. Despite considerable controversy, the prevailing wisdom is that financial aid and net tuition costs influence low-income families more than middle- and upper-income families. Direct grants have some impact on whether low-income students go to college, whereas for middle- and upper-income students such grants influence their choice among colleges. The shift from grant aid to loans in the 1980s and 1990s appears to have adversely affected the enrollment of low-income students and constrained their choices since they are less inclined to incur substantial debt. A convenient summary of these issues is Hauptman and McLaughlin, 1992, pp. 159-185.

⁴ The importance of women in these trends is significant and not well appreciated. Women went from 40 percent of the student population to a majority during the 1970s, up to 54 percent by 1990. The income returns to women college graduates also went up faster than those for men, so that by the end of the 1980s, while women with comparable education and jobs still earned less than men, the wage inequality gap was closing. Women were thus beginning to get "more" out of going to college than men. Most of the scholarly and popular discussion about costs and returns unfortunately is based on male income data. The price-income squeeze may be most severe—and generating the most anger—among men, with women having a somewhat different perception of what has been happening.

⁵ This section was generated by two questions which currently plague American higher education. First, given the reality that there are many outstanding teachers in colleges and universities, why is teaching in higher education so uniformly criticized? Second, why do discussions about the relationship between research and teaching seem so intellectually barren?

Regarding the former, historians have found persistent criticism of faculty teaching almost from the founding of American colleges-rote memorization, deadening lectures, obtuse seminars, negligent faculty, student rebellions-even as there were efforts to improve teaching (Rudolph, 1962). Regarding the latter, two sides have historically contended. One views research and teaching in conflict and asserts the necessity for choice. The second stresses the reinforcing nature of research and teaching. A compromise position has emerged in recent years calling for a redefinition of research that would include scholarship in aid of teaching, e.g., syntheses of current knowledge or research on teaching itself (Boyer, 1990).

I have chosen to address these issues by examining the development of the academic disciplines, believing that the ways we historically defined the disciplines powerfully shape and complicate our capacity to teach undergraduates and to engage in a productive conversation about learning.

⁶ Although I approach these issues somewhat differently, my argument is congruent with the report of the Association of American Colleges (1985). For a critique of the failure of the 1980s reports to take student learning seriously, see Wagener (1989).

⁷ I am appreciative that this argument risks generalizing developments at the research universities into the characteristics of all of higher education, reducing the distinctiveness of liberal arts colleges, comprehensive universities, and community colleges to caveats. That is not my intention. Sectors of higher education and individual campuses differ, often in substantial ways. Nonetheless, I am persuaded that in the organization of knowledge, the research universities dominated the discourse and were the most influential model. To quote Richard Freeland (1992, p.118), "The central tenet of this model was that the university whose faculty was most productive in research, as measured by publications in important scholarly outlets and, increasingly as the period advanced, by success in attracting outside funding, was the best university. The model incorporated a clear hierarchy of values: it celebrated modern, scientifically oriented research above traditional forms of interpretive or synthetic scholarship; investigation of basic problems above applied work—and therefore the

arts and sciences above professional fields; research over teaching; and graduate-level training above undergraduate education. It also retained more traditional indicators of academic prestige: selective admission policies, residential facilities, and strength in the liberal arts and the elite professions....By becoming research universities, leading institutions altered the terms in which other campuses, occupying positions of lesser prestige, understood the requirements of upward academic mobility."

⁸ That the community colleges embody some of the most critical elements of American postsecondary education and yet is its least understood sector is itself a commentary on the dominance of the research university in determining what is important to know. See Dougherty (1994).

⁹ A somewhat similar argument is made in the Association of American Colleges, *Integrity in the College Community* (1985). See also Kimball (1988).

¹⁰ The history of turn-of-the-century higher education reform has often been told through the growth of the research universities, most prominently by Lawrence Veysey (1965) and Roger Geiger (1986). The most recent version by Reuben (1996) is especially pertinent because it blends intellectual and institutional history and takes into account the continuing moral and character-building responsibilities of colleges and universities with regard to undergraduate education even as the faculty redefined their roles as research scholars. She also argues, as I do, that the growth of the extracurriculum was directly connected to changes in the organization and purposes of scholarship and research. An important reminder that higher education was never simply the research universities writ large is Leslie (1992).

¹¹ A concrete example involving educational choice might be helpful. Econometric models stress the common and shared knowledge held by decision makers, the application of rational self-interest to decision making, purposeful action to pursue well defined goals, and a resulting equilibrium as educational providers and educational seekers adjust to one another. Faced with this model, almost any undergraduate would argue that when their parents make educational choice decisions they rarely have the same knowledge as everyone else: racial and religious preferences and prejudices may be involved, poverty and wealth matter, as do peer pressures, sibling performance, and their parents' own biographies. This information can be put into econometric models, but they can also be examined in ways that invite conversation about the messiness of choices about education. The more the messiness is acknowledged, the more "real" the discussion to students for ,they observe unpredictability and irrationality all around them. However, the messier the analysis is to the economist, the more unsatisfying the approach especia,lly if one concludes that the model is less powerful than originally hoped. That, I think, separates undergraduates who are willing and may even delight in messiness from the academician's desire for disciplinary tidiness.

¹² The teaching outcome of these competing tendencies is described by M.H. Abrams with respect to literary studies: "my strong impression now is that what professing theorists teach in their classrooms is not nearly as joyless, impenetrable to non specialists, and immune to distinctly literary values as one might expect from what they say in conferences and publications directed to fellow initiates" (Abrams, 1997, p.127). If Abrams is correct, the portrait he draws with regard to teaching undergraduates is a disturbing notion of what constitutes healthy and vigorous conversation.



<u>References</u>

- Abrams, M. H. "The Transformation of English Studies: 1930-1995." *Daedalus* 126 (Winter 1997): 105-131.
- Association of American Colleges. *Integrity in the College Curriculum: A Report to the Academic Community*. Washington, D.C.: Association of American Colleges, 1985.
- Bannister, Robert C. Sociology and Scientism: The American Quest for Objectivity, 1880-1940. Chapel Hill: University of North Carolina Press, 1987.
- Barber, William J. "Reconfigurations in American Academic Economics: A General Practitioner's Perspective." *Daedalus* 126 (Winter 1997): 87-103.
- Bell, Daniel. *The Social Sciences Since the Second World War*. New Brunswick, NJ: Transaction Books, 1982.
- Bender, Thomas. "Politics, Intellect, and the American University, 1945-1995." *Daedalus* 126 (Winter 1997): 1-38.
- Bender, Thomas. "Wholes and Parts: The Need for Synthesis in American History." Journal of American History 73 (1986): 120-136.
- Bird, Caroline. The Case Against College. New York: David McKay, 1975.
- Blumberg, Paul. Inequality in an Age of Decline. New York: New York University Press, 1980.
- Boyer, Ernest. Scholarship Reconsidered. Princeton: Carnegie Foundation for the Advancement of Teaching, 1990.
- Breneman, David W. Liberal Arts Colleges: Thriving or Endangered? Washington, D.C.: Brookings Institution, 1994.
- Brint, Steven and Jerome Karabel. *The Diverted Dream: Community Colleges and the Promise of Educational Opportunity in America*, 1900-1985. New York: Oxford University Press, 1989.
- Carnochan, W. B. The Battleground of the Curriculum: Liberal Education and the American Experience. Stanford: Stanford University Press, 1993.
- Clark, Burton R. The Open Door College. New York: McGraw-Hill, 1960.
- Clowse, Barbara Barksdale. Brainpower for the Cold War: The Sputnik Crisis and National Defense Education Act of 1958. Westport, CT: Greenwood Press, 1981.
- Divine, Robert A. The Sputnik Challenge. New York: Oxford University Press, 1993.

- Dougherty, Kevin J. The Contradictory College: The Conflicting Origins, Impacts, and Futures of the Community College. Albany: State University of New York Press, 1994.
- Fitzpatrick, Ellen F. Endless Crusade: Women Social Scientists and Progressive Reform. New York: Oxford University Press, 1990.
- Freeland, Richard M. Academia's Golden Age: Universities in Massachusetts, 1945-1970. New York: Oxford University Press, 1992.
- Freeman, Richard. The Overeducated American. New York: Academic Press, 1976.
- Freeman, Richard. "Overinvestment in College Training?" Journal of Human Resources 10 (1975): 287-311.
- Freeman, Richard. The Market for College Trained Manpower. Cambridge: Harvard University Press, 1971.
- Gallagher, Catherine. "The History of Literary Criticism." *Daedalus* 126 (Winter 1997): 133-153.
- Geiger, Roger L. To Advance Knowledge: The Growth of American Research Universities, 1900-1940. New York: Oxford University Press, 1986.:
- Greiger, Roger L. Research and Relevant Knowledge: American Research Universities Since World War II. New York: Oxford University Press, 1993.
- Geiger, Roger L.. "The Era of Multi-Purpose Colleges in American Higher Education, 1850-1890," *History of Higher Education Annual* 15 (1995): 51-92.
- Gordon, Lynn. *Gender and Higher Education in the Progressive Era*. New Haven: Yale University Press, 1990.
- Grubb, W. Norton. "The Decline of Community College Transfer Rates: Evidence from National Longitudinal Surveys." *Journal of Higher Education* 62, no. 2 (1991): 194-217.
- Grubb, W. Norton. "The Economic Returns to Baccalaureate Degrees: New Evidence from the Class of 1972." *The Review of Higher Education* 15 (Winter 1992): 213-231.
- Gumport, Patricia. "The United States Country Report: Trends in Higher Education from Massification to Post-Massification." Hiroshima: Six Nation Educational Research Project, Hiroshima University, 1997.
- Hauptman, Arthur M. "Quality and Access in Higher Education: The Impossible Dream." In *American Higher Education: Purposes, Problems and Public Perceptions*. Queensland, MD: The Aspen Institute, 1992.



- Hauptman, Arthur M. and Maureen A.McLaughlin. "Is the Goal of College Access Being Met?" In *American Higher Education: Purposes, Problems and Public Perceptions.* Queensland, MD: The Aspen Institute, 1992.
- Hecker, Daniel E. "Reconciling Conflicting Data on Jobs for College Graduates." *Monthly Labor Review* (July 1992): 3-12.
- Hofstadter, Richard and Walter P. Metzger. *The Development of Academic Freedom*. Columbia University Press: New York, 1955.
- Horowitz, Helen L. Campus Life: Undergraduate Cultures from the End of the Eighteenth Century to the Present. New York: Knopf, 1987.
- Jencks, Christopher and David Riesman. *The Academic Revolution*. Chicago: University of Chicago Press, 1968.
- Kimball, Bruce A. "The Historical and Cultural Dimensions of the Recent Reports." *American Journal of Education* 98 (1988): 293-322.
- Kreps, David M. "Economics-The Current Position." Daedalus 126 (Winter 1997): 59-85.
- Leslie, J. Bruce. *Gentlemen and Community: The College in the "Age of the University, 1865-1917.* State College: Penn State University Press, 1992.
- Levin, Henry. Review of *Ph.D.'s and the Academic Labor Market* by Allan Carter and *The Over-educated American* by Richard Freeman. *Harvard Educational Review* 47 (November 1977): 226-231.
- Levine, David. *The American College and the Culture of Aspiration, 1915-1940.* Ithaca: Cornell University Press, 1986.
- Levine, Lawrence W. *The Opening of the American Mind: Canons, Culture, and History*. Boston: Beacon Press, 1996.
- Levy, Frank and Richard J. Murnane. "U.S. Earnings Levels and Earnings Inequality: A Review of Recent Trends and Proposed Explanations." *Journal of Economic Literature* 30 (September 1992):1333-1381.
- Lindblom, Charles E. Inquiry and Change: The Troubled Attempt to Understand and Shape Society. New Haven: Yale University Press, 1990.
- Lindblom, Charles E. "Political Science in the 1940s and 1950s." *Daedalus* 126 (Winter 1997): 225-252.
- Lindblom, Charles E. and David K. Cohen. *Usable Knowledge*. New Haven: Yale University Press, 1979.

- London, Howard. The Culture of a Community College. New York: Praeger, 1978.
- National Center for Education Statistics. *Digest of Education Statistics*, 1994. U.S. Department of Education, 1994.
- Nehamas, Alexander. "Trends in Recent American Philosophy." Daedalus 126 (Winter 1997): 209-223.
- Pascarella, Ernest T. and Patrick T. Terenzini. *How College Affects Students*. San Francisco: Jossey-Bass, 1991.
- Reuben, Julie A. The Making of the Modern University: Intellectual Transformation and the Marginalization of Morality. Chicago: University of Chicago Press, 1996.
- Rudolph, Frederick. The American College and University: A History. New York: Knopf, 1962.
- Rudolph, Frederick. Curriculum: A History of the Undergraduate Course of Study Since 1636. San Francisco: Jossey-Bass, 1977.
- Schorske, Carl E. "The New Rigorism in the Human Sciences, 1940-1960." *Daedalus* 126 (Winter 1997): 289-309.
- Sloan, Douglas. "The Teaching of Ethics in the American Undergraduate Curriculum, 1876-1976." In Daniel Callahan and Sissela Bok (eds.), *Ethics Teaching in Higher Education*. New York: Plenum Press, 1980. Pp. 1-57.
- Smith, Rogers M. "Still Blowing in the Wind: The American Quest for a Democratic, Scientific Political Science." *Daedalus* 126 (Winter 1997): 253-287.
- Solow, Robert M. "How Did Economics Get That Way and What Way Did It Get?" *Daedalus* 126 (Winter 1997): 39-58.
- Survey Research Center, University of Michigan. "What People Think About College," American Education (February 1965).
- Veysey, Laurence. The Emergence of the American University. Chicago: University of Chicago Press, 1965.
- Wagener, Ursula. ""Quality and Equity: The Necessity for Imagination." Harvard Educational Review 59 (May 1989): 240-250.
- Wilson, Daniel J. Science, Community, and the Transformation of American Philosophy. Chicago: University of Chicago Press, 1990.
- Zemsky, Robert. "Keynote Address: Seminar on Post-Massification." Hiroshima: Six Nation Educational Research Project, Hiroshima University, 1997.





U.S. Department of Education



Office of Educational Research and Improvement (OERI) National Library of Education (NLE) Educational Resources Information Center (ERIC)

NOTICE

REPRODUCTION BASIS

This document is covered by a signed "Reproduction Release (Blanket) form (on file within the ERIC system), encompassing all or classes of documents from its source organization and, therefore, does not require a "Specific Document" Release form.

K

This document is Federally-funded, or carries its own permission to reproduce, or is otherwise in the public domain and, therefore, may be reproduced by ERIC without a signed Reproduction Release form (either "Specific Document" or "Blanket").

