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Establishing the Collegiate Form in the Colonies: 1636–1789

Three characteristics of the English colonies in America most affected their development. First was the settlers' determination to form a way of life different from the governmental and familial rigidities they had left in Europe. Second was the land—the limitless horizons for which dissidents and new immigrants could reach whenever they tired of their previous stations. Third was the religious spirit of the time—Protestantism and Anglicanism newly separated from Catholicism and continually reforming, yielding variations in patterns of observance from deism (later Unitarianism) to fervent sects devoted to emotional worship.

Societal Context

Table 1.1. shows a statistical picture of the conditions surrounding American higher education in the Colonial Era.

The distance from Europe contributed to shaping the course of development, as the colonists built their own society with varying degrees of oversight from the parent country. Although explorers and immigrants had been arriving in the Western hemisphere for more than one hundred years, no lasting English settlement occurred until the beginning of the seventeenth century. Under British sovereignty, Virginia, the first colony, was settled in 1607, and all but one of the colonies were formed by the end of the

Table 1.1. Statistical Portrait of the Colonial Era, 1700–1789
(Estimates).

	1700	1789
Population	250,000	3,800,000
Number of students enrolled in higher education	150	1,000
Number of faculty (professors and tutors)	5	133
Number of institutions	2	9
Number of earned degrees conferred	15	200

Source: Rudolph, 1962; Snyder, 1993.

century. Georgia, the last of the original thirteen, was settled in 1732. As a result of the variant leadership, climate, and modes of settlement and subsequent immigration, each colony differed from the others.

Immigrants from England and from continental Europe quickly populated the Atlantic seaboard from New England to the Carolinas. Early on there were conflicts among the colonists based on religious convictions; the Puritans of the first migrations were challenged by new immigrants seeking religious freedom and by dissidents from within the original settlements. But a growing number came for profit-making purposes or to make new lives for themselves. The late 1600s marked the development of commercial agriculture for export. This growing industry was accompanied by a rising need for workers; hence there was an enormous increase in the number of slaves brought to the colonies.

Whereas the seventeenth century was characterized by an influx of English families, adventurers, and indentured servants, along with Africans who were brought unwillingly, in the eighteenth century sizeable numbers of Germans, Scots, and Irish arrived. From around 250,000 in 1700, the colonial population quadrupled by midcentury and increased by as much as 30 to 40 percent each decade thereafter. The settlements were widespread; Boston, the largest city, had 7,000 people in 1700, and by the end of the era only three cities had as many as 10,000. The more Europeans, the greater the need

for land, hence the onerous displacement of the native peoples as the immigrants conquered the wilderness.

For most of the settlers, the New World represented a chance for a new start. Some came as servants who had escaped prison and bought their passage by promising to work for the plantation owners for a number of years after arrival. Others were disinherited children who saw greater promise in a continent where land was cheap and a farm and family could be built anew. The desire for religious freedom brought groups from England and the Continent during an era of religious turmoil and conflict.

In their social and cultural context, the colonies were decidedly English. For a half-dozen generations after the founding of Jamestown and the landing at Plymouth Rock, they retained the characteristics of the motherland. The Germans brought their own language and customs, but the colonial laws, dress, culture, religion, professions, government, and child-rearing and educational practices were modeled on English forms. However, the years in America effected modifications in all areas of life. Some were necessitated by the challenge of living in a land where the wilderness and potentially hostile natives lurked just outside the settlements. Others were shifts in thinking, as a unique American consciousness took shape. Distance from the mother country, reckoned in terms of the several weeks that it took for messages to pass between England and the American seaboard, allowed for new ideas in religious observance and acculturation of the young to take shape.

Religion and the churches are worthy of a special note because they were so close to the daily life and thought of the colonists. Anglicanism and various Protestant sects dominated seventeenth-century England, hence the English colonies as well. The Bible was the major text, often the only book in the home. God and the devil were real to believers. As the Salem witchcraft trials demonstrated, people could be possessed, have occult powers. Good and evil, the forces of light and darkness, were tangible qualities. The New England Puritans had fled the dictates of the high church of the home

country and its links with the crown. They abhorred the idea of a theocracy, but the secular states they established had strong ties to their churches and in some areas of social control were more rigid than those they had left.

By the middle of the eighteenth century, European concepts of the Enlightenment and deism modified thought. Many of the leaders born in the first half of the century—Washington, Jefferson, Franklin—adhered to rationalist ideas, read political philosophy that espoused the rights of man, had less attachment to organized religious observance. To them, the Bible was not revelation but a text. Reaction against the eighteenth-century Enlightenment came with a religious backlash known initially as the Great Awakening, dating from around 1750 and reappearing subsequently under different identifiers. This religious fervor led to the continual splintering of established churches into various sects.

The major peculiarity of the North American continent—its limitless land—influenced the way the colonies and eventually the nation developed. The country was large enough to allow for continual reformation in all aspects of colonial life. New forms of religious observance and fresh ideas in everything from the building of settlements to child rearing could emerge in the vast spaces available. The boundless horizons affected family life. The general outlook, especially in the New England colonies, was that everyone should live in family units. But the restless son, chafing under the domination of parents who might have little patience with a rebellious child, could always strike off on his own. The frontier, new opportunities, a different environment always beckoned. In a land where cash was scarce, a child had little reason to hope for an inheritance, but although nearby farm land was not free, the frontier was ever expanding and a young man could work his way into a homestead of his own. Accordingly, a sense of optimism grew. The sons could expect to have more wealth than their fathers; the hope of doing better than one's parents was realistic. There were few barriers to those who wanted to make the move. A young man could

become a professional person even if his father was a farmer. Roles for women were more limited; most opportunities other than domestic service as wife, maid, or older-generation assistant were still in the future.

The geographic openness of the land was reflected also in the way people could reinvent themselves. There were few restrictions on entering the professions. The lawyers, physicians, and theologians occasionally attempted to control entry into their professions, but in few communities was anyone eager to examine the credentials of a newly arrived practitioner; public licensing was seldom seen. Apprenticeships were the major form of access to the professions. A lawyer could take a young person to read with him, and that person could hang up a shingle and enter practice at any time. In medicine a few physicians tried to form groups to judge who was entitled to call himself a doctor, but apprenticeships and the subsequent opening of practice were not regulated. According to Handlin and Handlin (1971), "Only one colony, New Jersey, in 1772, actually limited by law the right of anyone to assume the title of Doctor" (p. 39). Clergymen were both preachers and teachers, and congregations tended to value those who were schooled. Numerous preachers ascended to the pulpit without formal schooling, but "university graduates who could hurl about quotations in the original Hebrew and Greek and loftily demonstrate their superior familiarity with Scripture enjoyed a strategic advantage" (Handlin and Handlin, 1971, p. 43). Teaching required no specific preparation; anyone who could read and write could show others how to do it.

The development of literacy did not depend on schooling. Today's children are exposed to language on television, billboards, magazines, newspapers, even the promotional material on cereal and toy boxes; regardless of the emphasis in their homes, they are surrounded by words. But although the colonists in the coastal cities saw books and newspapers, many who were living on the margins of civilization had little association with print other than in the family Bible. Their familiarity with ideas came through words

delivered by a preacher or itinerant peddler. For the vast majority of young people, the family was the source of education in social mores, morality, and ways of behaving. Under the circumstances, the extent of literacy is remarkable. Their orthography was crude, but the colonists were more familiar with language than were their European social-class counterparts.

The American Revolution was born as the colonists gained a sense of uniqueness. Strung along the Eastern seaboard from Massachusetts to Georgia, oriented to the sea across which the immigrants had come, the colonists saw England as the mother country. All the main towns were on bodies of navigable water, and most of the commerce was waterborne trade among the colonies themselves, the English colonies in the West Indies, and Britain. The reasons for the American Revolution have been discussed countless times. Was it commercial interests? Blundering by the English rulers? A by-blow of the French-British rivalry? The revolution has gained particular status as a mythic quest for freedom from oppression by the crown. Taking a cynical view of the latter reason, the contemporary Samuel Johnson (Bate, 1975) said, "How is it that we hear the loudest yelps for liberty among the drivers of negroes?" (p. 193). Most of the colonists had no trouble holding compartmentalized notions of freedom—one for themselves, another for their slaves and servants. Views of parity were further stratified to account for what were perceived as natural differences among wealthy and poor and men and women. The "all men are created equal" phrase in the Declaration of Independence proved rather a qualified statement—one that was to be debated and reinterpreted countless times throughout the new nation's history.

Institutions

The nine colleges that were organized in the colonies were modeled on educational forms that had been developed in Europe over the prior five hundred years. This development has been traced well

by Rashdall (1936) and, more recently, by Lucas (1994). One incipient university form was organized by groups of students who established their own organizations and assemblies, employing the faculty, deciding on how they would spend their funds, and setting rules governing the courses of study, examinations, and awarding of degrees. Such institutions were organized as early as the twelfth century in Italy and subsequently in Spain, Portugal, and central Europe. The curriculum included the classical writers along with studies in the liberal arts and natural science. They awarded bachelor's degrees and, if a graduate wanted to stay on for another year or two, the master's. A teaching license would be awarded somewhere between receipt of the bachelor's and the master's. The student-led institutions also established rituals surrounding graduation, including academic robes and commencement exercises.

A second type of European institution developed within the church. Allied closely with the priesthood, these institutions were dedicated to training clergymen. Their curriculum was based in church doctrine with students learning the words of doctrinal authorities and principles of theology. They were professional schools operated by and for the purposes of the centralized church. The University of Paris exemplified the form.

In retrospect, the threads of the colonial colleges and of higher education subsequently were apparent in both groups. The institutions incorporated the conceptual precision that would later lead to empirical investigation, the use of ancient texts as enhancing intellectual curiosity, and humanistic thought that led toward secularized study. The elements of all the institutional types can be found in higher education today. However, at the time of the founding of the colonial colleges, the pattern of curriculum and faculty-student relations stemming from church-related institutions was most prominent. The European universities were lagging in the development of science, and the colonial institutions had little to do with science until the end of the era. The students and the faculty had no say in governance matters; authority ran from the

institution's board of governors to the college president. Curriculum centered on classical texts and the foundations of Christian doctrine. The humanities, as studied in classical writings as literature and the fine and performing arts, had to await a later day. Similarly, experimental science as an area of inductive inquiry could not emerge until scientists freed themselves from reliance on doctrine and prior authority and from the search for universal truths as revealed in classical writings.

The eighteenth-century Enlightenment did not have an immediate effect. The anticlerical ideas that were filtering into the thinking of Europeans from French and English philosophers to literate laypeople were slow to penetrate the universities. Gradually however, the idea of the university as the seat of all learning came to fruition in Oxford and Cambridge. And gradually across the continent, the university as an agent of the state was being born. Still, science as a path to understanding through experimentation and verification was developing outside the universities and remained there well into the nineteenth century. Except for theologians, few scientists, philosophers, or leading thinkers were working within the formal higher education structure in Europe or in the English colonies.

The colleges in the American colonies were modeled on an amalgamation of ideas and forms coming from Europe, but they emerged in their own way. Boorstin (1991) comments that the colonists settled the continent before they had a system for dealing with it. Hence they had to reinvent governmental and educational forms as they went along. The idea of lay governing boards was transplanted from Scottish universities and the curriculum and residential pattern from Cambridge. None of the colleges followed the continental pattern of students in charge of the institution, and none was strictly controlled by a dominant church. They all developed around notions of acculturating the young, passing on the wisdom of the classics, and preparing people not only for service as clergymen but as public servants as well.

Around 130 university-trained men were in the first generation of immigrants to Massachusetts Bay Colony. Thirty-five were graduates of Emmanuel College, Cambridge, and when they established Harvard they followed the Emmanuel pattern. Control was to be in the hands of church elders; curriculum was similar to Cambridge curriculum, and the residential pattern was suited for shaping immature youths. The college centered on teaching, not on the advancement of learning, and saw no contradiction in preparing young people to take their place as public officials and as ministers in a community where church and state were closely aligned. Because any institution could constitute itself as a college and grant the degrees that it chose, Harvard began awarding degrees even before it was legally incorporated.

The colleges formed in the other colonies followed the Harvard pattern but with some major distinctions. Soon after Virginia was settled, the colony received a grant of land for college purposes from the crown, but the College of William and Mary did not open until after it received a royal charter in 1693. The college was to prepare clergymen for service in the Anglican church, civilize the Indians, and prepare civil servants. Scottish influences were seen in the development of William and Mary, as its control was established in a board of trustees representative more of laymen than of church officials.

The combination of church influence blended with lay control became the pattern. There was a link between the established churches and the teaching of morality or the good life, and as new churches were formed, the colleges came along with them so that the young could be instructed in proper conduct. Each of the colonies was founded by “a considerable infusion of men who had received in the European universities a liberal culture, which they desired to reproduce on these shores” (Ten Brook, 1875, p. 17). Dartmouth and Yale were formed by Congregationalists—spin-offs from the Massachusetts Puritans. The dominant religious groups in the other colonies formed their own institutions: the College of

New Jersey, later Princeton, by the Presbyterians; the College of Rhode Island, later Brown, by the Baptists; Queen's College, later Rutgers, by the Dutch Reformed church; and King's College, later Columbia, by the Anglicans (but with a strong minority of other religions represented on its first governing board). The College of Philadelphia, later Pennsylvania, was the most decidedly nonsectarian of the colonial institutions.

Much has been written about these institutions; each has its own history, which Rudolph (1962) summarized well. In general they consolidated trends coming from England and Scotland. College governance, finance, faculty-student relations, curriculum, and instructional practices were all codified in this era, so that when hundreds of new colleges were founded after the formation of the United States, they followed the model even as their emphases shifted. Although they were connected with the churches, the colleges were not as much religious as educative, founded to produce a learned people. They would train clergymen, and because most clergymen were community leaders, they would prepare statesmen. Trow (1988) traced other reasons for establishing colleges: the idea of perpetuating a civilized society in frontier communities; the growing need for better-trained people not only in law, medicine, and theology but also in commerce and navigation; community pride; and idealism and philanthropy on the part of community leaders. The absence of any restraining political force helped. There was no centralized government to establish standards. Each colony was free to set its own rules, and although each college resembled the others because of the power of imitation, the institutions were free to develop in idiosyncratic patterns. The colonists could have sent their young to England for university schooling, and many did, but the trip was long and perilous and the expense was great. Coupled with the desire to build communities with strong religious orientation and to fit youth for public employment in the civil state, the colleges developed indigenously. They followed Harvard, the first, but Harvard never set rules for the others.

The ease with which religious sects formed as splinters from existing churches also influenced the development of higher education in the colonies. Rivalry between religious sects certainly played a part, as a half-dozen different church groupings were represented among the nine colonial institutions. Each of the colleges had a church connection, although two of them were effectually interdenominational. Church influence was never absolute, and a tradition of lay governance was established early on.

If the colleges were not needed to prepare people for professions, the impetus for their founding must be sought elsewhere. In general the colonists wanted to build communities that integrated religion with society, and religion depended on an educated laity. They needed institutions to assist in acculturating the young, and the notion of civilizing the Indians was not far from the surface. Furthermore, the college brought prestige to communities that needed to show that they were centers of civility, not merely rude outposts. The desire to build unified communities with strong religious orientation was powerful, and the belief that civil government needed educated leaders was prominent as well. Not only ministers but also civil servants were to be the product of the colonial institutions. For all these reasons the colonists built colleges—only three prior to the middle of the eighteenth century but six more between then and the founding of the nation. As few as they were, they effected lasting public perceptions of what a true college should be.

Toward the latter part of the Colonial Era the religious orientation waned, and the idea of a civil community centered on principles of morality and public service, apart from an established church, grew. The colleges (see Table 1.2) emphasized public service, acculturation of the young, and the civil community. Benjamin Franklin ([1749] 1931) detailed these purposes in his *Proposals Relating to the Education of Youth in Pensilvania*, in which he outlined the institution that would become the University of Pennsylvania. The college would center on the education of youth for the purpose of supplying qualified men who would serve the

Table 1.2. The Nine Colonial Colleges.

Original Name	Current Name	Year Established	Primary Religious Affiliation
Harvard College	Harvard University	1636	Puritan
College of William and Mary	College of William and Mary	1693	Anglican
Yale College	Yale University	1701	Congregationalist
College of Philadelphia	University of Pennsylvania	1740	Nonsectarian
College of New Jersey	Princeton University	1746	Presbyterian
King's College	Columbia University	1754	Anglican
College of Rhode Island	Brown University	1765	Baptist
Queen's College	Rutgers, the State University of New Jersey	1766	Dutch Reformed
Dartmouth College	Dartmouth College	1769	Congregationalist

public with honor. These youth would be prepared in writing, drawing, arithmetic, geography, and history, including natural history and the history of commerce. The rector would be a learned man, a correct and pure speaker and writer in English, and would have tutors serving under him. The scholars and students would live together and keep their bodies sound through frequent exercise. The English language would supersede Latin as the tongue of instruction. All would center on the good life for the students and the betterment of the community without reference to church doctrine. Here was the foundation of the institution that could sustain all the best purposes of the other colleges without reliance on doctrinal connection. William Smith, who published a similar plan for a college based on a broad curriculum, became the College of Philadelphia's first leader. More than any other colonial institution it seems to have presaged the institution that epitomized the American college.

Students

Few young people in the American colonies went to college. Either they had no need to go, or college was not accessible to them. College purposes and curricula did not match the interest and aspirations of most of the youth. Few families had the cash to pay the tuition, low as it was, and support their children through a course of study. They more likely depended on their sons for assistance on the farm or in the family business. Except in New England, education was not compulsory even in the lowest grades, hence there was no groundswell of demand for further study; few students attended school past the primary years.

College as an avenue of career preparation had limited appeal because few careers depended on further study. All the crafts and trades, as well as farming and business, could be learned through imitation or apprenticeships. The incipient professions—law and medicine—were learned in similar fashion. Only theology

demanded some further schooling, and even there, most of the preachers were not college trained. As for the girls, they could learn all they needed to know from their mothers initially, then from their husbands.

Enrollments were small. By the end of the Colonial Era scarcely one in one thousand colonists had been to college. The total number of resident students at any of the colonial colleges was usually less than one hundred, and the graduating classes could be numbered in single digits. Harvard, the largest college, graduated sixty-four students in 1771, but it was well out in front of the others. Rudolph (1977) notes, "Not until 1759 did the handful of colonial colleges graduate, among them, more than a hundred young men in any one year" (p. 25). Some of the wealthier families, especially in New England, sent their children to the mother country for their higher education, but even adding those into the college-trained population, the numbers remained consistently small.

The careers followed by those who had been to college give an indication of the purposes for which students attended. Most became either ministers, physicians, teachers, lawyers, public servants, or a combination of these. However, their numbers were so sparse that they did not form alumni groups or otherwise interact with each other in terms of the institution they had attended. They were likely to associate in the literary societies formed in Boston and Philadelphia that enlisted members from any college in America or England, or from none.

The paucity of public schools meant that most of the young people who had any formal training studied with tutors—educated people who would take on a few students as a means of supplementing their own livelihood. In Virginia the planters' sons sometime boarded with preachers who would provide instruction in English grammar, Latin, mathematics, and natural science. Meriwether Lewis commented that finding a place with tutors was not easy because the rudimentary schools that they operated could house only a few pupils at a time. He had to stay away from home for long

periods of time so that he would not lose his place as a student in the home of a person who was teaching him English grammar and arithmetic (Ambrose, 1996). Lewis's experiences as a member of a plantation-owning family were typical; most students were sons of land-owning families or of professionals. A few were from the families of artisans or tradesman; very few were from among the owners of small farms.

College life was designed as a system for controlling the often exuberant youth and for inculcating within them discipline, morals, and character. Each student was to attend the lectures and tutorials, obey the rules, and avoid the company of base people. Yale issued a set of rules describing the rigor with which the college expected its students to attend to a way of life: "No Student of this College Shall attend upon any Religious Meetings either Public or Private on the Sabbath or any other Day but Such as are appointed by Public Authority or Approved by the President. . . . If Any Student shall Prophane the Sabbath by unnecessary Business . . . or makeing any Indecent Noise or Disorder . . . He Shall be punished No Student Shall walk abroad, or be absent from his Chamber, Except Half an hour after Breakfast, and an hour and an half after Dinner" (Dexter, 1896, pp. 4–5). Further regulations described penalties, fines, or, at the ultimate, expulsion, for swearing, cursing, blaspheming, playing cards, singing loudly, associating with disorderly people, and the like. The freshmen were also obliged to go on errands if so instructed by students in superior classes. There were no provisions for grievance proceedings.

The family that sent its youngster to the college expected that the institution would take charge of the boy's life. Frequently the fourteen- or fifteen-year-old had already been identified by his parents as being in need of some greater discipline than a father or mother could provide. The colleges were truly to act as surrogate parents and to enforce behavior that the boy's parents might not have been able to instill. Youngsters who could not accept the form of discipline that the college imposed might be sent home.

The admissions requirements imposed by the colonial colleges further limited the number of students who could attend. Harvard required that the applicant be able to speak Latin verse and prose and to decline Greek grammar. At William and Mary an applicant was to be at least fifteen years old and to have studied Latin and Greek in the college's preparatory section if he had not attained a working knowledge of the classical languages previously. Admissions requirements at Yale were the same as at Harvard; students were to be "skilful in construing and grammatically resolving both latine and greek authors and in making a good and true latine" (Broome, 1903, p. 28). The only real change in admissions requirements all the way into the end of the era was when Yale added an understanding of arithmetic in 1745 along with "Sufficient Testimony of his Blameless and inoffensive Life" (p. 30). Princeton added arithmetic to its requirements in 1760; King's College began in 1754 with requirements in Latin, Greek, and arithmetic.

There were no written admissions tests. Students were examined orally by the college president or the tutors. Students were sometimes exempt from one or another requirement, especially because all the colleges needed students and could not afford to adhere too strictly to their written statements. Most of the books in use were written in Latin, hence knowledge of that language was certainly to be expected. But the colleges that required their students to converse exclusively in Latin were considerably less successful in enforcing the rule. Broome (1903, p. 23) cites a record of a visitor to Harvard in 1680 who found the students hardly able to speak a word of Latin. However, Latin was used on formal occasions.

Patterns of student life, some of which persisted well into the University Transformation Era, were set in the colonial colleges. The right of upperclassmen to haze freshman; college responsibility for student conduct; the residential nature of the institution, with students expected to obey rules set down by the college authorities; pranks played on faculty by students; punishment for mischief making—all the elements of adolescence displayed by boys living

in isolated communities were present. The rules of conduct typically were those found in a monastery or a reform school run by a religious order.

Rudolph (1962) summarizes the formation of what became a particular way of combining living and learning: “The collegiate way is the notion that a curriculum, a library, a faculty, and students are not enough to make a college. It is an adherence to the residential scheme of things. It is respectful of quiet rural settings, dependent on dormitories, committed to dining halls, permeated by paternalism. It is what every American college has had or consciously rejected or lost or sought to recapture” (p. 87). He rationalized this form of community by pointing out that in the Colonial Era the population was so scattered that for colleges to develop they had to form their own communities. But he also points out: “By the time that the colleges in Philadelphia and New York were under way, the collegiate pattern was not a necessity, for there were cities. But by then what had been a necessity had become a tradition” (p. 88). Although young people living together led to excesses such as rowdiness, it continued to be justified as the best arrangement for maintaining control over the developing adolescents, merging the extracurriculum with the formal program, enhancing relationships among all the people involved, and in the more recent vernacular, merging cognitive and affective growth. Belief in the virtue of the isolated community persisted. “Supporting this belief was the attachment of the American people to an agrarian myth, to a view of the world that saw the land as the source of virtue and as the great moving force in history” (Rudolph, 1977, p. 95). Nice to have a myth that fits the landscape.

Faculty

Throughout the era, the teaching profession was struggling to be born, but there were too few faculty to form a critical mass of like-minded colleagues. Most faculty were tutors, typically recent

graduates who were awaiting positions as ministers. They received little pay and might have been thankful for subsistence. Early on, the college president and the two or three tutors who served at his pleasure taught all the subjects to all the students. Subsequently, professors began to specialize in various subjects and nascent academic disciplines.

A review of the leading colleges reveals the situation. The president of King's College hired a tutor in 1755 and a professor two years later; the three taught the entire curriculum. Queen's College opened with one tutor in 1771 and employed another even before appointing a president; one tutor left, but the other taught all the classes and, in 1773, organized a student literary society. William and Mary had a total of ten professors over a forty-year span. Five principal masters teaching natural philosophy, moral philosophy, oratory, languages, and mathematics served the College of Philadelphia.

Yale and Harvard, which were older and larger, employed a combination of tutors and professors. Between 1702 and 1789, approximately four tutors a year worked at Yale; their tenure was typically three years. A Professorship of Divinity was endowed in 1746. Harvard had six professorships endowed between 1721 and 1783: Divinity, Mathematics and Natural Philosophy, Hebrew and other Oriental Languages, Rhetoric and Oratory, Anatomy and Surgery, and Theory and Practice of Physics. In addition a total of about sixty-three tutors were employed from 1643 on; all were Harvard graduates. The president and professors lived in their own houses, but the tutors, who were not allowed to marry, lived at the college and monitored the students twenty-four hours a day.

The idea of college teaching as a profession developed gradually and at different times in the early colleges. But none of them entertained the European idea that faculty constituted a corporate body possessing authority, privilege, and functional independence. Finkelstein (1983) conceptualizes academic careers as having three strands: disciplinary, institutional, and external. Until the middle of the eighteenth century the academic disciplinary strand had

virtually no effect, and there was not much to the faculty member's involvement with the institution from the standpoint of autonomy, permanent appointments, and other elements of making a career. Toward the end of the eighteenth century, the institutional aspect of the academic career took form as a permanent faculty made up of professors appeared. However, the external career—the consultations with government and industry—was more than a century in the future.

Both professors and tutors tended to come from professional families; their fathers were in law, medicine, or the ministry. Faculty acted both as instructors and as custodians responsible for student behavior. The tutors usually taught all subjects to a single class, whereas the professors taught in a particular subject, often one in which they had some postbaccalaureate training. The relative permanence of the professors was another distinguishing characteristic; a professor might plan a career at a single institution, but few tutors remained at a college long enough to see their class through to graduation. In a few cases a tutor was promoted to professor; in most, the professor was appointed from the outside.

The low wages paid to tutors and professors set a pattern that persisted until the second half of the twentieth century. The faculty were similar to clerics in that they were expected to teach for the privilege of affiliating with the college. Unlike lawyers or physicians who expected to be paid for their ministrations, faculty were more like volunteers engaged in public service. Few social institutions, except churches, could command that type of loyalty. At any rate, for some, tutoring and attempting to shape young people had more appeal than the drudgery of farming.

Curriculum

In his foreword to Rudolph's 1977 book, *Curriculum: A History of the American Undergraduate Course of Study Since 1636*, Clark Kerr offers a definition of curriculum as "nothing less than the statement

a college makes about what, out of the totality of man's constantly growing knowledge and experience, is considered useful, appropriate, or relevant to the lives of educated men and women at a certain point of time" (p. xxi). Whether curriculum is defined as a set of courses or the totality of experiences that the college designs for its students, it is always rationalized as being practical. The curriculum responds to society and in turn shapes society, sometimes lagging, sometimes leading.

Curriculum is directed toward acculturating young people—their character formation, preparation for careers, access to society, language, and manners. Over time and among institutions the emphasis on one or a combination of these purposes shifts. Except for the rarest of programs, learning for the sake of learning has not been used as a curriculum rationalization. Practicality and usefulness, whether for building a sense of accomplishment among the students or equipping them to obtain certain jobs or make more money, have been the goals; curriculum always has purpose.

The definition of what is practical shifts from era to era. A knowledge of rhetoric, classical scholarship, and the Bible was occupational preparation for lawyers, ministers, and statesmen in the Colonial Era. Science and mathematics entered the practical curriculum toward the end of the era, as many of the students prepared for commercial careers. Colleges do not change curriculum readily. The drawback of having a stable curriculum with only minor changes is seen when students begin using the college for purposes other than those for which it was designed, and the curriculum does not shift rapidly enough. If the college curriculum is designed to turn out clergymen or public servants, for example, and businessmen come out of the college, has something gone wrong with the curriculum? Or has society changed its mind? By the end of the Colonial Era the defenders of classical studies were hard put to justify their favored curriculum, as proportionately fewer graduates entered the clergy. But those studies persisted through several additional generations.

The colonial curriculum did not rest on vast numbers of courses. A few courses, required for all students, sufficed. The curriculum has since expanded dramatically, not necessarily because of the expansion of knowledge (a justification often placed on the overblown college catalogue of our times; there was much to be learned in the Colonial Era as well). But several forces acted to keep the colonial curriculum restricted: there were few students, as most young people entered society through learning outside the colleges; study was not for the purpose of advancing knowledge but for preserving what was already known; few occupations demanded specific preparation; and the colleges were dominated by religious organizations with a limited view of the scope of knowledge.

Principles of scientific inquiry were slow in penetrating the curriculum. Meriwether began his 1907 text by saying, "To-day science dominates our schools. Our colonial ancestors studied and taught in an atmosphere of religion which they had inherited from the middle ages. For centuries the pedagogic aim had been to point the road to Heaven" (p. 13). Education was a matter of authority; truth was derived from omniscience; individuality or creativity was not part of the plan. The classics and biblical texts dominated the curriculum throughout the Colonial Era because they proceeded from a well-organized base.

The classics could be justified as practical training for all careers. Because apprenticeship was the mode of training that led people toward every occupation, those who went to college would expect to advance in the higher reaches of the professions that they had entered through academic apprenticeship. A knowledge of rhetoric and Greek and Latin could certainly be justified as useful for practitioners in law and medicine as well as theology. No one was required to go to college to enter professional practice, and occasional efforts to restrict access to the professions had little effect. The label of practicality, then, was as easy to justify as it was difficult to prove. None of the professions demanded content examinations; modern foreign languages were no more or less useful than

Greek, Latin, and Hebrew; chemistry had no more or less practical relevance than rhetoric.

The curriculum in the colonial colleges was a direct import from Europe with little modification until the latter half of the eighteenth century. Rudolph (1977) traces it to both the Renaissance and the Reformation, whereas Lucas (1994) takes it back to the Roman Empire and the library and scholarly enclave at Alexandria. From the Renaissance the colleges taught Greek and intended to bring their charges toward adopting the role of gentlemen and scholars. Medicine and theology were the vocational studies of the time. From the Reformation the colleges took the study of Latin in preparation of the clergy. Both movements had been incorporated in Cambridge, where young men were prepared not only for the clergy and scholarship but also for public service. "Emmanuel at Cambridge, a Puritan foundation, was the model for Harvard; Queen's at Oxford was the model for William and Mary" (Rudolph, 1962, p. 24). Additional imports were the four-year baccalaureate and the names for the freshman, sophomore, junior, and senior classes, along with the organization of curriculum into courses with finite time blocks and the notion of a master or teacher who would dictate to his charges.

The curriculum derived from the seven liberal arts: grammar, rhetoric, logic, astronomy, arithmetic, geometry, and music. These seven subjects did not encompass everything that was known in Greece and Rome or even the curriculum as it was taught in the schools of the time, but they did appeal to the medieval church, not least because they were especially suited to the intellect and to spiritual concerns, as differentiated from the mundane or secular. Butts (1939) traced the codification of the seven liberal arts to the Roman scholar, Varro, in the second century B.C. Along with Lucas (1994), Rashdall (1936), and others, he tracked the development and modification of this essential curriculum form from its earliest days through the medieval church, the Reformation, and on across the Atlantic.

What is noteworthy is the way liberal arts studies were adapted to religious purposes, modified to add various forms of philosophy and ethics, and prescribed for all who would count themselves among the learned. At Oxford the four-year baccalaureate program included grammar, arithmetic, rhetoric, logic, and music. Students who would go on to the master's degree would read prescribed books in geometry, astronomy, and philosophy—the latter including physical science, ethics, and metaphysics. Thus the tradition of a prescribed curriculum was set before the American colonies had been founded.

Tracing curriculum in any precise form is difficult because the meaning of course names changes. Arithmetic, logic, physics, and philosophy were all present in the colonial curriculum, but content in those areas was different from the areas of learning into which those studies evolved. Latin in the seventeenth century was studied as a medium of communication, whereas by the eighteenth century it had been transformed into drill in composition and grammar. Science was certainly not as it is currently construed: an inductive process that involves discovering knowledge through theory building, hypothesis testing, and experimenting. Notes left by teachers of science in the Colonial Era show how painfully they attempted to straddle the worlds of observation and reliance on doctrine. They explained weather, the senses, and the elements such as air and water deductively, with a combination of rude observation and a heavy reliance on prior teachings. By the middle of the eighteenth century, Harvard had various types of apparatus for teaching science, including scales, pulleys, rulers, mirrors, and cylinders—the equipment found in a middle-school classroom two centuries later. Science teachers could demonstrate the force of gravity, a vacuum, and the rotation of the planets; thus the capacity for showing how experimentation and observation could yield understanding was present and undoubtedly used. Appliances to measure sound and electricity were meager, but space, time, and optics were well covered. Meriwether (1907) notes, “Of the scientific attitude as it is

cultivated to-day, of cold, dispassionate study of nature without the lingering flavor of authority or of religion, our colonial ancestors knew nothing” (p. 224).

Barriers to a common curriculum across institutions stem from the earliest days of the colleges. Each college staff thinks it has a unique approach because of the special predilections of the teachers, students, and community from which they come. However, there is much imitation in curriculum formation. The two forces—uniqueness and imitation—are constantly at odds. But regardless of whether the colleges imitated or went their own way, the curriculum in the colonial colleges was serious. No frivolous courses decorated the catalogues with promises of divertissements for the young people. They went to college and they were expected to study. What happened on their own time may have been frivolous, but the college demanded rigorous involvement with what the masters felt was appropriate for students. Rudolph (1977) reports that “the official catalogue of the Yale library in 1734 listed the works of Shakespeare, Pope, and Spenser under the heading, ‘Books of Diversion’” (p. 25).

A view of the colonial curriculum is available in the earliest schedule printed by Harvard, around the year 1638. It shows classes laid out from Monday to Saturday for students in the first, second, and third year of their studies. The first year included logic, physics, rhetoric, divinity, and the history and nature of plants, along with Greek etymology and Hebrew grammar. In the second year the students were presented with ethics, politics, and Greek prose and dialectics, along with a continuation of rhetoric, divinity, and plant taxonomies. The third year introduced them to arithmetic, astronomy, and geometry while they perfected their composition in Greek (Meriwether, 1907, p. 52). Although Harvard started with a three-year program, by 1654 it had adopted a four-year plan.

Yale modeled its curriculum on that of Harvard, and William and Mary picked up elements of that curriculum but added more science and mathematics. However, the College of Philadelphia

(later the University of Pennsylvania) laid out a three-year curriculum in 1756 that deviated somewhat. There, students studied more arithmetic, including algebra; more science, including architecture, mechanics, optics, and astronomy; more natural science, including both plant and animal history; more chemistry. Such innovations as studies in navigation, surveying, civil history, law and government, and trade and commerce were brought in as well. Even so, students were expected to follow classical and rhetorical studies with Greek and Latin literature at the core. And disputation was still important; the plan shows afternoons of the third term for seniors held aside “for composition and declamation on moral and physical subjects” (Snow, 1907, p. 71).

The other colonial colleges, all founded in the thirty years prior to the revolution, kept the study of the classics and the Bible but added modifications of their own. Most of the changes were in the direction of natural philosophy and greater emphasis on mathematics. William and Mary was the first to establish a professorship in science, and by the end of the era all the colleges had professors of mathematics and natural philosophy or physics. Ethics became an important area of study. It had been present from the start in courses in moral philosophy, which were central to the study of divinity, but as the Colonial Era progressed, the importance of reason and human nature began to supplant biblical studies. Ethics courses, often taught to seniors by the president of the college, included elements of science and religion; all were concerned with questions about the right conduct for people to follow. Ethics had to be defended continually against those who contended that faith and religious texts pointed the way to proper conduct. Still, the writings of modern philosophers such as John Locke were incorporated into the courses, and by the end of the era a professorship in moral philosophy had been endowed at Harvard.

Evolution of the curriculum continued as King’s College in New York opened with a distinctive bent toward commerce. Soon after the revolution, Jefferson, an alumnus and member of the board of

visitors, tried to reorganize the College of William and Mary by abolishing the professorships in divinity and adding medicine, natural history, and modern languages to the curriculum. His plan even included the introduction of electives, but it had only limited success. Throughout the era the champions of science fought continually against the religious orientation to which college founders and their successors had adhered. Plans for complete curriculum reorganization were usually defeated, and those who would introduce new studies would have to wait until separate professorships could be established. Then, as later, the disputes centered on what courses of study should be required of all students.

A view of curriculum in the Colonial Era shows, above all, how the colleges were struggling to break away from the influence of the church and adherence to the classics. Literature and history were introduced even at Harvard. Logic was studied as a key to understanding the scriptures but evolved so that it became more readily applied to human affairs. The early studies of science were dominated by recourse to authority; the works of Aristotle were scanned for reference to physical phenomena. As the era progressed, however, the teachers of science became more ready to base their curriculum on observation and experimentation. Languages that were studied as a way of learning literature and philosophy evolved so that they became objects of study in their own right. By the middle of the eighteenth century the classics were still at the core of the collegiate experience, but the study of political philosophy and science in the form of astronomy, mathematics, physics, chemistry, and geology was present in all the institutions. The establishment of professorships in the various disciplines revealed how the curriculum was splitting. Yale had both apparatus for teaching science and a professor of divinity, suggesting that the college leaders recognized the necessity for separating these areas of thought.

Throughout the era, issues of freedom of thought and the value of experience over authority were at the heart of the curricular battles. The Scottish universities had been reforming themselves

throughout the eighteenth century and were becoming influential on the form of the colleges in the colonies. They had begun assigning specific subjects to professors, thus laying the foundation for academic specializations. They were also breaking away from the idea of a prescribed curriculum, with each student studying the same subjects, and they were adding scientific studies. William and Mary had been founded as an Anglican institution, but because its first president had come from the University of Edinburgh, its curriculum was never as strict as that in the New England institutions. The first provost at the College of Philadelphia was also influenced by the Scotch; he had attended the University of Aberdeen. The very idea that curriculum had to be justified as being for practical use effected other changes. At King's College and the College of Philadelphia, navigation, geology, the study of government, and mathematics was central. It pushed divinity and the classics to the side. A broader curriculum that tended away from a primary reliance on deductive reasoning was emerging.

Instruction

Methods of instruction are central to studies of curriculum. Not only what is taught but how it is taught is at the core of the collegiate experience. Complete descriptions of teaching methods are not available, but the pedagogy of the time can be pieced together from reports of students describing their experiences in the classes, the rules governing instruction, and the reminiscences of the tutors.

Grammar was learned through memorization and analogical reasoning. Classifications of words, paradigms for declension and conjugation, and syntactic structures had to be learned by heart. Long passages or even the complete speeches of celebrated orators were assigned to students who then had to repeat them. More advanced students were required to compose their own orations. The study of rhetoric included training in the finding of suitable subject matter, arranging a declamation, memorizing material, and developing the style and form of delivery. The students might construct their own

speeches by taking extracts from the texts they were using. Education in rhetoric balanced reading and memorization with composition and performance.

Until the latter part of the era few textbooks had been written especially for college teaching. The tutors lectured, the students gave recitations, and readings were assigned in whatever books the college was able to acquire for its small library. Some of the professors gave laboratory demonstrations, and a few may have used a Socratic method. The paucity of books made the tutors and eventually the professors primary. The president lectured as well. When textbooks did appear they reflected ideas of the Enlightenment; written in English, they were thus subversive of Latin as the language of instruction.

Each of the colleges had a library, often with the core collection donated by a local book collector. Except for Harvard's twelve thousand volumes, the holdings averaged around two thousand. Most of the books were reprints of classical texts. Shores (1966) calculated the average annual rate of accessions to be less than one hundred volumes, some funded by student fees. The risk of fire or water damage was high.

Although much instruction, especially in the early years, was in Latin, few students spoke it outside of class. Most could no more speak Latin than can contemporary students who have studied a year or two of a modern foreign language speak readily in that language. Writing in Latin was similarly difficult for the students. The students may have been expected to read classics in the original, but translation guides in English were usually available. Students were supposed to be able to translate from Greek to Latin to Hebrew to English and so on, but few could do more than parrot the passages in the various languages. A professorship in Hebrew was established at Harvard in 1764, but "by 1775 the subject was almost extinct at Yale" (Meriwether, 1907, p. 108).

Scholasticism, a medieval philosophy centering on traditional teachings and doctrines, undergirded instruction that valued arguments based on authority. An archaic form of pedagogy, dispu-

tation clashed with the notion of experimentation and free inquiry as ways of discerning knowledge, but it held on throughout the era, possibly because it was popular, fitting the enthusiasms of young boys who may have seen it as verbal fighting in the classroom. Argument from authority, vehement rhetoric, and declamations all blended with the boyish desire to harangue in ringing terms. (Today we would call it an in-your-face method.) The intention was to see who could argue most convincingly.

What wonderful questions they argued: "Can the rite of baptism be performed with air, sand, or earth; with beer, fishbroth, rosewater as well as with water? What is the interior structure of Paradise? Why did Adam eat an apple instead of a pear?" (Meriwether, 1907, p. 231). Harvard demanded two disputes a week from students in the first three classes and one a week from the seniors. Disputation was even part of the entrance examination. The rules were carefully spelled out in great detail, specifying exactly how the adversaries should conduct themselves.

As the Colonial Era wore on, the disputation topics moved toward societal issues: "Is civil government absolutely necessary for men? Does a college education incapacitate a man for commercial life? Is the voice of the people the voice of God?" (Meriwether, 1907, p. 239). Science also fell into the list of topics: "Is the starry heaven made of fire? Is the earth the center of the universe? Were the aborigines of America descended from Abraham?" (p. 249). And so on through physiology ("Does the heart make blood?") and law ("Is extortion becoming a lawyer?") and ethics ("Is matrimony necessary to the safety of the state?") (p. 250). Student debates were featured in graduation ceremonies. A characteristic exercise was to give a thesis to two students who would apply their powers of deduction to establish its validity. Such topics as "prudence is the most difficult of virtues" would be brought forward, with the graduating students putting on a show at commencement time.

The reliance on a pedagogy centering on scholasticism grew steadily weaker throughout the era as students began studying empirical methods. Astronomy changed as students began studying

the Copernican system, wherein the earth spins on its axis and the planets revolve around the sun, instead of the Ptolemaic system in which the earth was thought to be the center of the universe. But the old methods of learning from authority died hard and could be observed for more than a century after experimental science entered. Furthermore, the scholastic method was based on the rigor of logic and a reliance on rhetoric—two ways of organizing and displaying learning that served well for their time.

Gradually the new pedagogy of experiments and experimental evidence became prominent. Descartes, Bacon, Newton, Locke, and Hume were being studied. The colleges now had telescopes and other scientific apparatus. Mathematics evolved to become a foundation for surveying and navigation. Early experiments with electricity were conducted. By the end of the era the philosophy of experience and experiment had pushed scholasticism quite to the side; if not for the religious tradition it would have disappeared even earlier. Instruction was being carried on in English, and even at Harvard and Yale—the colleges that clung to Latin the longest—the ancient language had weakened its hold on students and faculty alike. Latin would have disappeared completely except that many of the available books were written in Latin. Instruction in Hebrew was no longer required, and consequently the language was used only at ceremonial occasions.

The classics survived, and even though science was clearly in the ascendancy at the end of the era, Greek and Latin texts were still being studied. The rationale for reading those texts had shifted. Studying the classics in the original Greek and Latin had replaced the texts emanating from the church. The humanists were the progressives of the time, arguing against strictly religious studies. They held sway through much of the era, even as engineering, navigation, and modern foreign languages were being introduced. The evolution of curriculum in the Colonial Era is shown in the change from a curriculum based on church doctrine, to one based on secular humanism revealed through Greek and Latin texts, to one in which

science replaced divine revelation as the ultimate standard. Each in its time had been justified as practical: the teachings of authority represented orthodoxy and were necessary to bring young people into understanding Church doctrine and to leading a blameless life; humanistic studies, classical Greek, and Latin were necessary to demonstrate how the Protestant churches had broken from medieval orthodoxy and were certainly important for people who would display the garb of erudition; science was the foundation of engineering, hence necessary for people who would go into the emergent professions; study of language and literature would well fit the incipient statesmen and lawyers. Faith in the power of science, the reformation of social institutions, and belief in the intrinsic goodness of man were making their mark.

Governance

The governance of colonial institutions foreshadowed issues of governance in higher education throughout its history. The colleges were founded with a combination of public and private control, with a tilt toward the latter; the extent of influence by the lay board and the members appointed by the colonial court or legislature was always an issue. Similarly, the extent of control to be exerted by the board of trustees, as contrasted with the members of the college community itself, was always in question, although the board was certainly in control of all the important issues. The dominant president dates from the Colonial Era—a president appointed by the board and responsible to it alone.

These governance features came about because of the time when the colonial colleges were established and the peculiarities of the English colonies in America. In Europe the universities had evolved from self-governing groups of teachers and students or from within a court or church hierarchy itself. In the self-governing institutions, the masters and students received charters similar to those granted to the medieval guilds. The university properties and management

were quite modest. But in the colonies there was no class of faculty, masters, teachers, or professors to organize its own institutions. The colleges founded in the Colonial Era were governed by outsiders—boards of overseers that were made up of clergymen or magistrates. The only teacher represented in the governing body was the president, and even he served at the pleasure of the board. Subsequently, when the colleges were incorporated, the notion of adding faculty as members of a governing body was raised. However, the faculty were never in a position of power and certainly far from having self-governing status. The combination of lay boards of trustees, strong presidents, a weak professoriate, and the absence of a central ministry of higher education throughout American history served to perpetuate the governance patterns that were established early on.

A short review of the governing principles in some of the colonial institutions serves to illustrate the nature of governance. The General Court (that is, the legislature) in the Massachusetts Bay Colony agreed to establish Harvard and in 1639 arranged for a committee of overseers to be the initial governing body. Members of this committee included the governor, deputy governor, and treasurer of the colony as well as three magistrates and six ministers. The overseers were not actually a governing board but were subject to the General Court, which itself hired the first president of the institution. This president taught the entire curriculum on his own and presided over the first graduation with no explicit authority until the General Court granted a college charter in 1650.

Under the charter a corporation consisting of the president, fellows, and treasurer was formed. As a corporate body it had the right to self-succession and to hold property, appoint other officers within the institution, and be exempt from taxes. However, the corporation exercised its rights only in the presence of the counsel and consent of the overseers who, after 1642, included the colonial governor and deputy governor along with the college president, nine assistants of the court, and nine pastors and teachers from adjoining towns. Thus, although Harvard had two governing

boards—one a lay group, the other comprising the college's administrators and faculty members—the lay board was clearly the controlling group.

The College of William and Mary, organized in Virginia toward the end of the seventeenth century, took a slightly different form. Virginia was a royal colony dependent on officials in London, and the colony itself was dominated by plantation owners, many of whom did not rank public education as a high priority. In 1691 the head of the Anglican church in Virginia traveled to London and, on behalf of the Virginia assembly, petitioned the bishops for a grammar school and a college. James Blair returned to Virginia with a charter authorizing eighteen Virginia gentlemen to act as college trustees. This board, whose members were called visitors, would be augmented by additional members nominated by the general assembly. The visitors were authorized to draw statutes for the college and to arrange for their own successors. They also were to form a corporation made up of the college masters. But the board of visitors could elect members of the corporation and in effect had far greater authority over the faculty than had been the tradition in European universities. Like the lay board at Harvard, William and Mary's lay board had ultimate power with the corporation subordinate to it.

The third colonial college, Yale, was formed by the Congregational ministers in Connecticut. The Connecticut General Court appointed ten clergymen as trustees to organize the institution. They were given the power to manage the funds and property, to appoint the college rector and officers, and to grant degrees or licenses. The 1701 charter thus established a college operating without the direct participation of secular officials, even though the General Court promised to grant an annual sum to sustain the institution.

Toward the middle of the eighteenth century the trustees were incorporated as "The President And Fellows Of Yale College" under a charter that gave the General Court the right to inspect the college laws and to disallow those they considered improper. The charter upheld the ultimate authority of the General Court but also

guaranteed the college's autonomy within certain limits. Because the ten trustees were still church ministers, the charter reaffirmed the original intention of the college planners to protect the established religion by keeping the secular authorities away from direct governance.

The charter of Rhode Island College, later Brown, similarly gave authority to a governing board that was made up of clergymen but had an ecumenical tone. The Baptists were a majority of the board, but positions were reserved also for Quakers, Congregationalists, and Episcopalians. The president was to be a Baptist. The Baptists dominated, not because they were the official religion of Rhode Island but because they outnumbered the other sects and were the original sponsors and chief supporters of the institution. The Rhode Island charter also stated that there should never be a religious test administered to anyone wanting to teach in or attend the college. Accordingly, the college developed as a blend of religious ecumenicalism with a strong tilt toward single-sect dominance in the governing board and in the person of the president.

The College of New Jersey, later Princeton, was organized under a charter granted by the king and approved by the colonial legislature. It advocated religious freedom, specifying that the masters and students be from any religious denomination. The trustees were required to take an oath of loyalty to the king and were entitled to receive land and funds from which they could draw their salaries and pay the president, tutors, and college officers. The trustees were responsible for employing the staff and were authorized to award degrees. Staff included not only the president but also tutors, professors, a treasurer, a clerk, an usher, and a steward.

Benjamin Franklin's plan for organizing the College of Philadelphia was not followed exactly, but it is notable for what it says about governance powers and the detail with which it specified institutional functions. The college was not to be church based but was to be formed by collecting money from a group of subscribers who would then choose trustees; the trustees in turn adopted a consti-

tution. The plan thus provided for the formation of an institution without seeking permission from any outside governmental authority. It specified everything from tuition to the appointment of faculty and the president, from plans for a library to rules for the deportment of students, from the management of funds to salaries to be paid to the staff. The trustees were to have power over all those functions and would also engage people who would teach modern foreign languages, writing, mathematics, and natural and “mechanical” philosophy (Franklin, [1749] 1931, p. 29). Franklin’s plan also provided for a variant curriculum with one program based on Latin and Greek, another on English. Here then was an early acknowledgment of the importance of having both traditional and modern programs in the same institution.

The colonial institutions reflected the social organization within the colonies: a major religion or combinations of sects; reliance on a legislative body for at least initial if not continuing control through appointing trustees; and funding to be derived from a combination of donations or subscriptions and legislative appropriations, supplemented by whatever tuition they could collect from the students. Some colleges received royal charters, and others began with charters issued by the colonial authorities. In three of the institutions—Harvard, William and Mary, and Brown—a dual governing structure was established in which the lay board of trustees shared power with an internal group of college fellows consisting of the president and members of the faculty. In the other six colleges the lay board had authority over all functions. The influence of organized religion was evident in the composition of the lay boards. Several of the charters provided for trustees to be drawn from certain religious denominations, but none required that control remain in the hands of the founding denominations. Only three specified that the college president be a member of a particular religious group.

Perhaps most in contrast to European institutions, the American college president was the unquestioned authority. He was the liaison between members of the college and the governing board and

was responsible for all college operations. Most of the presidents were ministers who taught classes, raised money, recruited and disciplined students, and presided over all college functions. Much of their energy was devoted to ensuring that the college had enough students and funds to sustain itself. Many were homegrown; Harvard had six presidents in its first fifty years, four of whom were alumni of the institution. Many of the presidents of other colleges had been trained in Scotland, including the founding leaders of William and Mary, the College of Philadelphia, and the College of New Jersey.

Whether or not one religious denomination was dominant in a colony, the colleges tended to emphasize interdenominational freedom. Harvard, William and Mary, and Yale had been founded with an emphasis on preparing ministers, but in their original charters several of them mentioned the importance of interdenominationalism: “those of every Religious Denomination may have free and Equal Liberty and Advantage of Education in the Said College” (Princeton), and “all the members hereof shall forever enjoy full, free, *absolute, and uninterrupted* liberty of conscience” (Brown) (Hofstadter and Smith, 1961, pp. 83, 135). As Herbst (1981) notes, “It was a case where the religion of the people rather than of the sovereign determined the religion of the college” (p. 46).

In summation, regardless of whether the colleges were established indigenously or by the granting of a royal charter, the concept of the lay board of governors was part of the system. In the subsequent history of college governance, the major change was that the social composition of boards shifted as clergymen were replaced by businessmen and politicians. Even though the faculty subsequently gained a measure of self-governance, taking charge of curriculum and admissions requirements, they never gained more than token representation on the boards of trustees. And when the first state universities were organized soon after the formation of the United States, their governance followed the pattern established previously: lay boards were responsible for fiscal matters and for

appointing a president answerable to the board who would manage the day-to-day affairs of the institution. The main difference in the state institutions was that church influence on the governing board and curriculum was abolished. Otherwise, these institutions functioned quite as did their private predecessors.

Finance

How could the colleges sustain themselves? In general they depended on voluntary contributions and on combinations of funds coming from various other sources. Funds were received from sponsoring church groups, from subscribers or private donors, and from governmental bodies. This combination of public and private financing led Rudolph (1962, p. 13) to coin the term *state-church colleges* to describe Harvard, William and Mary, and Yale, which were the first three.

Harvard received money from the Massachusetts General Court, including a tax levee and a donation of land. The court also assigned revenues from the Charlestown Ferry; years later when the ferry was replaced by a toll bridge, Harvard continued to receive revenue from it. The college itself was named for the Reverend John Harvard, who contributed money and what was then a sizable library of four hundred books. In the latter years of the seventeenth century, more than half of Harvard's annual income was provided by the government, less than 10 percent from tuition.

When William and Mary was chartered in 1693 the Virginia legislature awarded funds to it from a tax on tobacco and from export duties on furs. Subsequently, monies from a tax on peddlers were granted to it. As additional evidence of legislative support, the students were granted immunity from taxes and military service.

Exemption from taxes and military service was granted also to students at Yale as a way of making the college more attractive to the young people it was trying to enroll. The Connecticut General

Court also donated special funds from time to time. The institution was named in honor of Elihu Yale, who donated goods that yielded an endowment of around five hundred pounds, a goodly sum at a time when fifty or sixty pounds might support the entire staff for a year.

The College of New Jersey (Princeton) and Queen's College (Rutgers) did not receive regular financial support from the legislature, although they and the other colleges that were formed in the middle of the eighteenth century might appeal for ad hoc donations from time to time. Legislative support was capricious anyway because when a colonial assembly became dissatisfied with a college, it might reduce or omit an annual appropriation. Still, the colonies had a hand in assisting most of the institutions—some by donations of land, which they had in surplus. And the colonies helped in other ways, such as by granting permission for the colleges to operate lotteries.

The College of Philadelphia received funds from individual subscribers to get it started. Around four hundred pounds total was pledged per annum for the first five years by twenty-five donors, Benjamin Franklin among them. Even so, in most of the colonies substantial donations were hard to attract, and the colleges had to depend on student fees for their survival. A family that could afford to send its sons away to school could usually also spare some money for tuition. Fees, room, and board ranged from ten to fifty pounds, at a time when a journeyman mechanic earned fifty pounds per year and a prosperous attorney from two hundred to three hundred pounds. Obviously, college was not for the sons of the poor. However, few students were expelled if they could not pay the tuition; the notion of work-study was in place early on.

Thus the pattern of funding from multiple sources was established. Philanthropy—regular or occasional support from legislative bodies, tuition, and individual college fundraising efforts—played a part. None of the colonial colleges were well endowed; the pat-

tern of trying to raise money continually, of spending all that could be raised, and of living in genteel poverty continued well into the future of practically all the colleges in the nation.

Outcomes

The few extant colleges with their small numbers of students—a minuscule portion of the population—were certainly less influential than the churches of the era, but some effects are apparent. These include career preparation, individual mobility, assistance in child rearing, the idea of the institution as an archive, and such intangibles as community pride.

Career preparation is especially notable in two areas: preparation for the ministry and for public service. Although many graduates became neither ministers nor public servants, a high proportion entered those callings. In the early years of Harvard and Yale, more than half their graduates became ministers, a percentage that dropped to about one-third by the end of the Colonial Era. Although this group did not account for the majority of the people who took up pulpits, it was a force because many of the alumni returned to the institution as tutors while they were awaiting reassignment and because ministers who had been college trained were often selected for the most prestigious church positions. The college function of preparing students for the ministry dropped as a percentage of the whole as new colleges were opened and new programs were added, but it remained significant; as late as the Civil War, 20 percent of the Yale graduates were ministry-bound.

The graduates of the other colonial institutions were less likely to enter the ministry. A record exists of the progress of students at King's College, which admitted between six and eleven young men in each of its early years. Few of those students completed the course of study; they went into business or into the army; they left because of illness or transferred to other institutions. One student "after

three years went to nothing” (Schneider and Schneider, 1929, p. 244). These different career outcomes reflect the different orientation of King’s, as well as some of the other institutions that had less stringent church affiliations than Harvard and Yale.

A sizable proportion of graduates became influential in public service. Fewer than five thousand people graduated from the nine colonial colleges during their entire period of existence, but twenty-five of the fifty-six signers of the Declaration of Independence and thirty-one of the fifty-five members of the Constitutional Convention were lawyers, along with ten of the first twenty-nine U.S. senators and seventeen of the first sixty-five congressmen. Not all the lawyers had graduated college, and some had been trained in England, but in an era when the colleges awarded approximately one bachelor’s degree per year per twenty-five thousand people, their influence was well out of proportion to their size. Five of the first six presidents of the United States were college trained—the two Adamses at Harvard, Jefferson and Monroe at William and Mary, and Madison at Princeton. Several justices of the Connecticut Supreme Court were Yale graduates. William and Mary produced the first president of the Continental Congress, the principal author of the Declaration of Independence, a delegate to the Constitutional Convention, several senior officers in the Continental Army, a chief justice, a governor of Maryland, the first governor of Virginia, and several early congressmen. This suggests not only the importance of the early colleges but also that the nation was founded by an educated minority whose writings evidenced their dedication to classical and contemporary political philosophy.

The graduates who entered civil service, the ministry, or other activities, were similar in many respects. The distinction between one profession and another or between people in the professions and those who were managing estates or businesses was not nearly as clear as it would become later. The curriculum was not distinguished by barriers between academic disciplines. Young men stud-

ied the liberal arts along with science, classics, and classical languages. On a continent where social and professional roles were not rigidly differentiated, the manner of preparing people for particular callings was not differentiated either.

People had to be versatile. Men prepared for the ministry often entered public service or managed estates. Most changed vocations as opportunity or circumstances beckoned. The colleges prepared learned men, using a liberal arts curriculum that was considered the best preparation for people who would take their place in any walk of society. Specialized curriculum for any endeavor was slow to develop. A curriculum centering on rhetoric, the classics, and grammar was useful for ministers, lawyers, or statesmen, all of whom frequently embellished their arguments with quotations from the ancients. The importance of rhetoric alone cannot be discounted as an essential for politics and the pulpit.

Individual mobility was enhanced through college attendance. The colonial institutions brought the young person into society in a fashion similar to the function that later institutions sustained. At issue was the proper way of rearing children. Could a family raise sons with all of the necessary skills and connections that an aspiring member of the elite should have? Many could not, and they depended on a college to properly prepare their sons.

The early colleges created several arrangements to acculturate their charges. The living quarters included tutors as male role models and, because the students lived together, peer pressure was strong. Students met others who could help them with social connections; a sample of students from Princeton, Philadelphia, and King's suggests that around one-fourth of them married sisters of classmates or daughters of trustees or college presidents. These personal connections led also to beneficial apprenticeships as the students met professional people who helped them connect with the proper physicians or attorneys with whom they might study (Vine, 1997). Elaborate graduation ceremonies were another way that students connected with the community. Commencement exercises

were a rite of passage, and the new colleges that were formed at the latter part of the Colonial Era all had rules about conducting the ceremonies written into their charters.

The colonial colleges were only marginally connected with the advancement of knowledge. They did serve as archives because they had libraries and because their curriculum tended to perpetuate knowledge. But they were far from being centers of scholarship and research. Nor was there much interaction among professors at different institutions; more likely, the discussions about scientific research or philosophy took place in learned societies such as the Boston Philosophical Society and the Philadelphia-based American Philosophical Society. Various other specialized societies were formed outside the colleges in the Colonial Era; prominent among these were marine societies in Boston and Salem.

The colleges continually strived to demonstrate their value to the broader community. They petitioned repeatedly for public funds and wrote into their charters or regulations promises that they would fit young people for public employment. Certainly the colleges were valuable because of the status that was gained by someone who became conversant with the classics. Communities took pride in the number of erudite people among them. Even though the degree was not required for any particular vocation, a community with a number of college graduates serving as teachers, ministers, lawyers, and members of the town council was considered to be of high social status. Liberal education had a connection with community mores.

Thus the colleges provided an avenue of mobility for young men, prepared ministers and public servants, and assisted in the formation and maintenance of an elite group of public servants at a time when there was no specialized training for government, teaching, librarianship, or medical practice. Overall they served as symbols of community pride; an institution distinguished a civilized community from an unlettered settlement in the wilderness.