

PART I / Core Enduring Missions

Chapter One

The Ten Generations of American Higher Education

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We study the history of higher education because things change and because some things do not change. Continuity is evident in individual institutions where circumstances or self-images of origin and development continue to influence current activities. Basic forms persist as well, most notably in the centrality of the American college. Issues also recur, particularly those concerned with curriculum, institutional mission, and student learning. But change is an irreducible reality and must, by its nature, be analyzed in a temporal dimension. The key elements here are understanding the processes of change and aggregating such changes to discern fundamental transformations in the entire system of higher education. This last element forms the premise of the analysis that follows: that the character of American higher education has perceptibly shifted in each generation, or approximately every thirty years. The exploration of the successive generations is intended to illuminate these historical dynamics as well as the underlying processes that shaped them.

The ten generations of American higher education, from the founding of Harvard to the current era, are characterized here in terms of what was taught, the experience of students, and the array of institutions. Existing knowledge was and is screened by institutions and their faculty for certified acceptance into the curriculum. That curriculum, in turn, has an implied relationship with subsequent uses. Next, the place of higher education in the lives of students can be captured in the phrase “origins and destinations.” The expansive nature of American higher education has meant that student origins have tended over time to become broader and more diverse. Yet college attendance has been largely motivated by expectations about culture and career destinations, and these same expectations have inspired crucial interventions by third parties—whether governments, churches, foundations, or individuals. Between origins and destinations lies the college experience itself, certainly one of the most critical variables. Finally, there is institutional order—all the institutions offering higher education and their internal makeup. This chapter’s organizational scheme is intended to be heuristic, highlighting central features for monitoring change over time without necessarily excluding any factors impinging on higher education.

Generation 1: Reformation Beginnings, 1636–1740s

Each of the first three colleges in the British colonies of America was unique, but all may be described as “schools of the Reformation.”¹ Harvard College, the College of William and Mary, and Yale College were established as adjuncts of their respective churches, which in turn were integrally related to the colonies’ civil governments. The long head start enjoyed by Harvard

gave it a special, settled character. A true product of the Wars of Religion when it was chartered in 1636 by Puritans fleeing religious persecution, it evolved in the eighteenth century into a more cosmopolitan and tolerant institution. This evolution away from strict Calvinism reflected the spreading heterodoxy of Puritan society and the support of the more secular and mercantile elements in that community. The College of William and Mary was formally linked with the Church of England. Its founder, James Blair, and his successors were titular heads of the church in Virginia. Originally operated as a grammar school, William and Mary did not offer collegiate instruction until the 1730s. It then embodied the relative tolerance of official Anglicanism, a stance congenial to the planter families who dominated the colony.² Only Yale attempted to preserve and cultivate the sectarian zeal of the Reformation era into the middle of the eighteenth century.

Some original features persisted long after the Reformation era. External governance was a natural outgrowth of viewing the colleges as an emanation of the polity. Both Harvard and William and Mary had dual structures, consisting of an immediate governing body and boards of overseers or visitors. Yale was guided by a single board, originally consisting of ten Congregational ministers, but it looked to the General Assembly of Connecticut for financial support and legal backing.³ This combination of provincial authority external to the college and the clerical authority lodged within it generated recurring conflicts. Control of Harvard was contested among old-line Puritans and more liberal Congregationalists. Yale's minister-trustees, left to themselves, disagreed over where to locate the college. And at William and Mary, the inability of the board of visitors to control the faculty was a perpetual problem. All three colleges nevertheless received financial support from their respective colonies.

A relatively powerful college president eventually emerged as the natural complement to lay authority. A circumscribed role remained to be played by the faculty of tutors, who were usually recent graduates preparing for the ministry. The curriculum of the colleges in this era was adapted from the Arts course of medieval universities. Its aim was to provide students with a liberal education, which meant facility with classical languages, grounding in the three basic philosophies of Aristotle—ethics, metaphysics, and natural philosophy or science—and logic. In order to be admitted, students had to show knowledge of Latin, the language of instruction, and a bit of Greek. The first two years were devoted for the most part to polishing these linguistic skills and then learning logic in order to engage in disputations. Philosophy and general subjects were taught in the final two years. The education offered was a practical one for the seventeenth and early eighteenth centuries, when most learned texts were in Latin. The process of education was undoubtedly as valuable as the content. The collegiate way of living and the constant presence of tutors gave students complete immersion in both religion and learning. Delivering declamations and engaging in disputations inculcated a facility with language that was indispensable to the oral public culture they would enter.

The founding documents of all three schools speak to the aim of educating ministers. Indeed, except at William and Mary, this was the chief expectation associated with college matriculation. Actual ministerial training, nevertheless, followed upon a liberal education. Nearly two-thirds of the graduates of seventeenth-century Harvard entered the ministry, but nonministerial students were both welcomed and expected. William and Mary sought to make youths “piously educated

in good Letters and Manners”; the founders of Yale intended to provide education “for Publick employment both in Church & Civil State.”⁴

The nexus between college and the ministry would erode slowly during the eighteenth century. Under president John Leverett (1708–24), Harvard already possessed a clientele of young gentlemen who took scant interest in studies or piety. At William and Mary, where a ministerial career required a journey to England for ordination, most sons of the Virginia gentry sought only a patina of liberal education, and almost none bothered to graduate.

By the third decade of the eighteenth century, Harvard surmounted the narrow role of a Reformation college in another way. Gifts from Thomas Hollis created two professorships, in divinity (1721) and in mathematics and natural philosophy (1727). The hiring of individuals who could specialize in a single field of knowledge overcame an inherent curricular limitation. By the next generation, learned professors, in addition to young tutors, would be sought by the colonial colleges.⁵

Generation 2: Colonial Colleges, 1745–1775

The mold of Reformation colleges was broken with the founding of the College of New Jersey (Princeton University) in 1746. A compromise between Presbyterians and the colony of New Jersey produced a board of trustees having twelve ministers, ten laymen, and the governor of the colony as ex officio presiding officer. The college was rooted in the colony yet served a far wider constituency of Presbyterians; it was denominational in nature yet tolerant of other Protestant sects. The next four colleges to be founded followed this same pattern of “toleration with preferment,” although for somewhat different reasons. King’s College (Columbia University, 1754), as an Anglican founding, had to overcome fears of institutionalizing a state religion. The College of Philadelphia (University of Pennsylvania, 1755), successor to the academy that Benjamin Franklin had helped to found, practiced toleration in the spirit of the Enlightenment amid a context of considerable religious diversity, but was led by a prominent Anglican. Baptists, too, believed in toleration, even while insisting on control over the College of Rhode Island (Brown University, 1765). New Hampshire’s eagerness to launch a provincial college prompted it to entice Eleazar Wheelock to found Dartmouth College (1769). Only the creation of Queen’s College (Rutgers University, 1771), by and for the New Jersey Dutch Reformed community, introduced an exclusive (and long unsuccessful) model at the end of this period.⁶

Harvard and William and Mary also conformed to the new model of provincial colleges. Yale under Thomas Clap (1740–66), however, resisted this form in the name of doctrinal purity but, in doing so, demonstrated that the theocratic ideal of the Reformation was no longer tenable. Clap’s rearguard action to defend Yale against the doctrines of the Great Awakening, against an Anglican presence in Connecticut, and, finally, against the Connecticut General Assembly ironically ended when he lost control of the college to rebellious students.

On the eve of the Revolution, the colonial colleges enrolled nearly 750 students, but 450 of them attended Harvard, Yale, and Princeton.⁷ These schools—and Philadelphia—exemplified instruction that had become more secular in its curriculum and purpose. Fewer than half of the

graduates of Princeton pursued careers in the ministry. In the small but vital urban centers of the colonies, a sizable class of gentlemen now existed, consisting of professional men and successful merchants. At King's College perhaps 40 percent of the students originated from that milieu, and the proportion at Harvard may well have been higher. Still, many students clearly came from more humble circumstances, chiefly the sons of farmers. They were more likely to be destined for the ministry, while gentlemen's sons more typically followed the path that led to law and public life.⁸ Students at the three largest colleges formed literary societies to cultivate debate, belles lettres, and good company.

At the outset of this period, the curriculum was an incoherent amalgam of works predicated on both the old, theocentric universe and the new, enlightened views reflecting the writings of John Locke and Sir Isaac Newton. The doctrines of the "Moderate Enlightenment" gradually prevailed.⁹ The enlightened spirit also included a more thorough teaching and appreciation of classical authors. Latin and Greek thus remained at the heart of the curriculum, but Latin ceased to be a language of instruction. Classical authors introduced the generation of the Founding Fathers to the political forms and lessons of the ancient world. Scottish "common-sense philosophy," as taught by John Witherspoon (1768–95) at Princeton, reconciled Christian doctrines and the new knowledge. Students also received more competent instruction in these decades, as college teaching became a settled occupation, attracting a few men of genuine learning.¹⁰

In sum, during the colonial generation the colleges balanced duties to both church and province, offered a richer and more secular intellectual fare, and served, among others, a constituency of aspiring gentlemen. The new nation soon called upon them to make a still larger contribution.

Generation 3: Republican Education, 1776–1800

The revolt against England ignited political sentiments in the colleges. However, college life was disrupted for much of the War for Independence and then developed slowly before the nation was united under the Constitution in 1788. Despite this triumph of federalism, political passions rose to a crescendo at the end of the century.

The ideal for collegiate education in this period sought a harmonious joining of disparate elements. First was the notion of republican education—instilling selflessness, patriotism, and virtue in the citizens and leaders of the new republic. Such an outlook was conveyed through the choice of texts, topics for student oratory, and the widely touted (though unsuccessful) introduction of the study of law. Second, Enlightenment learning was welcomed as never before, although the fiscal limitations of colleges made realization fall far short of aspirations. Indeed, these years mark the zenith of Enlightenment influence in American colleges, a time in which theology sought to accommodate the truths of science and reason. Samuel Stanhope Smith (1795–1812), who succeeded Witherspoon at Princeton, epitomized both the ascendancy and the fragility of this "republican Christian Enlightenment": learning was valued in the colleges, and higher education was valued in the polity.¹¹

After independence, the newly sovereign states made provision for collegiate education for their citizens. States that had no colleges chartered new institutions—Maryland (1782 and 1784), Georgia (1785), South Carolina (1785), North Carolina (1789), and Vermont (1791)—although some years passed before most of these institutions were able to open. Elsewhere, this same impulse sometimes became entwined with controversial changes in existing colleges. The board of visitors of William and Mary imposed a reorganization of the faculty in 1779, dispensing with classical languages. That same year, Pennsylvania supplanted the College of Philadelphia with a “public” institution (the two were merged in 1791 to form the University of Pennsylvania). The superstructure of the University of the State of New York was erected in the 1780s, in theory to oversee Columbia and future colleges. Where continuity was the rule, state officials were made ex officio trustees of colleges (Massachusetts, Connecticut, New Hampshire, and New Jersey), and financial support was sporadically provided. Denominationally sponsored colleges found few students and little influence in these years. The new colleges founded near the frontier often reflected close-knit denominational communities, but they, too, assumed a public outlook.

The vision of republican higher education was undermined considerably by the material weakness of the colleges. The nation’s most solid institution, Harvard, had just three professors at the turn of the century. Collegiate enrollments for the last quarter of the century did not keep pace with population growth, despite the proliferation of new institutions. Where roughly one percent of a four-year male cohort attended college in 1775, the corresponding figure for 1800 was 0.75 percent. In some new colleges, like North Carolina, the absence of experienced teachers gave rise to chaotic conditions. Student unruliness was a particular blight at institutions associated with Jeffersonian republicanism, such as William and Mary and Dickinson College. Public subsidies for state-sponsored colleges were soon terminated, leaving these institutions in an exceedingly weak state. At the end of the eighteenth century, there was no functioning model of a state college.¹²

Ironically, popular sentiment now began to turn decisively in support of religion, but the religion of the heart, not the head. In this respect, as in others, the consequences of the failure of republican education were realized after 1800.

Generation 4: The Passing of Republican Education, 1800–1820s

The first generation of the nineteenth century is perhaps the least understood in American history. It has largely been associated with negative developments. Indeed, a widely known history interprets it as the beginning of a “great retrogression.”¹³ Signs of trouble are not hard to find. The underpinnings of republican education were doubly challenged—by popular egalitarianism, to the horror of the Federalists who dominated most colleges, and by the upsurge of evangelical religious spirit known as the Second Great Awakening. Before 1830, the most popular churches—Methodists and Baptists—opposed colleges and college-trained ministers. In addition, most institutions were in a parlous state. In a plea some other colleges might have echoed, Columbia trustees described the college’s sorry state as “mortifying to its friends, [and] humiliating to the city.”¹⁴ The universities of Maryland and of North Carolina lost their state

support; and such major institutions as Princeton and William and Mary entered prolonged declines.

Such a picture, however, portrays only misfortune. Harvard, Yale, Brown, and Union College all strengthened notably, and even Columbia was much improved by the 1820s. Moreover, an important group of institutions opened their doors shortly after 1800—Transylvania University, Bowdoin College, and the state colleges of Georgia and South Carolina. College enrollments slowly recovered, except during the depression caused by the War of 1812, bringing male participation back to 1 percent by the end of the 1820s. Underlying the fortunes of individual institutions, nevertheless, lay fundamental questions stemming in large measure from the obsolescence of the putative republican model: Who owned the colleges? What was their mission? What should students be taught? And how should they be governed?

In the first three decades of the century, colleges experienced their worst student disruptions. Unruliness had long been endemic in all-male residential colleges, but these years were distinguished by episodes of collective resistance to college authority.¹⁵ They invariably began with some relatively minor transgression of college rules, but escalation often followed. Typically, students deemed disciplinary action, based on “admonitions” (measured degrees of public disgrace), to be unjustly severe. Believing their rights and dignity to have been violated, they would either remonstrate or commit further acts of insubordination. The colleges invariably won these contests of will, but at considerable cost. Numerous unrepentant students were expelled, and the college’s reputation was besmirched. Such riots at Princeton and William and Mary were factors in precipitating their decline; Harvard endured its periodic riots more stoically; North Carolina forfeited public support.

Steven Novak interpreted student riots as the stimulus for college leaders to shift the emphasis of the curriculum back toward ancient languages. Latin and Greek were considered safe, and their difficult study promoted behavioral as well as mental discipline. However, “having embraced [this] curriculum for the wrong reasons—as a bulwark against dangerous ideas—academics were never able to bring it to life.”¹⁶ Other factors played a role here as well. Efforts to construct a republican curriculum of scientific and professional subjects collapsed due to the lack of suitable teachers or interested students. Moreover, sporadic attempts to deemphasize classical languages threatened to undermine the entire enterprise. At Transylvania, the college course without Latin and Greek lasted just two years; and Dickinson students in 1800 demanded and were granted a reduction of the course to a single year. Socially, some knowledge of the classical languages was a badge of cultural distinction, appropriate to gentlemen. As a practical matter, lax entrance requirements brought immature and poorly prepared students to campus. Insofar as it was possible, established colleges sought to raise their entrance requirements, impose a minimum age, and strengthen instruction in Latin and Greek.

This restandardization of the classical curriculum focused institutions on their collegiate missions and attempts at professional education withered. A few colleges, notably Yale, sprouted professional schools during these years and appeared to be fledgling universities. However, the professional schools in those institutions were largely proprietary undertakings with little organic connection to the parent college. They resembled, in fact, the independent professional schools that began to flourish in this era.

The first real law school after 1800 operated independently—in Litchfield, Connecticut. Unlike earlier attempts to teach law in the colleges, which were intended for civic education, Litchfield Law School prepared students for professional practice. In medicine, the dominant institution was the University of Pennsylvania. With enrollments exceeding four hundred, this medical school was the largest higher education unit in the country. But its students paid the professors directly for lectures, making the school virtually autonomous, in fact it overshadowed the college. Medical schools either assumed proprietary status or collapsed. The Columbia medical school faltered and was absorbed by another school; Harvard's medical school achieved virtual autonomy by moving to Boston; and Brown's medical school folded when the college sought to control its faculty.¹⁷ The most consequential change for the colleges, nevertheless, concerned the training of ministers.

The preparation of ministers was an implicit mission of the colleges, even though ministerial training had always followed the undergraduate course. When Unitarians gained control of Harvard, New England Congregationalists reacted by establishing Andover Theological Seminary (1808), thus creating a new alternative. During the next two decades, more schools for ministerial training were opened than new colleges. These institutions were, in a sense, alternatives to collegiate education and, as in the case of the Princeton Theological Seminary (1812), were votes of no confidence in the colleges. The leading seminaries became the locus for serious scholars of language and philology (and, hence, contact with German academic scholarship). They also attracted support that might have gone to colleges.¹⁸ Most consequential, they distanced colleges from the function of ministerial training, thus abetting a secular curriculum.

The final issue hanging over the colleges was the ambiguous mix of public function and private control. Controversies arising from this situation had plagued the colleges since the Revolution. A resolution of sorts had to await the justly celebrated Dartmouth College case (*Dartmouth College v. Woodward*, 1819). When the US Supreme Court ruled that New Hampshire could not without cause alter the charter of an “eleemosynary corporation” like Dartmouth College, it effectively provided colleges with a shield against unwanted intrusions of democratic legislatures. More significantly, it resolved an implicit question of ownership that had plagued virtually every college. In Massachusetts, for example, the composition of the board of overseers had been altered by the legislature three times in the 1810s. Justice Joseph Story, a member of that board, was undoubtedly as concerned with the autonomy of Harvard as with that of Dartmouth when he supported the trustees. Years passed before the import of the Dartmouth College case became fully apparent; the colleges continued to present both public and private personae, but an agenda of privatization clearly triumphed. Not only did the eastern provincial colleges become fully private institutions, but the way was also cleared for the establishment of a new type of unambiguously private denominational college.¹⁹

Generation 5: The Classical Denominational Colleges, 1820s–1850s

Generation 5 began in the 1820s, with widespread challenges to the classical college, and was superseded in the 1850s by new waves of reform. The first efforts largely failed, but the

second produced permanent change. In between, the private denominational college emerged as the characteristic institution of American higher education. Its success drove a rapid expansion in both the number of colleges and total enrollments. At the same time, sectional differences created distinctive patterns for higher education in the Northeast, the South, and the trans-Appalachian West.²⁰

Criticism of the classical college in the 1820s in part reflected the success of efforts to bolster the curriculum. Now colleges were attacked for their obsession with dead languages, for neglecting practical subjects and science, and for the continued disruptions of undisciplined students. A flurry of specific reforms occurred in the middle of the decade.²¹ George Ticknor, after a student insurrection at Harvard, managed to reform his own modern languages department, offering advanced courses outside the rigid boundaries of the separate classes. Thomas Jefferson's University of Virginia (1824) replaced a fixed curriculum with different study options and aspired to form the nation's first true university. And Eliphalet Nott created a parallel scientific course at Union College (1827). Little lasting change resulted from this ferment of reform. The efforts of Ticknor and Nott remained isolated achievements, and the University of Virginia proved an incongruous (if congenial) setting for the sons of southern planters. Instead, the reforms provoked a magisterial defense of the classical college—the *Yale Reports* of 1828.

In defending the classical curriculum, the *Reports* defined the purpose of college as “to lay the foundation of a superior education.”²² The object, above all, was to discipline the mind and only secondarily to provide content, or “furniture.” The classical languages were championed as the ideal vehicle for instilling mental discipline as well as culture and “balance.” From these premises, the report could argue that all other forms of education—for practical training or advanced learning—should be relegated to other kinds of institutions. This position rationalized the de facto undergraduate focus of the colleges. The cogency of the *Yale Reports*, moreover, seemed to grow over time and became the principal defense of the classical course for the next fifty years.

The classical college drew on deeper strengths than the arguments of the *Yale Reports*. Furthermore, it had rather different histories on the eastern and western sides of the Appalachians. In the Northeast, generally, the colleges preserved their narrow focus on preprofessional liberal education and were content to serve the relatively limited clientele who valued such an expensive badge of cultural distinction. Student life in these institutions changed profoundly during this era and served to fortify this sense of distinction. As the colleges relaxed their oppressive discipline, the students themselves developed a rich extracurriculum of their own, including the rapid rise of fraternities (not yet residential). Student life was transformed into a self-contained world of activities and social ceremony that engendered deep loyalties instead of rebellion.²³ In the West, the most salient development of this era was the proliferation of denominational colleges in territories that had, only short years before, been considered the frontier.

The prototypical denominational college nevertheless emerged in the East in the 1820s. The definition given by the Lutherans of Pennsylvania College (Gettysburg College, 1832) cut to the heart of the matter: noting that its students, teachers, trustees, and benefactors all were church

members, they concluded that the college “may then with truth be said to belong to that Church.” These colleges were established by religious minorities primarily to educate and retain the loyalties of their members. Some, particularly Methodists, had previously disdained advanced education for their ministers, but now the preparation of ministers was left to theological seminaries. Regional church organizations generally played an important role in founding denominational colleges as well as in their governance. Thus, Baptists established Waterville College (1820, later Colby College) and Columbian College (1821, later George Washington University). Episcopalians broke the Yale monopoly in Connecticut in 1826 (Trinity College). And Methodists joined the collegiate movement by opening Wesleyan University (1831) and Randolph-Macon College (1832). State legislatures required that the charters of these colleges impose no religious tests, nor had they any desire to since they served all local students. Like the Gettysburg Lutherans, the churches wanted their own colleges to educate their own communicants.

On the western side of the Appalachians, where colleges were virtually nonexistent in 1820, denominational colleges soon proliferated. The earliest exemplars were founded by Congregational or Presbyterian missionaries almost as soon as the frontiers were settled. Later foundings tended to be sponsored by regional church organizations. In both cases, a crucial role was played by local boosters, who believed that a college would enhance the cultural and economic standing of their towns.²⁴ The western colleges were capable of notable experiments, especially where student access was concerned. Manual labor schemes were tried repeatedly—and unsuccessfully—in the 1830s and 1840s, and Oberlin College became the first college to admit women and African Americans. Pedagogically, though, they initially replicated the classical curriculum. Given denominational sponsorship and clerical leadership (often from graduates of Yale or Princeton), this was a natural path to follow. Colin Burke has argued that these institutions should be viewed in a different framework from the established colleges of the East: they served the basic need for educational upgrading for their localities by becoming multipurpose colleges. Nearly all found it necessary to establish preparatory departments, for example. Over time, they tended to add diverse educational programs to the classical core in spite of limited means. The average size of western colleges in 1860 was about 56 collegiate students (compared with 174 in New England), but usually more in preparatory classes. Costs were kept low for their far-from-wealthy students. By 1860 the Southwest and Midwest contained 59 percent of colleges and 43 percent of students.²⁵

A somewhat different institutional pattern, characterized by dominant state universities, emerged in the South during this era. The College of South Carolina (1803) and the University of Virginia (1824) were the region’s strongest institutions and the only universities in the country to receive regular state appropriations before the Civil War. Both institutions catered to sons of the planter aristocracy, who dominated their states politically and socially. Such students, with exaggerated notions of personal honor, made student unrest endemic in southern universities. Denominational colleges in such milieus developed later and attracted a more humble clientele. The pattern of strong state universities spread throughout the Cotton Belt but conspicuously failed in states like Kentucky and Tennessee, where social and religious fragmentation favored denominational colleges.

The 1820s and 1830s were two of the most expansive decades for higher education. Enrollments jumped by roughly 80 percent in each decade, fueled by the establishment of denominational colleges. The 1840s, however, were years of comparative stagnation: they were no doubt hampered by the severe economic downturn that followed the crash of 1837 and by the limited appeal of the classical course in the East. Exasperation with these conditions prompted another spasm of reform. Brown president Francis Wayland (1827–56) diagnosed the weakness of the eastern colleges: they catered solely to the professional class and furnished students with only a preprofessional education—precisely the narrow focus advocated in the *Yale Reports*. Entirely neglected were practitioners of industry and commerce, who were responsible for the transformation taking place in the American economy.²⁶ However, these were the polemics of the 1820s in a more sophisticated guise. Wayland’s attempt to restructure Brown in order to appeal to this new class proved disastrous. Ironically, his failure occurred at the opening of one of the most dynamic eras of American higher education. The ensuing generation, rather than displacing the classical college, created new institutions and studies to complement it.

Generation 6: New Departures, 1850s–1890

The Civil War has long been the conventional dividing line for the history of American higher education. However, most of the new departures associated with the postbellum years emerged in preliminary form in the 1850s, if not earlier. German-style universities, offering graduate education, are associated with the opening of Johns Hopkins University in 1876, but Henry Tappan (1853–63) transformed the University of Michigan in this same spirit. The Morrill Land Grant Act of 1862 can lay exclusive claim to neither “schools of science” nor agricultural colleges. Daniel Coit Gilman estimated that twenty such institutions existed before 1860, including Yale’s Sheffield Scientific School, which had evolved from a few extracurricular courses into a department in which both practical and advanced subjects could be studied.²⁷ In addition, at least four agricultural colleges were chartered in the 1850s, in Pennsylvania, Michigan, Maryland, and Ohio.

In the same decade, collegiate education was broadened beyond white males. More than forty women’s institutions were chartered to offer collegiate degrees before Matthew Vassar presumed to give women “a college in the proper sense of the word.”²⁸ Ashmun Institute (1854, later Lincoln University) in Pennsylvania and Wilberforce University (1856) in Ohio provided college education for free African Americans.

Perhaps the greatest continuity from antebellum to postbellum years existed for denominational colleges. They began a second period of proliferation in the 1850s, which carried through to the early 1870s. The dynamics of this expansion derived from a dual process of extension and elaboration. Through extension, colleges followed close behind the ever-moving frontier into the trans-Mississippi West. Once again, the agents of these initial foundings were largely missionaries from the principal denominations. In the wake of this movement, and indeed throughout the Midwest, a second process of elaboration occurred as denominations without colleges made provision for the education of their church members. These colleges were inherently multipurpose. They still preserved the classical core, but added degree courses in English and science or practical courses in business and teaching. In keeping with this impulse to serve their denominations broadly, these multipurpose colleges were often coeducational, except

for denominations opposed in principle (Roman Catholics, Presbyterians, German Lutherans). This great expansion of denominational colleges proceeded unfazed by the dawning age of the university, until conditions changed radically after 1890.²⁹

The Morrill Land Grant Act largely determined the character of the new utilitarian education. Enthusiasm among the industrial classes for education in agriculture or the mechanical arts turned out to be sparse. True, well-publicized Cornell University attracted the nation's largest entering class in 1868, but these initial students were mixed in their aspirations and qualifications. Only 10 percent eventually graduated. Outside of New England, preparatory departments overshadowed collegiate ones in the new land-grant colleges. After a slow start, enrolments in engineering grew in the 1880s and then accelerated after 1890. Matriculants in agriculture, however, remained few and far between. Connecting farming with advanced education would require federal legislation and subsidies (1887-1914).

Contrary to the conventional view, land-grant colleges did not meet an exigent popular demand, nor did they appreciably democratize higher education. Had they been dependent on enrollment, many undoubtedly would have failed. However, the circumstances of their beginnings gave them an assured, if meager, income as well as an implicit relationship with their respective states. They were thus sustained long enough through sickly infancy for social and economic conditions to catch up to the expectations that had prompted their somewhat premature founding. In 1890, after intensive lobbying by land-grant presidents, the Second Morrill Act gave these institutions direct annual infusions of federal funds, a crucial advantage at a time when universities were entering their most dynamic era of growth.³⁰

The first Morrill Act nevertheless set the most important precondition for utilitarian education when it stipulated the establishment of "at least one *college*" in which these subjects would be taught "without excluding other scientific and classical studies."³¹ Unlike continental Europe, where modern languages and useful subjects were taught in less-prestigious institutions than those offering classical and theoretical studies, in the United States the progeny of the industrial classes would eventually study in the same institutions as those from the professional classes.

Despite the salience of the Morrill Act, these years were characterized far more by private initiatives and, particularly, singular acts of philanthropy. Gifts of hitherto unprecedented size sought to fill lacunae in American higher education. Matthew Vassar, Henry Wells, Sophia Smith, and Henry Durant (Wellesley College) founded colleges for women between 1865 and 1875 that were intended to equal the best men's colleges.³² The philanthropy of Ezra Cornell and John Purdue enhanced the effectiveness of their respective land-grant colleges. Trustees of estates were responsible for establishing the Stevens Institute of Technology and the Johns Hopkins University. This era culminated with the most spectacular new institutions (after Hopkins)—Clark and Stanford universities and the University of Chicago.

The American university is the most enduring legacy of these developments, even though its ascendancy over American higher education would have to await the next generation. Charles Eliot said in 1869 that no university yet existed in the United States, and prior to 1890 it was uncertain what form an American university would assume. Indeed, Daniel Coit Gilman, G.

Stanley Hall, David Starr Jordan, and William Rainey Harper each independently attempted to invent such an institution (at Johns Hopkins, Clark, Stanford, and Chicago, respectively). The chief conundrum was the relationship between advanced learning, or graduate education, and the American college.

The true paradigm of the American university evolved instead at the country's paramount institution. Charles W. Eliot assumed the presidency of Harvard in 1869 with a clear sense of the changes that were needed in both college and professional schools. For the college, he sought to replace recitations and the classical curriculum with an elective system of taught courses that could accommodate broad and advanced learning. This reform took a decade and a half, but by then the old regime was vanquished at Harvard and in retreat elsewhere. Eliot also attacked the decadence of the professional schools at the outset of his presidency. A learned, full-time faculty replaced proprietary-teachers; a mandatory curriculum was put in place; and professional education was eventually defined as requiring a bachelor's degree. Eliot's instincts were by no means as sure when it came to graduate education. But as the elective system allowed him to appoint many more learned professors, a distinguished faculty emerged, capable of scholarship, research, and advanced instruction. In 1890 the scientific school and the college faculty were merged into the Faculty of Arts and Sciences. The Graduate School of Arts and Sciences was its other face. Finally, Eliot felt that Harvard was "now well on the way to the complete organization of a university in a true sense." The American university would be an institution in which the instruction of large numbers of undergraduates would support a numerous, specialized faculty who would also teach graduate students. Not even the ingenious William Rainey Harper could devise anything better. Moreover, this model was a natural one for the more vigorous state universities, whose growth was about to explode. The next generation of American higher education would see the efflorescence of this powerful combination of mixed purposes.³³

Generation 7: Growth and Standardization, 1890 - World War I

The character of growth in American higher education changed profoundly around 1890. During the previous generation, enrollment growth had been absorbed into an increasing number of institutions, but during generation 7 the net number of institutions remained fairly stable, while enrollments swelled. The average institution in 1870 had 10 faculty and 98 students; in 1890, these figures had grown to just 16 faculty and 157 students; but in 1910, they were up to 38 faculty and 374 students. Moreover, the largest institutions led this growth: in 1895 the ten largest universities averaged nearly 2,000 students; in 1910 they approximated 4,000; and in 1915, 5,000.³⁴

At the other end of the spectrum, colleges that failed to grow were threatened with extinction. The institutional order was anything but stable; the founding of new colleges continued unabated into the 1890s, but many institutions expired during these years.

One important source of growth was the assimilation of women into higher education. In 1890 the majority of female students were found in single-sex colleges, most of which were regarded by contemporaries as inferior. This situation changed abruptly with the opening of the elective curriculum and the expansion of universities. The proportion of women students grew slowly, from 32 to 37 percent (1890–1913), but the proportion of women in coeducational

institutions nearly doubled, to 68 percent. The gulf between the educational experiences of women and men narrowed even further in the next generation.³⁵

The standardization of the universities after 1890 is the central theme of Laurence Veysey's classic study. His deliberate emphasis on the intellectual history of this subject, however, may slight some of the more mundane features, largely caused by similar adaptations to a common environment. The rapid growth of universities resulted from the growth of their several parts. Most added units in engineering, business, and education, plus different combinations of other smaller specialties (e.g., mining, forestry, dentistry, pharmacy, veterinary medicine, art, architecture, and music), in addition to schools for graduate study, medicine, and law. Universities became compartmentalized institutions, whose parts shared little common subject matter. Administrative structures were necessary to serve these intellectually autonomous compartments and especially to secure ever more resources to fulfill their needs.³⁶

By 1908 it was possible to define the standard American university. It admitted only bona fide high school graduates. It provided them with two years of general education followed by two years of advanced or specialized courses. It offered doctoral training in at least five departments, appropriately led by PhDs, and had at least one professional school. A sizable list of possible options might be added: summer sessions, extension work, correspondence courses, a university press, and the publication of learned journals. Idiosyncrasies faded away in this environment, such as Eliot's free elective system and proposed three-year bachelor's degree. Outliers moved closer to the norm: Johns Hopkins enrolled more undergraduates and lengthened the bachelor of arts course to four years; the Massachusetts Institute of Technology established units for research and graduate education.

The universities, in turn, were the most powerful force in generating standards for the rest of higher education, chiefly by defining academic knowledge and the academic profession. From about 1890 to 1905, all of the major disciplinary associations assumed their modern form. In a parallel development, the departmental structure of colleges and universities replicated these subjects. Academic disciplines henceforth possessed a dual structure, whereby scientific recognition was embodied in disciplinary organizations while the most consequential positions, those commanding the means to advance these fields, were in university departments. As teaching positions were increasingly reserved for faculty who contributed to the knowledge base of disciplines, the universities imposed a definition on the academic profession. University faculty then took this definition a step further by organizing the American Association of University Professors (1915) to champion their professional rights, particularly academic freedom.³⁷

More striking for contemporaries was the "Collegiate Revolution"—the explosion of student-run organizations and activities on campus, with the rise of football being the most prominent. Younger alumni with business careers in urban centers, in particular, appreciated the social qualities that were instilled by extracurricular activities. Their ability to contribute badly needed funds gave their wishes weight among college trustees and eventually influenced the selection of modernizing presidents. Denominational doctrines were soon deemphasized in favor of broad, middle-of-the-road Protestantism, epitomized in the soaring popularity of the campus YMCA. New kinds of students began to matriculate, eager to throw themselves into campus activities and

consciously destined for careers in the business world. Intercollegiate athletics tended to be the catalyst in this process, galvanizing the enthusiasm of students and the loyalties of alumni.³⁸

The collegiate ideal developed first out of the unique traditions of the Ivy League schools, especially Harvard and Yale. It quickly captured imaginations among the principal eastern colleges and spread to include state universities. The older generation of university leaders, such as Charles Eliot, had scant regard for such activities, but the next generation—Eliot's successor, Abbott Lawrence Lowell (1909–33), and above all Woodrow Wilson (1902–10) at Princeton—sought to amalgamate the collegiate ideal with their own concern for enhancing undergraduate learning. The collegiate ideal projected clear normative standards emphasizing the college experience outside the classroom, while another form of standardization found champions after 1900.

In 1905 the Carnegie Foundation for the Advancement of Teaching was chartered to provide pensions for college teachers. That same year, the General Education Board reoriented its activities toward promoting “a comprehensive system of higher education in the United States.” Both foundations sought to alleviate the “chaos” and “confusion” they perceived. Carnegie promulgated stringent criteria of eligibility for its pensions, and institutions scrambled to conform. The General Education Board worked more subtly by providing matching endowment grants that forced colleges to appeal to their alumni.³⁹ Neither required an institution to have a football team, but they validated the types of schools that did: residential colleges with collegiate spirit and alumni support.

Following the model of the Land-Grant College Association (1887), successive associations were formed in this era, and their efforts also furthered standardization. The National Association of State Universities formulated the definition of the “standard American university.” The Association of American Universities (AAU), formed to set standards for graduate education, soon became, in effect, an accrediting agency for colleges.⁴⁰

A generation of standardizing activities gave much greater definition to the American system of higher education, even if it left the system still highly diverse and decentralized. By World War I, American colleges and universities by and large conformed to a single pattern in terms of admissions, credit hours, offerings, and majors. The large divergence among institutions pertained chiefly to the level of resources each commanded for the fulfillment of this pattern. Differences in resources would henceforth exaggerate the steep and increasingly apparent hierarchy among American institutions of higher education.

Generation 8: Mass Higher Education and Differentiation between the Wars

Enrollments in higher education approximately doubled during the 1920s, and this expansion triggered qualitative changes analogous to what Martin Trow would later identify as the transition from elite to mass higher education.⁴¹ Elite patterns are characterized by full-time residential students, by cultural ideals of liberal learning and character formation, and by destinations in high-status professions. In contrast, mass forms of higher education cater to part-

time or commuting students, convey applicable knowledge, and prepare students for employment in technical or semiprofessional positions. American higher education had always been somewhat hierarchical in terms of resource levels and admissions requirements. Between the two world wars, however, emerging forms of higher education fulfilled “mass” roles, and educational leaders deliberately sought to offer qualitatively different kinds of instruction for different levels of students.

The growth of a mass sector in American higher education was apparent in the development of junior colleges, teachers colleges, and service-oriented, urban universities.⁴² Teachers colleges resulted from the process of continuously upgrading normal schools. This process began in the 1900s, although the majority of normal schools were converted in the 1920s. During this period most teachers colleges were controlled by state boards of education and awarded only education degrees for mostly primary school teachers. In addition, education departments of traditional universities offered credentials for higher positions. But as heirs to the normal schools, they provided access to higher education for a broad segment of the population, especially women.

The expansion of higher education to serve city dwellers included both new and existing institutions. The free municipal university established in Akron (1913) exemplified the former. It aimed to produce employable graduates for the region, typically with programs in engineering, home economics, commerce, and teaching. The College of the City of New York was a unique exemplar of this phenomenon, growing to more than 24,000 students during the 1920s. Most urban universities were private and also shared in this growth, especially New York University. Both types combined a variety of professional schools and programs with special courses for part-time students. In 1930, for example, part-time and summer students exceeded full-time students at New York, Northwestern, Southern California, Boston, and Western Reserve universities. By that date, the biggest American institutions were no longer research universities, but urban universities with large, irregular enrollments.

True junior colleges first appeared in California in the decade of the 1900s but multiplied nationally in the 1920s. They provided local access to higher education for both sparsely populated areas of the West and cities. By 1940, 11 percent of college students were enrolled in junior colleges, many of which were still attached to local high schools. The emergence of junior colleges nevertheless profoundly affected thinking about the structure and purpose of American higher education.

The waves of mass higher education lapping the shores of traditional institutions produced largely defensive reactions. President Ernest Hopkins of Dartmouth caused a stir by declaring that “too many young men are going to college.” Perhaps the most vehement critic was Abraham Flexner, who charged that universities had become “‘service’ stations for the general public.”⁴³ A number of educators took inspiration from the apparent success of junior colleges and concluded that democratic access should extend through the sophomore year of college. The University of Minnesota created a two-year, terminal General College for students deemed unfit for its regular programs. Another clear rationalization of hierarchical differentiation was the Carnegie Foundation’s 1932 report, *State Higher Education in California*, which defined separate roles for the university in Berkeley, regional state colleges, and largely vocational junior colleges. This document was resisted in California, but reflected widespread opinion that sought

to restrict former teachers colleges and define the junior colleges as terminal programs. Leaders of higher education generally favored keeping the sectors of mass higher education separate.

At the same time, the upper reaches of American higher education were marked by manner or style of attendance, pedagogical ideals, and links with higher learning. Three criteria were associated with elite status. The *collegiate ideal*, especially popular in the 1920s, was determined by the peer society of students, by extracurricular activities, and by expectations of subsequent careers in the business world. *Quality of undergraduate learning* was a persistent concern; not only did colleges attempt to raise their standards, but many educators also sought to re-create the elusive ideal of liberal education. In universities, the imperative of *advancing knowledge* was an end in itself, the touchstone of research and graduate education, but also a distinguishing feature of only a handful of institutions.

At the leading private institutions, financial constraints and rising applications prompted limits on the number of students after World War I. At the same time, these institutions became more sensitive to the social composition of their students and the implications it had for their collegiate image. Columbia pioneered a form of selective admissions in which social criteria were used to limit the proportion of Jewish students, and the same discriminatory procedures were soon copied by Princeton, Yale, and Harvard.⁴⁴ Selective admissions were part of a larger pattern of fashioning elite status. These institutions shaped the peer society and collegiate environment not only by excluding supposedly nonconforming social types, but also by widening their recruitment pool to encompass the entire country. They became national rather than regional institutions, culling the weakest academic performers from among their traditional clientele and raising the level of study, at least slightly. As these institutions prospered in the 1920s, they vastly increased per-student educational spending. When Yale launched higher education's largest endowment drive in 1927, it promised "to make a finer, not a bigger Yale."⁴⁵

For elite universities, additional wealth was invested in more and better faculty—in scientists and scholars actively engaged in the advancement of knowledge. This phase of development was strongly assisted by philanthropic foundations, particularly the Rockefeller trusts. Participation in research also conferred prestige and elite status. Recognition in this dimension lay outside of universities, in international communities of scholars. It thus created an altogether different set of imperatives, which universities could scarcely ignore. It was no paradox, then, that a Jew could be a physics professor at Princeton but not an undergraduate: universalism prevailed in the former sphere but not in the latter.

Probably the most difficult course for sculpting an elite status was to excel in only undergraduate education. However, Swarthmore, under president Frank Aydelotte (1921–39), was notably successful in this regard. Inspired by his Oxford experience as a Rhodes Scholar, Aydelotte established an honors program to provide a rigorous program of study for able and motivated juniors and seniors. At the same time, he progressively deemphasized the underpinnings of the collegiate ideal—sororities, fraternities, and big-time football. The honors program was used to attract academically ambitious students and soon made Swarthmore one of the most academically selective colleges in the country. The high cost of this education was met with help from Abraham Flexner and the General Education Board, always eager to bolster high academic standards.⁴⁶

The hierarchical differentiation of the institutional order between the wars simultaneously moved American higher education in several different directions with respect to elite and mass sectors, access, and the curriculum. American higher education became open to virtually all high school graduates, a category that grew from 9 to 51 percent of age cohorts between 1910 and 1940. Yet social exclusiveness among many elite institutions increased, too, as nativist prejudice grew. The system was only weakly meritocratic and largely mirrored the social biases prevailing in the workplace. In curricular matters, the expanding mass sector was dominated by vocationally oriented programs, including attempts to define terminal tracks. A preoccupation of the era was nevertheless the persistent desire to fashion a true liberal education. At the same time, the implacable advancement of the academic disciplines pressured the curriculum. Which trends predominated? The answer would become apparent during the next generation of American higher education: democratic access triumphed over social exclusiveness; academic development raised the stature of mass institutions, even as elite ones became more meritocratic; and an academic revolution confirmed the ascendancy of the academic curriculum.

Generation 9: The Academic Revolution, 1945–1975

The thirty years following the end of World War II were possibly the most tumultuous in the history of American higher education. Two fundamental movements nevertheless underlie these myriad developments: enrollment expansion and academic advancement. Both were prominent during the conservative 1950s, but virtually exploded in the liberal 1960s.⁴⁷

Beginning with the flood of returning soldiers under the Servicemen's Readjustment Act of 1944 (the GI Bill) and concluding with a surge of community college students in the early 1970s, this generation was the most expansive in the American experience. The proportion of young people attending college tripled, from 15 to 45 percent; from 1940 to 1970, undergraduates grew almost fivefold and graduate students almost ninefold. The 1960s alone registered the largest percentage growth of any decade.⁴⁸

While previous growth spurts, like the 1920s, were associated with new types of institutions reaching new clienteles, the postwar period was characterized by an implacable movement toward common academic standards. Not only did institutions become more alike in terms of curricular offerings, faculty training, and administrative practices, but students migrated toward studies in the arts and sciences. The principal dynamics of this era fortified these developments.

In 1947, 1.1 million ex-GIs were enrolled, compared with 1.5 million total students before the war. This surge did little to raise standards, though, as overcrowded institutions were forced to run year-round, shorten courses, and curtail requirements. This interlude nevertheless rebuilt depleted institutional treasuries and boosted morale as well. In the wake of this experience, most institutions sought to consolidate and bolster their programs. Enrollments backtracked only slightly in the early 1950s, before growing by approximately 50 percent in the 1950s. In keeping with the conservatism of the decade, social patterns of attendance remained stable, with additional students coming chiefly from the expanding middle class and three males attending for every two females. Given the lack of employment opportunities, female students were allegedly preoccupied with marriage prospects—'a ring by the spring' of their senior year. Only after 1960 would the proportion of female collegians inexorably rise. Colleges and universities

benefited from economic growth and general prosperity, advancing materially and academically. By the end of the decade, however, they faced an approaching 'Tidal Wave' from the baby-boom generation that had already filled the high schools.

Growth in the 1960s was doubly propelled: participation rates increased by half (from 30% to 45%), and the eighteen- to twenty-one-year-old age cohort grew even more (from 9 million to 15 million). This flood of students flowed into flagship state universities, which expanded to their limits and then became somewhat more selective. Private institutions, which had more difficulty funding expansion, tended to optimize their efforts by building stronger academic programs for a more select student body. A large portion of the new students found places at burgeoning regional state institutions. Formerly teachers colleges, these institutions eagerly expanded academic programs, ventured into graduate education, and became regional universities. The latter half of the decade saw the widespread construction of public universities in cities where private institutions had predominated. The final component of this growth came from new public community colleges which from 1965 to 1972 opened at a rate exceeding one per week. Remarkably, state governments made the huge fiscal effort to provide the institutions to accommodate the Tidal Wave of students.

Higher education expanded in another way by opening to previously excluded minorities, most dramatically African Americans. Progress was underway before the 1954 *Brown v. Board of Education* decision outlawing segregation. The achievement of equal treatment in northern universities was largely unforced, correcting what before the war had been de facto internal segregation. In the Upper South, the long process of desegregation had begun with the opening of limited programs. The *Brown* decision actually heightened resistance, especially in the Lower South, but the several violent confrontations that occurred after 1960 were atypical. Only the 1964 Civil Rights Act overcame the principal obstruction, which came from southern politicians, and allowed a genuine process of desegregation to develop. Also in the mid-sixties, northern colleges and universities began to undertake proactive measures to reverse the grievous underrepresentation of African American students.⁴⁹

The idealism suffusing higher education after the war lent support for the basic arts and sciences. Institutions emphasizing these subjects had assumed preponderant prestige in the interwar years. Now, a consensus formed around the general message of the Harvard report, *General Education in a Free Society* (1945), which advocated foundational courses for a liberal education. In practice this became a judicious sampling of the basic disciplines that came to be known as 'gen ed.'⁵⁰ The pattern of institutional expansion also supported this trend toward arts and sciences. Service-oriented institutions that had in the interwar years embraced vocational-professional programs (or were confined to teacher education) now created or expanded disciplinary departments. In the 1960s, bachelor's degrees awarded in the arts and sciences rose to a peak of 47 percent.⁵¹

These trends were complemented by a prodigious expansion of research and graduate education, powered by federal support. Federal sponsorship of research initially took place within the channels established for the wartime emergency. For more than a decade after World War II, the bulk of the increased funding for academic research came from the defense establishment and was skewed toward the physical sciences. However, a new federal relationship

with higher education was sparked by the launch of the Soviet Sputnik satellite in 1957. For about a decade after Sputnik, huge increases in funding for academic science came from the civilian side of the federal government: the National Science Foundation, the National Aeronautical and Space Administration, and, most prolifically, the National Institutes of Health. Moreover, this bounteous support was accompanied by assistance for universities to support graduate students, build laboratories, and develop new science programs. Sputnik also provoked Washington to support higher education directly, first through the National Defense Education Act and later through direct aid for buildings and students. Federal largess, superimposed on mushrooming enrollments and state support, produced an ephemeral golden age in American higher education.⁵²

Christopher Jencks and David Riesman characterized the transformation that occurred during this era as “the academic revolution.”⁵³ They meant the process by which the theoretical and specialized academic outlook of graduate schools was transmitted throughout the institutional order. It was a process that transcended the sciences, ultimately enhancing the research orientation of virtually every school and department. The agents were, first, innovative postwar PhD.s who were now senior academics; then, legions of new PhD.s, trained in burgeoning graduate programs, who staffed the expanding universities. Their teaching and writings brought the most current and specialized academic knowledge into the classrooms of all types of institutions. Ultimately, however, the expectations and idealism of the academic revolution set the stage for a backlash that arose in the late 1960s. Its chief manifestation was the great student rebellion.

Student protest was mobilized by the 1964 Free Speech Movement at the University of California, Berkeley, and Students for a Democratic Society. The national issues of the Vietnam War and racial injustice largely propelled its evolution toward increasing radicalism and militancy, exacerbated after 1966 by the Black Power movement. Although the major campuses suffered their greatest disruption from the fall of 1967 to the spring of 1970, the enduring impact altered the state of higher education.⁵⁴ The momentum of the academic revolution was checked. The university’s relation to students was altered from paternalism to permissiveness. And universities retreated for a time to an ivory-tower aloofness. The student rebellion was the crescendo to the tumultuous postwar generation, but it only partially foreshadowed the dawning new era.

the 1970s represented a transitional decade for higher education. The higher education establishment abandoned the academic revolution in favor of egalitarianism and an ideology of ‘college for all.’ Enrollments peaked in 1975 amid declining student academic ability. The federal government intervened to actively shape the course of higher education. However, the most consequential development was the rise of women, a national trend spearheaded by the women’s movement on campus.

The transformation of the status of women from 1969 to 1973 was an abrupt and far-reaching social revolution. The admission of women to the Ivy League in 1969 was a harbinger, although unconnected with the women’s movement.⁵⁵ The campus women’s movement joined together the national movement for women’s legal rights and the more radical women’s liberation, which emphasized consciousness raising and condemnation of male patriarchy. The cause of women’s

rights became for a time sacrosanct and opposition ineffectual, nationally and on campuses. For example, Congress overwhelmingly passed the Equal Rights Amendment in 1972, although subsequent opposition blocked its ratification. Other federal actions had profound effects. Women were classified with minorities as beneficiaries of affirmative action. Title IX of the 1972 Education Amendments forbade discrimination against women, thus outlawing the widespread quotas limiting female admissions to graduate and professional schools. Outlawing discrimination opened male-dominated careers to women, encouraging them to study those subjects in college. Ending discrimination also caused a reordering of careers and salaries in colleges and universities. And by the end of the decade, women's studies curricula were ubiquitous.⁵⁶

Higher education's relationship with the federal government changed in these years. Federal investment in higher education increased in the 1970s, despite dwindling research support. In an effort to expand access, the 1972 Amendments to the Higher Education Act provided financial aid for lower income students (now, Pell Grants). This legislation formalized a federal commitment to provide student aid based on financial need. The 1972 amendments, together with affirmative action, extended the government's regulatory intrusion into higher education. Universities were made subject to regulations governing all employers, and Congress showed no restraint in devising specific interventions—ordering states to create commissions to coordinate higher education; imposing bureaucratic procedures for research on human subjects; and abolishing confidentiality with the Buckley Amendment. Federal regulation became an inescapable presence in higher education.

One clarion call of the student rebellion was for greater relevance in university studies. Relevance indeed became a hallmark of the new era, but in ways not anticipated by student activists. They had advocated a tendentious relevance predicated on the university's role as an aloof critic of society. They demanded that universities study and seek to ameliorate problems stemming from the end of colonialism, racial inequality, poverty, and the environment. These topics long remained preoccupations on campuses, but more 1970s students sought a tangible form of relevance by turning away from the arts and sciences toward vocational or professional majors. Bachelor's degrees in arts and sciences plummeted to just over one-quarter of the total, barely more than the number awarded in business alone. This development was a premonition of a decisive change in American higher education. Whereas government actions had been the dominant influence through the first half of the 1970s, now market forces began to alter the demographics, politics, and social relations of American higher education.

Generation 10: Privatization and the Current Era, 1975–2010

In 1975, enrollments in higher education topped 11 million, but then in an unprecedented development, student numbers for the first time ceased to grow. In the ensuing years there was an upward creep, but twenty years later the number of full-time undergraduates had grown by just 20 percent. Never before had enrollments been so stagnant for so long. One important dynamic was nevertheless at work: whereas 55 percent of students were male in 1975, 55 percent were female in 1995 (and 57 percent by 2015). Moderate enrollment growth returned in the 1990s and continued through the first decade of the 21st century.

The United States had long been the most educated society in the world, but due to enrollment stagnation, college participation fell behind a dozen other countries. President Obama, wishing to restore that former leadership, revived the college-for-all chimera, setting a goal for every child to attain at least one year of postsecondary education by 2020. No federal program supported this goal, but the major foundations consistently endeavored to raise rates of college attendance and graduation. Social inclusion, or diversity, had been promoted by the higher education community since the 1970s. Substantial progress was achieved in the decades after 1990, so that attendance rates of Blacks and Latinx matched those of Whites by 2010, although their graduation rates still lagged. Subsequent efforts were widened to aid all “disadvantaged” (minority, lower-income, first-generation) students. However, progress has consistently been impeded by the spiraling costs of higher education and, perhaps more formidable, inadequate academic preparation. Roughly one half of high school graduates who pursue postsecondary education were estimated to lack the requisite academic skills.

Beginning around 1980, an era of privatization dawned for American higher education. Whereas the previous generation had been characterized by increasing government investments, higher education now began to extract a growing proportion of revenues from private sources. Most prominent was rising absolute and relative levels of tuition. From the 1950s to 1980, average tuition in both the public and private sectors had been stable as a percentage of median family income. That figure doubled in both sectors by the late 1990s and then rose steeply again after 2001.⁵⁷ These increases made higher levels of spending possible, especially in wealthier private colleges and universities. In public institutions the preponderance of needed revenues shifted from states to students and parents. Several conditions made this possible.

Private colleges and universities adopted a strategy of “high tuition–high aid,” whereby large tuition increases were accompanied by aid for students with financial need. The increasing availability of federal student loans after the Middle Income Student Assistance Act (1978) touched off the development of a loan culture that has grown ever since. However, private schools amplified the impact of federal student aid by offering additional institutional aid—tuition discounts—to allow students to meet escalating prices. Differential pricing and loans thus prevented demand from falling due to lack of affordability, but merit aid was also used to entice desirable students. Private schools benefited from soaring demand for high-priced, high-quality (and high-status) education at selective colleges and universities. Rising monetary returns to a college education and media publicity for college rankings encouraged this “selectivity sweepstakes.”⁵⁸ Public institutions had to adapt to the stagnation of state appropriations. Real spending per student peaked in the late 1970s and then fluctuated around that level for three decades. However, the Great Recession caused a precipitous drop, making public colleges and universities ever more dependent on rising tuition to uphold quality and innovation.

The consequences of this financial aid revolution were mixed. Private colleges and universities enjoyed unparalleled prosperity, with the wealthiest institutions receiving the greatest bounty from burgeoning student demand, rising tuition revenue, large donations, and outsized investment returns. At the same time, despite programs to recruit diverse students and provide greater student aid, the wealthiest institutions predominantly enrolled wealthy students, and in fact depend on them to pay the high tuition that supported elevated expenditures, including financial aid. For American higher education as a whole, rising prices were

accompanied by increasing social stratification. In the public sector, regional campuses and community colleges were weakened by stagnant appropriations. Public research universities adapted by raising tuition and recruiting more international and out-of-state students. They also performed increasing amounts of research.⁵⁹

Privatization in university research began to be encouraged in 1980, with a succession of federal actions designed to encourage the transfer of university technology to private industry and the commercialization of university inventions. During the Current Era, the expectation that university research could and should contribute to economic development became an article of faith in many circles. This rationale, in turn, justified a healthy growth of private, state, but mostly federal investments in academic research. At research universities, research grew far more rapidly than instruction or faculty, thus increasing its relative weight in the balance of university activities. Controversy over university involvement in commercial pursuits accompanied these developments. But, undeniably, the current era experienced an enormous expansion of university research, a corresponding strengthening of most research universities, and greater contributions to society.⁶⁰

The Next Generation?

The Covid-19 pandemic of 2020-2021 will likely prove more disruptive for higher education than the Great Recession of 2008-2010, but together they augur a transition to a new generation. As in the past, much of the conditions in this vast, variegated system will persist, some will be accentuated, and perhaps some new factors will appear.⁶¹ Based on past patterns, it is possible to speculate about at least the probable directions of change.

Congress has not passed major higher education legislation since 1978 (see Generation 10) and seems unlikely to do so in the foreseeable future. Hence, the existing, somewhat dysfunctional financial system based on federal student aid seems likely to persist—relatively depressed state support, rising tuition tempered by rising discounts, possible bumps in Pell grants, and an enormous book of federal student loans, a significant portion of which will not be repaid. Only the last condition might at some point bestir legislators.

The social stratification of American higher education shows no sign of waning. Affluent families, who were unaffected by the pandemic, can be expected to keep supporting the elite institutions where they intend to send their offspring—colleges and universities with high selectivity, high spending, and exorbitant tuition. The higher education establishment will continue efforts to encourage and assist disadvantaged students to attend, and small numbers will be recruited to selective institutions. However, the outlook for most lower-income students is discouraging. The pandemic disproportionately depressed their enrollments, and community colleges, where many attend, have been most severely affected by declining enrollments and revenue.

Pandemic conditions caused many students to reevaluate whether to attend or how to attend. Participation rates may be depressed for several years, and then higher education will face smaller age cohorts and altered patterns of attendance. The suspension of in-class instruction in 2020-2021 most likely represented a tipping point for the utilization of online instruction. Mass

online universities had already become a significant sector, and university online programs allowed growing numbers of location-bound students to complete degrees. The widespread resort to online instruction at residential campuses in 2020 provided enhanced respectability and familiarity, which is likely to encourage more complementary use in regular courses as well as money-saving substitutions. The for-profit sector began exploiting the lucrative potential of online education in the 2000s. This sector mushroomed in that decade as federal regulations were relaxed; and it shrank in the 2010s as regulations were tightened. However, these institutions are truly protean, changing more rapidly than the Department of Education can regulate them. Now most have assumed a hybrid form, with at least some units still depending totally on revenue from federal student aid.

In the Next Generation four sectors of American higher education will become increasingly distinct: a traditional, high quality sector of elite privates and major state research universities, the latter less selective but offering top programs in STEM and other fields; non-selective colleges and universities, mostly public, poorly funded, and largely vocationally oriented; multi-purpose community colleges with shrinking academic programs and strained finances; and an expansive online sector, highly commercial and competitive, consisting of mass and specialized online universities, hybrid former for-profits, and university online divisions.

Beyond Covid, American higher education was more politicized in 2020 than it was at the end of the 1960s. Then, students protested against university administrations as well as social issues. In 2020, university administrators were more “progressive” than average students, and the reigning dogmas of race or gender were inculcated in student orientations and often-compulsory diversity classes. American higher education seems destined to remain ideologically monolithic, which threatens to further polarize its public support.

American leadership of global science has brought extraordinary benefits for the United States, and that leadership has been embodied in the nation’s universities. No issue is more important for the Next Generation than preserving of the integrity and vitality of academic science.

NOTES

References have been limited to principal secondary works and quotation sources. The first eight generations are examined more thoroughly in Roger L. Geiger, The History of American Higher Education: Learning and Culture from the Founding to World War II (Princeton: Princeton University Press, 2015) and the last two in Geiger, American Higher Education Since World War II: A History (Princeton: Princeton University Press, 2019). For additional bibliography, see Christine A. Ogren, “Sites, Students, Scholarship, and Structure: The Historiography of

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