

13 Big Issues for Higher Education

HIGHER EDUCATION HAS ENTERED A NEW ERA. Across the country, colleges and universities have been changing rapidly in size, shape, and purpose. And no one can predict where or when the changes will end.

Much of the current debate about higher education is prompted by its success. A century ago, less than 2 per cent of the nation's college-age population actually were enrolled in a college; today, about 35 per cent of the age group are enrolled, and by the turn of the century more than half are expected to be on campus.

The character of higher education also is changing. In 1950, some 2 million students were on campus—about evenly divided between public and private institutions. Today there are 8.5 million students—but three in every four are in public colleges or universities. Higher education today is no longer the elite preserve of scholars or sons of the new aristocracy. It is national in scope and democratic in purpose. Although it still has a long way to go, it increasingly is opening up to serve minorities and student populations that it has never served before.

The character of higher education is changing far beyond the mere increase in public institutions. Many small, private liberal arts or specialized colleges remain in the United States; some are financially weak and struggling to stay alive, others are healthy and growing in national distinction. Increasingly, however, higher education is evolving into larger education, with sophisticated networks of two-year community colleges, four-year colleges, and major universities all combining

the traditional purposes of teaching, research, and public service in one system. The 1,500-student campus remains; the 40,000-student campus is appearing in ever-greater numbers.

SUCH EXPANSION does not come without growing pains. Higher education in this country is losing much of its mystique as it becomes universal. There are no longer references to a "college man." And society, while acknowledging the spreading impact of higher education, is placing new demands on it. Colleges and universities have been the focal point of demands ranging from stopping the war in Southeast Asia to starting low-cost housing at home, from "open admissions" to gay liberation. Crisis management is now a stock item in the tool kit of any capable university administrator.

The campus community simply is not the same—geographically or philosophically—as it was a decade ago. At some schools students sit *in* the president's office, at others they sit *on* the board of trustees. Many campuses are swept by tensions of student disaffection, faculty anxieties, and administrative malaise. The wave of disquiet has even crept into the reflective chambers of Phi Beta Kappa, where younger members debate the "relevance" of the scholarly organization.

At a time when all the institutions of society are under attack, it often seems that colleges and universities are in the center of the storm. They are trying to find their way in a new era when, as "the Lord" said in Green Pastures, "everything nailed down is coming loose."

A Special Report

What Is the Role of Higher Education Today?

"Universities have been founded for all manner of reasons: to preserve an old faith, to proselytize a new one, to train skilled workers, to raise the standards of the professions, to expand the frontiers of knowledge, and even to educate the young."—Robert Paul Wolff, *The Ideal of the University*.

AS HIGHER EDUCATION GROWS in public visibility and importance, its purpose increasingly is debated and challenged.

It is expected to be all things to all people: A place to educate the young, not only to teach them the great thoughts but also to give them the clues to upward mobility in society and the professions. An ivory tower of scholarship and research where academicians can pursue the Truth however they may perceive it. And a public service center for society, helping to promote the national good by rolling forward new knowledge that will alter the shape of the nation for generations to come.

THE ROLE of higher education was not always so broad. In 1852, for example, John Henry Cardinal Newman said that a university should be "an Alma Mater, knowing her children one by one, not a foundry or a mint or a treadmill." In those days a university was expected to provide not mere vocational or technical skills but "a liberal education" for the sons of the elite.

In later years, much of university education in America was built on the German model, with emphasis on graduate study and research. Johns Hopkins, Harvard, Yale, and Stanford followed the German example. Liberal arts colleges looked to Britain for many of their models.

The explosion of science and the Congressional passage of the Land-Grant Act also created schools to teach the skills needed for the nation's agricultural and industrial growth.



Colleges and universities started training specialists and forming elective systems. The researcher-teacher emerged with an emphasis on original investigation and a loyalty to worldwide discipline rather than to a single institution. Through the first two-thirds of this century there occurred the triumph of professionalism—what Christopher Jencks and David Riesman call "the academic revolution."

TODAY it is difficult—if not impossible—for most colleges and universities to recapture Cardinal Newman's idea that they know their children "one by one." The impersonality of the modern campus makes many students, and even some faculty members and administrators, feel that they are like IBM cards, or virtually interchangeable parts of a vast system that will grind on and on—with or without them.

Still, the basic role of a college or university is to teach and, despite the immensity of the numbers of students crowding through their gates, most manage to perform this function.

There is a growing belief, however, that higher education is not as concerned as it might be with "learning"; that the regurgitation of facts received in a one-way lecture is the only requirement for a passing grade.

Faculties and students both are trying to break away from this stereotype—by setting up clusters of small colleges within a large campus, by creating "free" colleges where students determine their own courses, and by using advanced students to "teach" others in informal settings.

There is little question that students do "know" more now than ever before. The sheer weight of knowledge—and the means of transmitting it—is expanding rapidly; freshmen today study elements and debate concepts that had not been discovered when their parents were in school. At the other end of the scale, requirements for advanced degrees are ever-tighter. "The average Ph.D. of 30 years ago couldn't even begin to meet our requirements today," says the dean of a large mid-western graduate school.

The amount of teaching actually done by faculty members varies widely. At large universities, where faculty members are expected to spend much of their time in original research, the teaching load may drop to as few as five or six hours a week; some professors have no teaching obligations at all. At two-year community colleges, by comparison, teachers may spend as much as 18 hours a week in the classroom. At four-year colleges the average usually falls between 9 and 16 hours.

THE SECOND MAJOR ROLE of higher education is research. Indeed, large universities with cyclotrons, miles of library stacks, underwater laboratories, and Nobel laureates on their faculties are national resources because of their research capabilities. They also can lose much of their independence because of their research obligations.

Few colleges or universities are fully independent today. Almost all receive

money from the federal or state governments. Such funds, often earmarked for specific research projects, can determine the character of the institution. The loss of a research grant can wipe out a large share of a department. The award of another can change the direction of a department almost overnight, adding on faculty members, graduate students, teaching assistants, and ultimately even undergraduates with interests far removed from those held by the pre-grant institution.

There is now a debate on many campuses about the type of research that a university should undertake. Many students, faculty members, and administrators believe that universities should not engage in classified—*i.e.*, secret—research. They argue that a basic objective of scholarly investigation is the spread of knowledge—and that secret research is antithetical to that purpose. Others maintain that universities often have the best minds and facilities to perform research in the national interest.

The third traditional role of higher education is public service, whether defined as serving the national interest through government research or through spreading knowledge about raising agricultural products. Almost all colleges and universities have some type of extension program, taking their faculties and facilities out into communities beyond their gates—leading tutorials in ghettos, setting up community health programs, or creating model day-care centers.

THE ROLE of an individual college or university is not established in a vacuum. Today the function of a college may be influenced by mundane matters such as its location (whether it is in an urban center or on a pastoral hillside) and by such unpredictable matters as the interests of its faculty or the fund-raising abilities of its treasurer.

Those influences are far from constant. A college founded in rural isolation, for example, may find itself years later in the midst of a thriving

suburb. A college founded to train teachers may be expanded suddenly to full university status within a new state system.

As colleges and universities have moved to center stage in society, their roles have been prescribed more and more by "outsiders," people usually not included in the traditional academic community. A governor or state legislature, for example, may demand that a public university spend more time and money on teaching or on agricultural research; a state coordinating agency may call for wholesale redistribution of functions among community colleges, four-year colleges, and universities. Or Congress may launch new programs that change the direction of a college.

At such a time there is little for higher education to do but to continue what it has always done: adapt to its changing environment. For colleges and universities are not independent of the society that surrounds them. Their fate and the fate of society are inseparable.

What's the Best Way to Teach - and to Learn?

OVER THE YEARS, college teaching methods have been slow to change. The lecture, the seminar, and the laboratory were all imported from Europe after the Civil War—and they remain the hallmarks of American higher education to this day.

Some colleges, however, are sweeping the traditions aside as they open up their classrooms—and their curricula—to new ways of teaching and learning. The key to the new style of education is flexibility—letting students themselves set the pace of their learning.

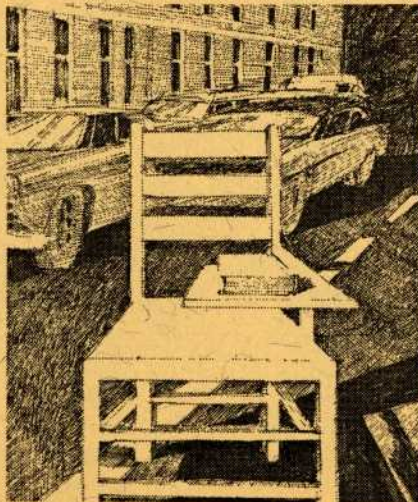
One of the most exciting experiments in the new way of learning is the University Without Walls, a cooperative venture involving more than 1,000 students at 20 colleges. Students in uww do most of their learning off campus, at work, at home, in inde-

pendent study, or in field experience. They have no fixed curriculum, no fixed time period for earning a degree. They work out their own programs with faculty advisers and learn what

they want. Their progress can be evaluated by their advisers and measured by standardized tests.

The students in uww, of course, are hardly run-of-the-mill freshmen. They include several 16-year-olds who haven't finished high school, a 38-year-old mother of three who wants to teach high school English, and a 50-year-old executive of an oil company. Their participation underscores a growing belief in American higher education that learning is an individualized, flexible affair that does not start when someone sits in a certain classroom at a fixed time or stop when a certain birthday is passed.

The uww experiment is financed by the Ford Foundation and the U.S. Office of Education and sponsored by the Union for Experimenting Colleges & Universities. Smaller-scale attempts to launch systems of higher education



Higher Education's Soaring Seventies

ENROLLMENT

	Fall 1969	Fall 1979
Total, all institutions	7,917,000	12,258,000
Public	5,840,000	9,806,000
Private	2,078,000	2,451,000
Degree-credit	7,299,000	11,075,000
Public	5,260,000	8,671,000
Private	2,040,000	2,403,000
4-year	5,902,000	8,629,000
2-year	1,397,000	2,446,000
Men	4,317,000	6,251,000
Women	2,982,000	4,823,000
Full-time	5,198,000	7,669,000
Part-time	2,101,000	3,405,000
Undergraduate	6,411,000	9,435,000
Graduate	889,000	1,640,000
Non-degree-credit	618,000	1,183,000

STAFF

	1969-70	1979-80
Total, professional staff	872,000	1,221,000
Instructional staff	700,000	986,000
Resident degree-credit	578,000	801,000
Other instruction	122,000	185,000
Other professional staff	172,000	235,000
Administration, services	91,000	124,000
Organized research	80,000	112,000
Public	589,000	906,000
Private	282,400	316,000
4-year	749,000	1,011,000
2-year	122,400	211,000

EXPENDITURES

(in billions of 1969-70 dollars)

	1969-70	1979-80
Total expenditures from current funds	\$21.8	\$40.0
Public institutions	13.8	26.8
Student education	8.6	16.9
Organized research	1.8	2.8
Related activities	0.8	1.8
Auxiliary, student aid	2.6	5.3
Private institutions	8.0	13.2
Student education	4.1	6.5
Organized research	1.7	2.9
Related activities	0.4	0.6
Auxiliary, student aid	1.8	3.2
Capital outlay from current funds	0.5	0.5

STUDENT CHARGES

(tuition, room, and board in 1969-70 dollars)

	1969-70	1979-80
All public institutions	\$1,198	\$1,367
Universities	1,342	1,578
Other 4-year	1,147	1,380
2-year	957	1,166
All private institutions	\$2,520	\$3,162
Universities	2,905	3,651
Other 4-year	2,435	3,118
2-year	2,064	2,839

EARNED DEGREES

	1969-70	1979-80
Bachelor's and 1st prof.	784,000	1,133,000
Natural sciences	176,880	239,130
Mathematics, statistics	29,740	52,980
Engineering	41,090	50,410
Physical sciences	21,090	18,070
Biological sciences	37,180	62,990
Agriculture, forestry	11,070	9,390
Health professions	33,600	41,970
General science	3,110	3,320
Social sci., humanities	607,120	893,870
Fine arts	52,250	77,860
English, journalism	62,840	116,840
Foreign languages	23,790	57,150
Psychology	31,360	60,740
Social sciences	149,500	273,190
Education	120,460	114,170
Library science	1,000	1,580
Social work	3,190	4,100
Accounting	20,780	29,780
Other bus. & commerce	81,870	91,920
Other	60,080	66,540
Master's	219,200	432,500
Natural sciences	46,080	88,580
Mathematics, statistics	7,950	23,290
Engineering	16,900	30,750
Physical sciences	6,300	6,210
Biological sciences	6,580	15,060
Agriculture, forestry	2,680	3,030
Health professions	4,570	7,940
General science	1,100	2,300
Social sci., humanities	173,120	343,920
Fine arts	13,850	27,120
English, journalism	10,890	28,420
Foreign languages	6,390	22,180
Psychology	4,700	12,910
Social sciences	20,970	51,100
Education	71,130	90,160
Library science	7,190	19,280
Social work	5,960	17,700
Accounting	1,490	2,980
Other bus. & commerce	22,950	61,750
Other	7,600	10,320
Doctor's (except 1st prof.)	29,300	62,500
Natural sciences	14,100	32,120
Mathematics, statistics	1,350	3,970
Engineering	3,980	12,650
Physical sciences	4,220	6,870
Biological sciences	3,410	7,310
Agriculture, forestry	800	730
Health professions	310	510
General science	30	80
Social sci., humanities	15,200	30,380
Fine arts	990	1,330
English, journalism	1,310	2,880
Foreign languages	860	2,210
Psychology	1,720	3,470
Social sciences	3,550	6,990
Education	5,030	10,350
Library science	20	40
Social work	100	220
Accounting	50	100
Other bus. & commerce	620	1,710
Other	950	1,080

SOURCE: U.S. OFFICE OF EDUCATION

involving "external degrees" and "open universities" are sprouting across the country.

THE NEW TREND to flexibility started by killing the old notion that all students learn the same way at the same time. With that out of the way, colleges have expanded independent study and replaced many lectures with seminars.

Some colleges have moved to the ultimate in flexibility. New College, in Florida, lets a student write his own course of study, sign a "contract" with a faculty adviser, and then carry it out. Others give credit for work in the field—for time at other universities, traveling, working in urban ghettos or AEC laboratories. Still more are substituting examinations for hours of classroom attendance to determine what a student knows; some 280 students at San Francisco State, for example, eliminated their entire freshman year by passing five exams last fall.

Another trend is the increasing use and availability of technology. At Simon Fraser University in British Columbia, among other institutions, students can drop into a bioscience lab at any time of day, go to a booth, turn on a tape recorder, and be guided through a complicated series of experiments and demonstrations. The student there has complete control of the pace of his instruction; he can stop, replay, or advance the tape whenever he wants. One result of the program: students now spend more time "studying" the course than they did when it was given by the conventional lecture-and-laboratory method.

The computer holds the key to further use of technology in the classroom. The University of Illinois, for example, is starting Project Plato, a centralized computer system that soon will accommodate up to 4,000 users at stations as far as 150 miles from the Champaign-Urbana campus. Each student station, or "terminal," has a keyset and a plasma panel, which looks like a television screen. The student uses the keyset to punch out questions and answers, to set up experiments, and to control his progress. The computer responds to his direc-

tions within one-tenth of a second.

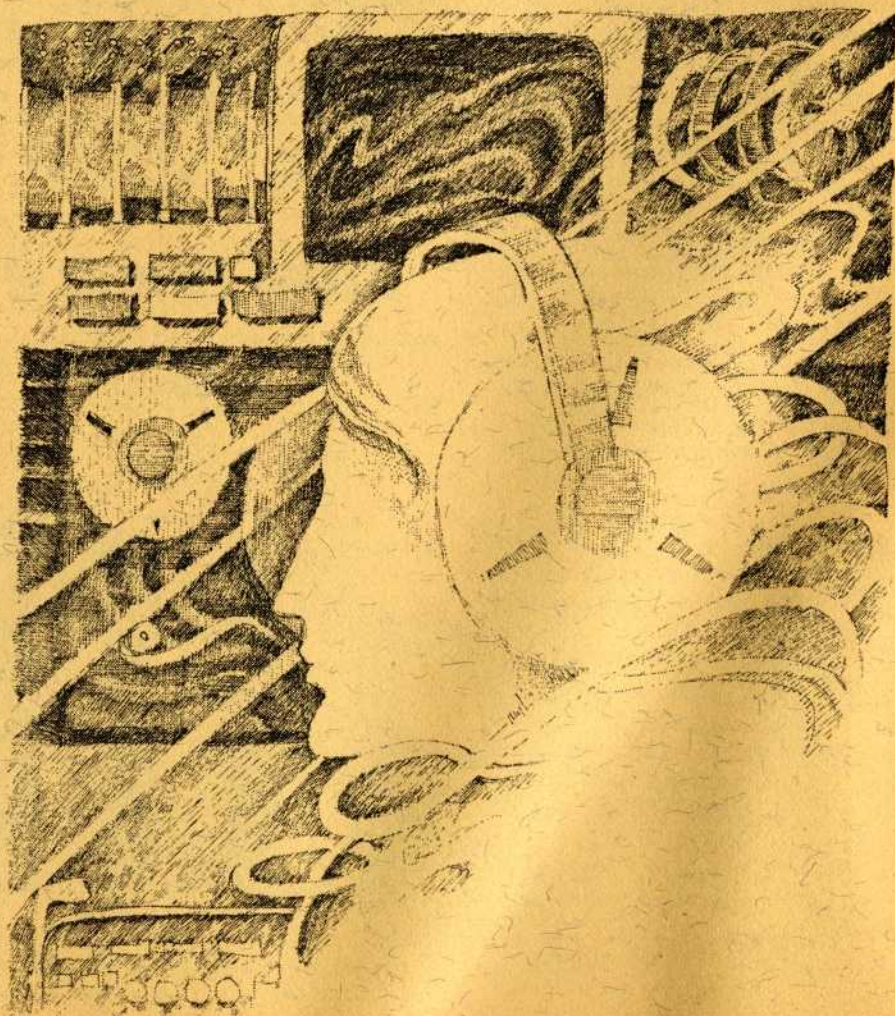
Computers are still too expensive an instructional tool for some colleges. Eventually, however, they should make education considerably more open and available than it is today. Instruction can be wired into homes and offices; students can learn where and when they want.

Technology itself, of course, will never replace the traditional forms of education—the face-to-face contact with professors, the give-and-take of seminars, the self-discovery of the laboratory. Technology, however, will augment other forms of formal instruction, widening the range of alternatives, gearing the educational process more to the choice of the student, opening the system to new students.

What are the implications of technology for the colleges themselves? Most of the new technology requires large capital investments; it is still

too expensive for hard-pressed institutions. But there may be ways that flexibility can be fiscally efficient and attractive.

Last summer, Howard R. Bowen, chancellor of the Claremont University Center, and Gordon Douglass, professor of economics at Pomona College, issued a report on efficiency in liberal arts instruction. They said that small liberal arts colleges could operate more effectively by diversifying their teaching methods. Their report suggested a plan under which 35 per cent of the teaching at a small college would be done in the conventional way, 25 per cent in large lectures, 15 per cent in independent study, 15 per cent in tutorials, and 10 per cent in machine-assisted study. Bowen and Douglass estimated that such a plan would cost \$121 per student per course—compared with \$240 per student now.



Should Campuses Get Bigger?

AT THE University of Illinois in Champaign-Urbana, midterm grades in some courses are posted not by the students' names but by their Social Security numbers. At Ohio State, a single 24-story dormitory houses 1,900 students—more than the total enrollment of Amherst or Swarthmore.

Across the country, colleges and universities are grappling with the problem of size. How big can a campus get before students lose contact with professors or before the flow of ideas becomes thoroughly clogged? How can a large campus be broken into smaller parts so students can feel that they are part of a learning community, not mere cogs in a machine?

Increasingly, parents and students are opting for larger campuses—both because large colleges and universities provide a good education and because they usually are state institutions with lower costs. A few years ago the National Opinion Research Center in Chicago conducted a national survey of the alumni class of 1961 and found that the graduates did not even have "much romanticism" about the advantages of small colleges. Only one-fourth of the respondents thought that a college with fewer than 2,000 students would be desirable for their oldest son—and only one-third thought it would be desirable for their oldest daughter.

SIZE is only one of several factors involved in choosing a college. Others include cost, distance from home, the availability of special courses, and counseling from relatives and friends. A choice based on these factors leads to a college of a certain size. Choosing a highly specialized field, or one requiring much laboratory research, usually will mean choosing a large school. Trying to save money by living at home might mean attending a public (and large) community college.

Large colleges, of course, have advantages—more books, more distin-

guished professors, more majors to choose from, more extracurricular activities. They also have longer lines, larger classes, and more demonstrations. Three years ago a study of student life at the University of California at Berkeley (pop. 27,500) by law professor Caleb Foote concluded with the opinion that human relationships there "tend to be remote, fugitive, and vaguely sullen." Students and faculty were so overwhelmed by the impersonality of the university's size, said Foote, that the school failed even to educate students to "respect the value of the intellect itself."

By comparison, relationships at small colleges are almost idyllic. For example, a study of 491 private, four-year nonselective colleges with enrollments under 2,500 found that students and faculty there usually are on familiar terms and tend to be absorbed in class work. "The environment," said the study's authors, Alexander Astin, director of research for the American Council on Education, and

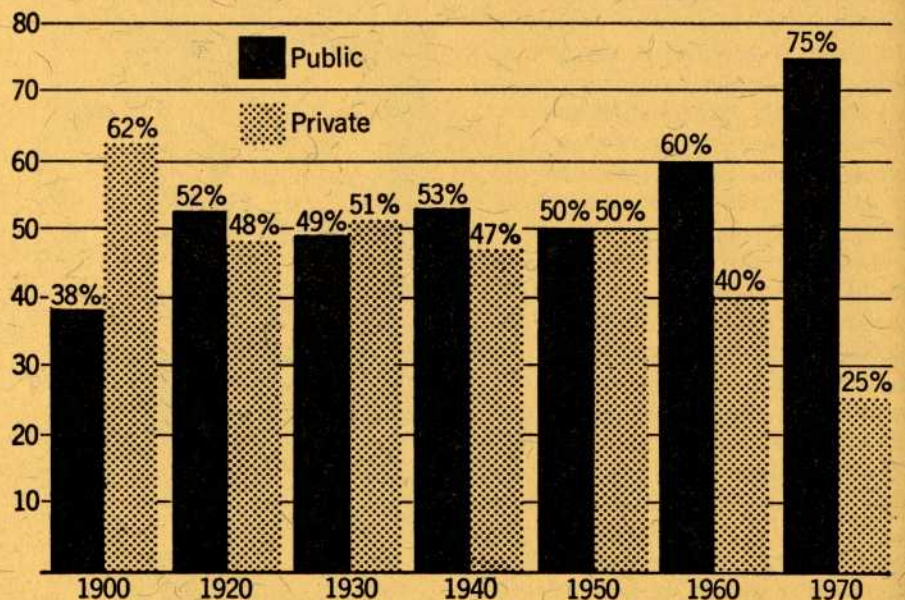
Calvin B. T. Lee, chancellor of the University of Maryland campus in Baltimore County, "is cohesive, and the administration is concerned about them as individuals."

THE GREATEST PROBLEM is to strike a balance, to make the campus big enough to enjoy the advantages of size but small enough to retain the human qualities. "I guess the trick," says the president of a small liberal arts college, "is to get big enough so people know you are there, and small enough so it's hard for things to get out of hand."

The Carnegie Commission on Higher Education recently studied campus size in relation to institutional efficiency. The optimum efficiency of a college, according to the commission, is when costs per student stop going down with increased enrollment—and when greater size starts to erode the academic environment.

It proposed that the best size for a doctorate-granting institution is 5,000

Shifting Patterns of College Enrollment



SOURCE: U.S. OFFICE OF EDUCATION

In 1950, the two million students on campus were evenly divided between public and private colleges. Today, three out of four students are in public institutions.

to 20,000 full-time students; for a comprehensive college, 5,000 to 10,000 students; for liberal arts colleges, 1,000 to 2,500 students; and for two-year colleges, 2,000 to 5,000 students. The commission also noted that it realized that some institutions would not be able to reach the sizes it suggested.

In an effort to reduce the impact of large size, many colleges have tried to organize their campuses around a series of clusters, houses, or mini-colleges. At the University of California at Santa Cruz, for example, students live and study in 650-student colleges; as the university grows it simply adds on another, virtually self-

contained, college. Each college has its own identity and character.

As long as the population continues to grow, and the proportion of young people going to college increases, large schools will get larger and small schools will have trouble staying small. The answer will have to be the creation of more colleges of all kinds.

What Is the "New" Student?

THE YOUTH COUNTERCULTURE flourished on the campus long before it spread to the rest of society.

The counterculture brought a new sense of community to the campus, a new feeling for a physical dynamic and for the visual world. Academicians spoke of the university's "new feel," where students preferred films to books and spoken poetry to written, and where they tried to rearrange things to fit their own time frames.

At first, universities and the new students didn't seem to mesh. Universities are traditional, reflective institutions often concerned with the past. Many of the new students wanted to look to the future. What happened yesterday was not as "relevant" as what is happening today, or what will happen tomorrow.

Margaret Mead looked at the new students and described them as the young "natives" in a technological world where anyone over 25 was a "foreigner." As a group, the new class seemed born to the struggle, more willing to challenge the ways of the world—and to try to change them—than their predecessors. And they felt fully capable of acting on their own. "Today students aren't fighting their parents," said Edgar Z. Friedenberg, professor of education at Dalhousie University, "they're abandoning them."

On the campus, many presidents and deans were under pressure from the public and alumni to stamp out the counterculture, to restore traditional standards of behavior. By the end of the Sixties, however, most

students and faculty members alike had come to believe that off-campus behavior should be beyond a college's control. A national survey in 1969 found that only 17 per cent of the faculty members interviewed thought that "college officials have the right to regulate student behavior off campus."

ATTEMPTS TO REGULATE BEHAVIOR on the campus also ran into obstacles. For the past century, college presidents had exercised almost absolute control over discipline on campus. In the last few years, however, the authority of the president has been undercut by new—and more democratic—judicial procedures. "Due process" became a byword on new student and faculty judicial committees. Court decisions construed college attendance as a right that could be denied only after the rights of the accused were protected. The courts thus restrained administrative impulses to take summary disciplinary action.

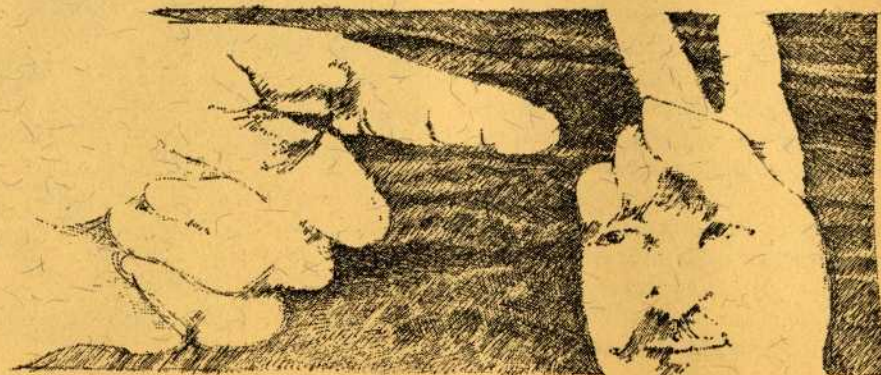
Partly in response to the demands of the times, partly in response to court decisions, and partly in response

to the recommendations of groups such as the President's Commission on Campus Unrest, many colleges now are creating entirely new judicial procedures of their own. Students are represented on campus judicial boards or committees; on a few, they form a majority.

At the same time, colleges are turning over to outside police agencies and civil courts the responsibility for regulating the conduct of students as citizens. On few, if any, campuses are students provided sanctuary from society's laws. For its part, society has developed a far greater tolerance for the counterculture and general student behavior than it once held.

"The trend," says James A. Perkins, former president of Cornell University and now chairman of the International Council for Educational Development, "is toward recognizing that the student is a citizen first and a student second—not the other way around. He will be treated as an adult, not as a child of an institutional parent."

That is a trend that more and more students heartily endorse.



Are Students Taking Over?

THE GREATEST STRUGGLE on many campuses in the past decade was for the redistribution of power. Trustees were reluctant to give more to the president, the president didn't want to surrender more to the faculty, the faculty felt pushed by the students, and the students—who didn't have much power to begin with—kept demanding more.

Except for the presence of students among the warring factions, struggles for power are as old as universities themselves. The disputes began more than a century ago when boards of trustees wrestled authority from chartering agencies—and continued down the line, only to stop with the faculty.

In the late 1960's, students discovered that they had one power all to themselves: they could disrupt the campus. Enough students at enough

campuses employed confrontation politics so effectively that other elements of the college community—the administration and the faculty—took their complaints, and their protests, seriously.

By the end of 1969, a survey of 1,769 colleges found that students actually held seats on decision-making boards or committees at 184 institutions of higher education. They sat on the governing boards of 13 colleges. Otterbein College includes students with full voting power on every committee whose actions affect the lives of students; three are members of the board of trustees. At the University of Kentucky, 17 students sit as voting members of the faculty senate.

On the whole, students appear to have gained influence at many schools

without gaining real power. For one thing, they are on campus, usually, for only four years, while faculty members and administrators stay on. For another, they usually constitute a small minority on the committees where they can vote. Frequently they do not have a clear or enthusiastic mandate from their constituency about what they are supposed to do. Except in periods of clear crisis, most students ignore issues of academic reform and simply go their own way.

Even when students do have power, they often act with great restraint. "We have students sitting on our faculty promotion committees," says an administrator at a state college in the Northwest, "and we're discovering that, if anything, they tend to be more conservative than many of the faculty members."

What Is the Best Preparation for a College Teacher?

TEN YEARS AGO, the academic community worried that there would not be enough Ph.D.'s to fill the faculties of rapidly growing colleges and universities. Efforts to solve the problem, however, may well have been too successful. Today people talk of a glut of Ph.D.'s—and men and women who have spent years in advanced study often can't find jobs. Or they take jobs for which they are greatly overqualified.

Over the years, about 75 per cent of all Ph.D.'s have joined a college or university faculty, and most still go into higher education. Due to the rapid growth of higher education, however, only 45 per cent of faculty members in the U.S. actually hold that degree; fully one-third of the 491 colleges that were the subject of a recent study do not have a single Ph.D. on their faculty. There is still a need for highly trained academic

talent—but most colleges can't afford to expand their staff fast enough to provide jobs for the new talent emerging from graduate schools.

In addition to the problem of training a person for a job that is not available, many academics are wondering if the Ph.D. degree—tradi-

tionally the passport to a scholarly life of teaching or research—provides the best training for the jobs that exist.

The training of a Ph.D. prepares him to conduct original research. That ability, however, is needed at colleges and universities only by people with



heavy research commitments or responsibilities. Once they have earned their doctorate, some Ph.D.'s will gravitate toward doing more research than teaching; others will choose to emphasize more teaching. Yet the preparation is the same for both. Moreover, although research can improve a professor's teaching, the qualities that make him a top-flight investigative scholar are not necessarily those required for effective classroom teaching.

Across the country, the demand is

growing for an alternative to the Ph.D. One such alternative is the M.Phil., or Master of Philosophy, degree; another is the D.A., or Doctor of Arts. A D.A. candidate would fulfill many of the requirements now expected of a Ph.D., but would attempt to master what is already known about his field rather than conducting his own original research. He also would spend time teaching, under the direction of senior faculty members.

Many colleges and universities have

already opened their doors and their classrooms to teachers without formal academic preparation at all. These are the outside experts or specialists who serve briefly as "adjunct" professors on a college faculty to share their knowledge both with students and with their fellow faculty members. Many administrators, arguing that faculties need greater flexibility and less dependence on the official certification of a degree, hope that the use of such outside resources will continue to grow.

How Can Anyone Pay for College?

THE COSTS of sending a son or daughter to college are now astronomical, and they keep going up. The expense of getting a bachelor's degree at a prestigious private university today can surpass \$20,000; in a few years it will be even more.

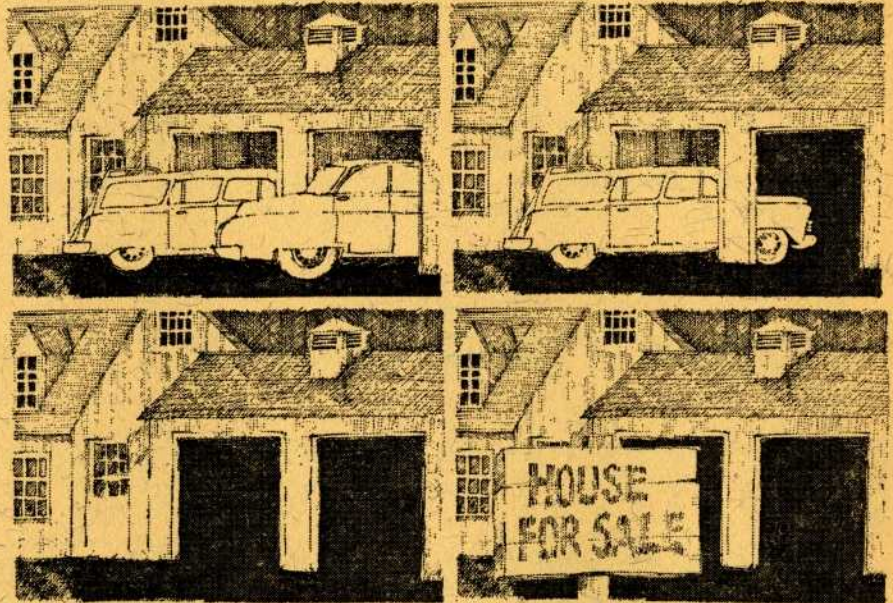
The U.S. Office of Education estimates that average costs for tuition, required fees, room, and board in 1970-71 were \$1,336 at a public university and \$2,979 at a private university—or 75 per cent more than in 1960.

Some schools, of course, cost much more than the norm. Tuition, room, and board cost \$3,905 at Stanford this year; \$4,795 at Reed. Harvard charges \$4,470—or \$400 more than a year ago.

State colleges and universities are less expensive, although their costs keep rising, too. The University of California is charging in-state students \$629 in tuition and required fees; the State University of New York, \$550. Other charges at public schools, such as room and board, are similar to those at private schools. Total costs at public institutions, therefore, can easily climb to \$2,500 a year.

Some colleges and universities are trying new ways to make the pain bearable.

Last fall, for example, Yale started its Tuition Postponement Option, permitting students to borrow \$800 di-



rectly from the university for college costs. The amount they can borrow will increase by about \$300 a year, almost matching anticipated boosts in costs. (Yale now charges \$4,400 for tuition, room, and board.)

The Yale plan is open to all students, regardless of family income. A participating student simply agrees to pay back 0.4 per cent of his annual income after graduation, or a minimum of \$29 a year, for each \$1,000 he borrows. All students who start repayment in a given year will continue paying 0.4 per cent of their income each year until the amount

owed by the entire group, plus Yale's cost of borrowing the money and 1 per cent for administrative costs, is paid back. Yale estimates that this probably will take 26 years.

The Yale option works for a student in this way: If he borrows \$5,000 and later earns \$10,000 a year, he will repay \$200 annually. If he earns \$50,000, he will repay \$1,000. A woman who borrows and then becomes a non-earning housewife will base her repayments on half the total family income.

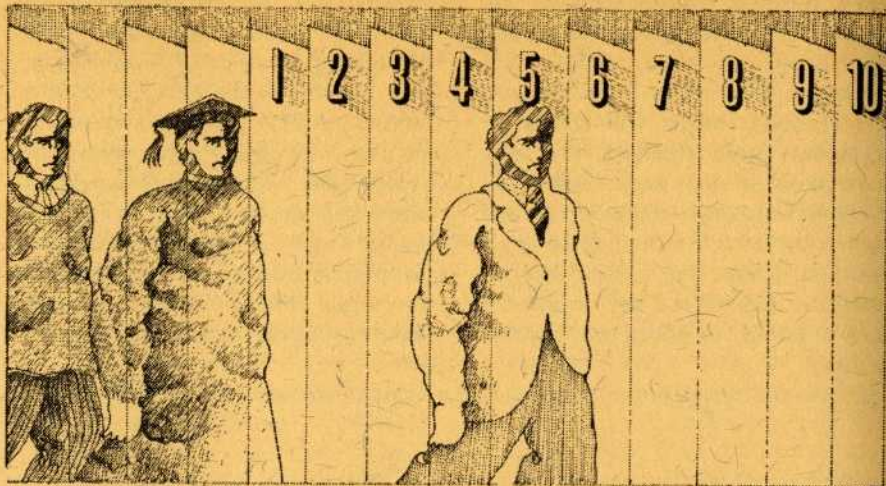
Many students and parents like the Yale plan. They say it avoids the "in-

stant debt" aspects of a commercial loan, and repayments are tied directly to their future income—and, hence, their ability to pay.

PARENTS ALSO CAN pay college costs by taking out commercial loans; most banks have special loans for college. The College Scholarship Service estimates, however, that the effective interest rate on commercial loans runs from 12 to 18 per cent.

The federal government also is in the college loan business. President Nixon has declared that "no qualified student who wants to go to college should be barred by lack of money." Last year the U.S. Office of Education helped pay for higher education for 1.5 million students through federally guaranteed loans, national defense student loans, college work-study programs, and educational opportunity grants.

The federally guaranteed loans are the most popular with middle-income parents. A student can borrow up to \$1,500 a year at 7 per cent interest



and start repayment 9 to 12 months after he graduates from college. He then can take 10 years to repay.

Most students still need help from their families to pay for college. According to the College Scholarship Service, a family with a \$16,000 annual income and one child should be able to pay \$4,020 a year for college. A family with a \$20,000 income and two children should have \$3,920 available for college.

One result of rapidly rising college costs is that most students work during the summer or part-time during the year to help pay their expenses. Another is that an ever-growing number seek out relatively inexpensive public colleges and universities. A third is that students—acting as consumers with an increasingly heavy investment in their college—will demand greater influence over both the form and content of their education.

Is Academic Freedom in Jeopardy?

IF COMPLAINTS filed with the American Association of University Professors can be taken as an indicator, academic freedom is in an increasingly perilous condition. Last summer the AAUP's "Committee A on Academic Freedom and Tenure" reported that it had considered 880 complaints in the 1970-71 school year—a 22 per cent increase from the year before.

Many of the complaints involved alleged violations of academic freedom in the classic sense—sanctions imposed against an individual for utterances or actions disapproved by his institution. It is not surprising that such controversies persist or that the actions of professors, trustees, students, and administrators might come into conflict, particularly in the increasingly politicized modern university.

As the title of the AAUP's committee suggests, academic freedom increasingly has become identified with guarantees of permanent academic employment. That guarantee, known as tenure, is usually forfeited only in cases of severe incompetence or serious infractions of institutional rules.

Because of the requirements of due process, however, disputes over academic freedom and tenure increasingly involve procedural issues. Some fear that as the adjudication process becomes increasingly legalistic, the elements of academic freedom in each case may be defined in ever-narrower terms. Robert B. McKay, dean of the New York University School of Law, warns that colleges should pay close attention to their internal judicial procedures so that outside decisions—less consistent with academic traditions—do not move into a vacuum.

THE CONCEPT OF TENURE ITSELF is now under review at many institutions. Many faculty members and administrators realize that abuses of tenure through actions that are not protected by academic freedom threaten the freedom itself. Such an abuse might occur when a professor uses class time to express a personal point of view without affording students an opportunity to study other positions, or when a faculty member fails to meet a class—depriving students of their freedom to learn—in order to engage in political activity.

Because these examples are not clear-cut, they are typical of the academic freedom issue on many campuses. It is also typical for academics to resist regulation of any kind. The President's Commission on Campus Unrest noted that "faculty members, both as members of the academic

community and as professionals, have an obligation to act in a responsible and even exemplary way. Yet faculty members have been reluctant to enforce codes of behavior other than those governing scholarship. They have generally assumed that a minimum of regulation would lead to a maximum of academic freedom."

Political events—often off the campus—have made academic freedom a

volatile issue. Occasionally a political figure will claim that a university is too relaxed a community, or that it is the hotbed of revolutionary activity. Institutions of higher learning have been thrust into the political arena, and academic freedom has been abused for political reasons. On some campuses, outside speakers have been prohibited; at others, controversial faculty members have been fired.

For centuries, academic communities have realized that neutrality may be their strongest virtue and surest protection. If they give up that neutrality, society may require them to forfeit many traditional freedoms and privileges. There is now a strong belief that neutrality is essential to the teaching, learning, and scholarship that are the very bedrock of higher education.

What Is a College Degree Really Worth?

COLLEGE CREDENTIALS, says HEW's Newman report on higher education, "are not only a highly prized status symbol, but also the key to many of the well-paying and satisfying jobs in American society."

The problem today is that colleges have been producing graduates faster than the economy can absorb them in challenging jobs. The members of last spring's graduating class found that, for the first time in years, a degree was not an automatic passport to a job and the good life.

Job offers to graduates were on the decline. At Louisiana State University, for example, there were only half as many job offers as the year before; even the recruiters stayed away. At graduate schools, job offers to new Ph.D.'s plummeted 78 per cent, and many might well have asked if all their years of study were worth it.

In the long run, higher education does pay off. Last fall a research team under Stephen B. Withey of the Institute for Social Research at the University of Michigan reported that male college graduates earn \$59,000 more in their lifetimes than male high school graduates.

A higher income is only one benefit of a degree. Withey's report also concluded that college graduates held jobs with fewer risks of accidents, fewer physical demands, more advancement, and "generally more comfort, psychic rewards, stimulation, and satisfactions." The report also found a direct correlation between college

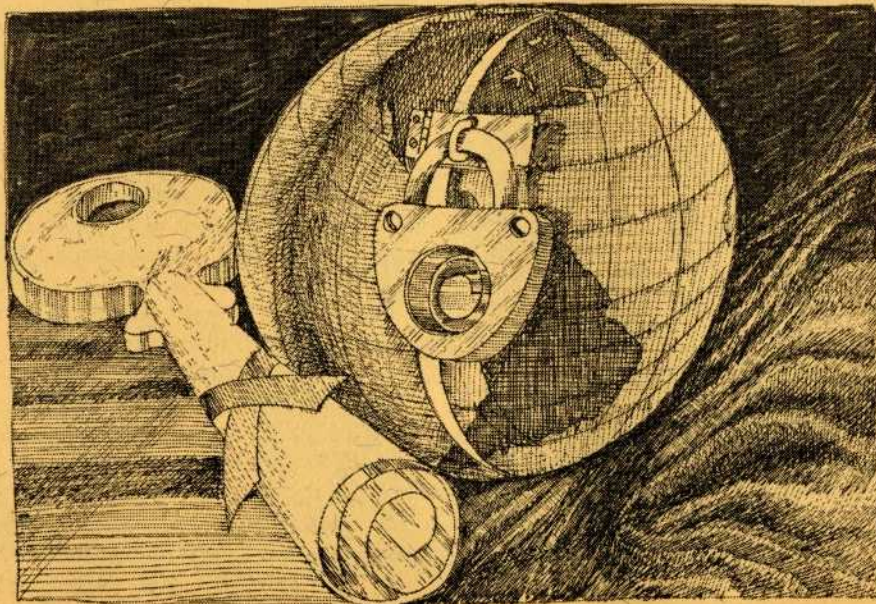
attendance, enriched life styles, and satisfactory family adjustments.

The nation's work ethic is changing, however, as are the values of many recent college graduates. To many, the tangible rewards of a job and a degree mean less than the accumulated wisdom and experience of life itself. Sociologist Amitai Etzioni recently commented: "The American college and university system is best at preparing students for a society which is primarily committed to producing commodities, while the society is reorienting towards an increasing concern for the good life."

Even when they can be defined, the nation's manpower needs are changing,

too. Last year Dartmouth College's President John G. Kemeny asked, "What do we say to all our students when we realize that a significant fraction of them will end up in a profession that hasn't been invented yet?"

Many educators now are urging employers to place less emphasis on the fact that a job applicant does or does not have a college degree and to give more attention to other qualities. Many also urge a review of the "certification" functions of higher education—where a degree often signifies only that the holder has spent four years at a given institution—so that society can operate more smoothly as a true meritocracy.



Should Everyone Go to College?

HIGHER EDUCATION, says Princeton's Professor Fritz Machlup, "is far too high for the average intelligence, much too high for the average interest, and vastly too high for the average patience and perseverance of the people here and anywhere."

Not everyone, of course, would agree with Professor Machlup's assessment of both the institution of higher education in the United States and the ability of the populace to measure up to it. But trying to draw the line in a democracy, specifying who should be admitted to higher education and who should not, is increasingly difficult.

What, for example, are the real qualifications for college? How wide can college and university doors be opened without diluting the academic excellence of the institution? And shouldn't higher education institutions be more concerned with letting students in than with keeping them out?

Public policy in the United States has set higher education apart from elementary and secondary education in size, scope, and purpose. All states have compulsory attendance laws—usually starting with the first grade—requiring all young people to attend public schools long enough so they can learn to read, write, and function as citizens. But compulsory attendance usually stops at the age of 16—and free public education in most states stops at grade 12.

Are 12 years enough? Should everyone have the right to return to school—beyond the 12th-grade level—when ever he wants? Or should "higher" education really be "post-secondary" education, with different types of institutions serving the needs of different people?

INCREASINGLY, the real question is not who goes on to higher education, but who does not go. In 1960, for example, about 50 per cent of all high school graduates in the U.S. moved on to some form of high-

er education. Today about 60 per cent go to college. By 1980, according to the U.S. Office of Education, about 65 per cent of all high school graduates will continue their education.

Today, the people who do not go on to college usually fall into three categories:

1. Students with financial need. Even a low-cost community college can be too expensive for a young person who must work to support himself and his family.

2. Students who are not "prepared" for college by their elementary and secondary schools. If they do go to college they need compensatory or remedial instruction before they start their regular classes. They also often need special counseling and help during the school year.

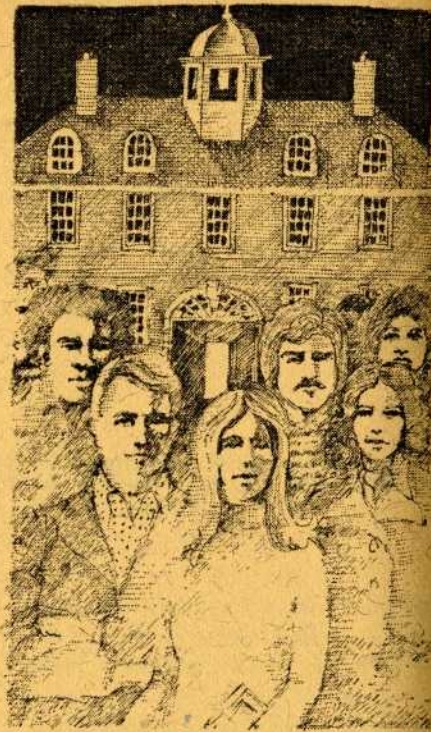
3. People beyond the traditional college-going age—from young mothers to retired executives—who want to attend college for many reasons.

During the Sixties, most of the efforts to open college doors were focused on racial minorities. To a degree, these efforts were successful. Last year, for example, 470,000 black students were enrolled in U.S. colleges and universities.

The explosive growth of two-year community colleges will continue to open college doors for many students. Most community colleges have lower admissions requirements than four-year schools (many require only high school graduation); they charge relatively low tuition (average tuition at a public community college this year is \$300), and most are in urban areas, accessible by public transportation to large numbers of students.

Community colleges will continue to grow. In 1960 there were 663 two-year community colleges in the U.S., with 816,000 students. Today there are 1,100 community colleges—with 2.5 million students. A new community college opens every week.

New patterns of "open admissions" also will open college doors for students who have not been served by



higher education before. In a sense, open admissions are a recognition that the traditional criteria for college admissions—where one ranks in high school, and scores on Scholastic Aptitude Tests—were not recognizing students who were bright enough to do well in college but who were poorly prepared in their elementary and secondary schools.

In the fall of 1970, the City University of New York started an open admissions program, admitting all graduates of New York high schools who applied and then giving them special help when they were on campus. There was a relatively high attrition rate over the year; 30 per cent of the "open admissions" freshmen did not return the next year, compared with 20 per cent of the "regular" freshmen. Even so, many university officials were pleased with the results, preferring to describe the class as "70 per cent full" rather than as "30 per cent empty."

The lesson is that, as higher education becomes more available, more young people will take advantage of it. Open admissions and other more democratic forms of admissions should not only make for a greater meritocracy on campus, but also lead to a better-educated society.

What Will We Do With Kids if They Don't Go to College?

"They are sick of preparing for life—they want to live."—S. I. Hayakawa.

NO ONE KNOWS HOW MANY, but certainly some of the 8.5 million students now on campus are there for the wrong reasons. Some are there under pressure (if not outright duress) from parents, peers, and high school counselors; others are there to stay out of the armed forces or the job market. Almost all, even the most highly motivated, are vulnerable to pressures from parents who view college attendance as a major stepping-stone toward the good life.

One result of these pressures is that college teachers are often forced to

play to captive audiences—students who would rather be someplace else. Walk into almost any large lecture in the country and you'll see students doodling, daydreaming, and nodding; they come alive again when the final bell rings. Many are bored by the specific class—but many more are bored by college itself.

Acknowledging the problem, the Assembly on University Goals and Governance has proposed that new kinds of institutions be established "to appeal to those who are not very much taken with the academic environment." Other proposals call for periods of national service for many young men and women between the ages of 18 and 26, and for greater flexibility in

college attendance.

Steven Muller, president of the Johns Hopkins University, proposes a four-part national service program, consisting of:

- ▶ A national day-care system, staffed by national service personnel.

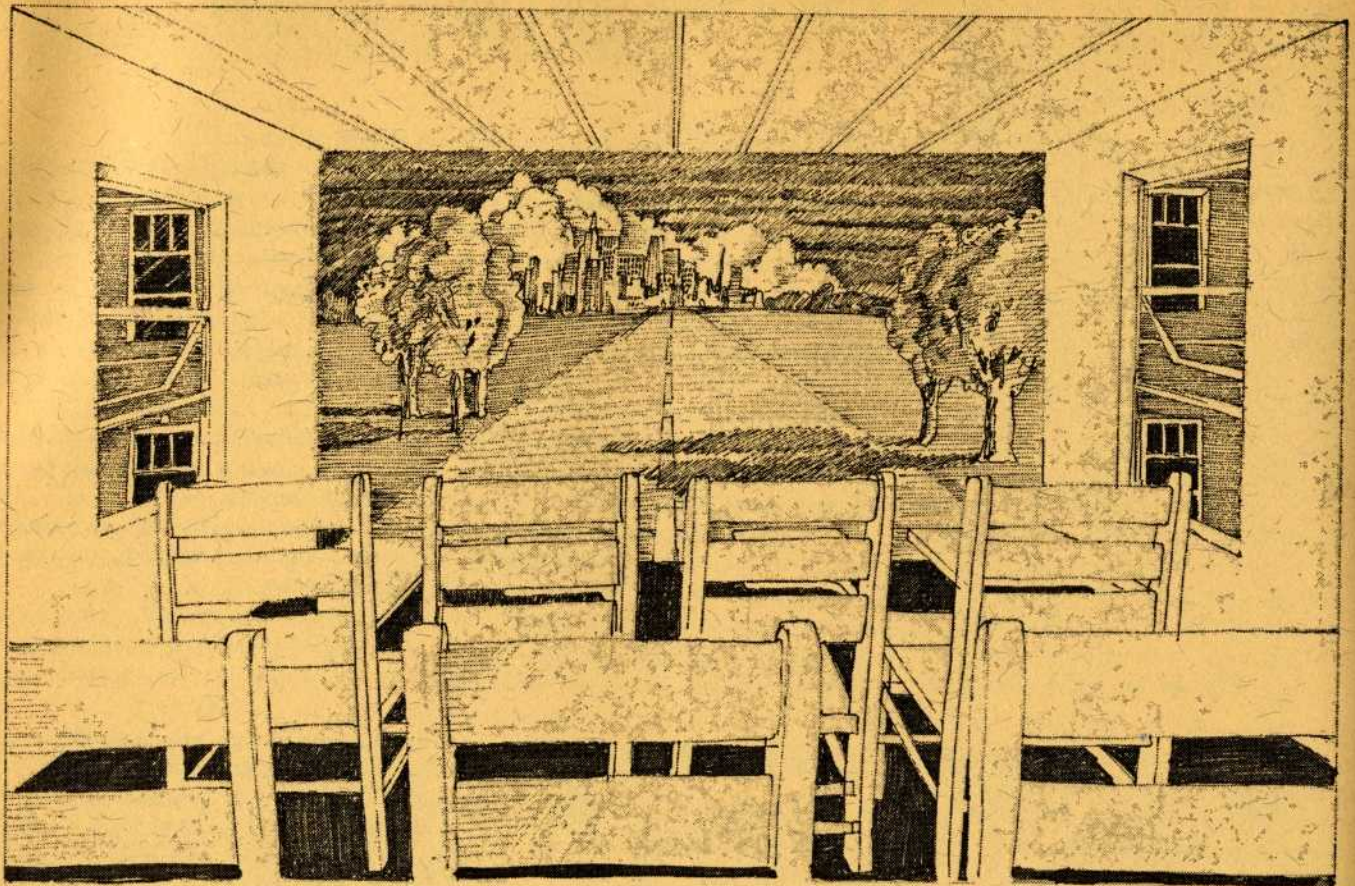
- ▶ A national neighborhood-preservation system, including security, cleanup, and social services.

- ▶ A national health corps, providing para-medical services to homes and communities.

- ▶ An elementary school teacher corps using high school graduates as teacher aides.

President Muller also proposes that two years of such non-military service be compulsory for all young peo-





ple. The advantages of mandatory national service, he said, would range from reducing enrollment pressures on colleges to giving students more time to sort out what they want to do with their lives.

The Carnegie Commission on Higher Education has suggested at least a consideration of national service plans and proposes that colleges make provisions for students to "stop out" at certain well-defined junctures to embark on periods of national service, employment, travel, or other activities.

The commission also advocates reducing the time required to earn a bachelor's degree from four years to three, and awarding credit by examination, instead of measuring how much a student knows by determining how much time he has sat in a particular class.

Some of these ideas are being studied. Institutions such as Harvard, Princeton, Claremont Men's College, New York University, and the entire California State College System are

considering the possibility of three-year degree programs. Others, such as Goddard, Syracuse, and the University of South Florida, require students to spend only brief periods of time on the campus itself to earn a degree.

A MAJOR TREND in American higher education today is toward greater flexibility. Last year two foundations—the Ford Foundation and the Carnegie Corporation of New York—provided \$2.5-million to help start a highly flexible series of experiments in New York State, including:

▶ A program of "external degrees," offering bachelors' and associates' degrees to students who pass college-level exams, even if they have not been formally enrolled at a college.

▶ A new, non-residential college drawing on the resources of the state university's 72 campuses but maintaining its own faculty to help students in independent study at home or at other schools.

▶ A "university without walls" including 20 institutions but with no fixed curriculum or time required for degrees; outside specialists will form a strong "adjunct" faculty.

These and other alternatives are designed to "open up" the present system of higher education, removing many of the time, financial, geographic, and age barriers to higher education. They should make it easier for students to go to college when they want, to stop when they want, and to resume when they want. A bored junior can leave the campus and work or study elsewhere; a mother can study at home or at institutions nearby; a businessman can take courses at night or on weekends.

The alternatives emphasize that higher education is not limited to a college campus or to the ages of 18 to 24, but that it can be a lifetime pursuit, part of our national spirit. The impact of these changes could be enormous, not only for the present system of higher education, but for the country itself.

With All Their Successes, Why Are Colleges So Broke?

IN A RECENT ECHO of an all-too-common plea, the presidents of six institutions in New York warned that private colleges there were on the verge of financial collapse and needed more money from the state.

The presidents were not crying wolf. The Carnegie Commission on Higher Education reports that fully two-thirds of the nation's 2,729 colleges and universities are already in financial difficulty or are headed for it. "Higher education," says Earl Cheit, author of the Carnegie report, "has come upon hard times."

At most schools the faculty has already felt the squeeze. Last spring the American Association of University Professors reported that the average rise in faculty salaries last year had failed to keep pace with the cost of living.

The real problem with college finance is that costs keep rising while income does not. It is compounded by the fact that the gap keeps growing between what a student pays for his education and what it costs to educate him.

The problems are great for public colleges and universities, and for private institutions they are even greater. About one-fourth of all private colleges are eating up their capital, just to stay in business.

As the Association of American Colleges warns, this is a potentially disastrous practice. As its capital shrinks, an institution then loses both income on its endowment and capital growth of it. The association sees little hope of a reprieve in the immediate future. "Most colleges in the red are staying in the red and many are getting redder," it says, "while colleges in the black are generally growing grayer."

MANY OF THE TRADITIONAL METHODS of saving money don't seem to work in higher education. Most colleges can't cut costs without excluding some students or eliminating some classes and pro-

grams. There is little "fat" in the average budget; when a college is forced to trim it usually diminishes many of the programs it has started in the past few years, such as scholarships or counseling services for low-income students.

Most colleges and universities have tried to raise money by increasing tuition—but this, as we have seen, is approaching its upper limits. Private institutions already have priced themselves out of the range of many students. Trying to set tuition any higher is like crossing a swamp with no way to know where the last solid ground is—or when more students will flee to less expensive public colleges. The competitive situation for private colleges is particularly acute because, as one president puts it, public colleges offer low-cost, high-quality education "just down the street."

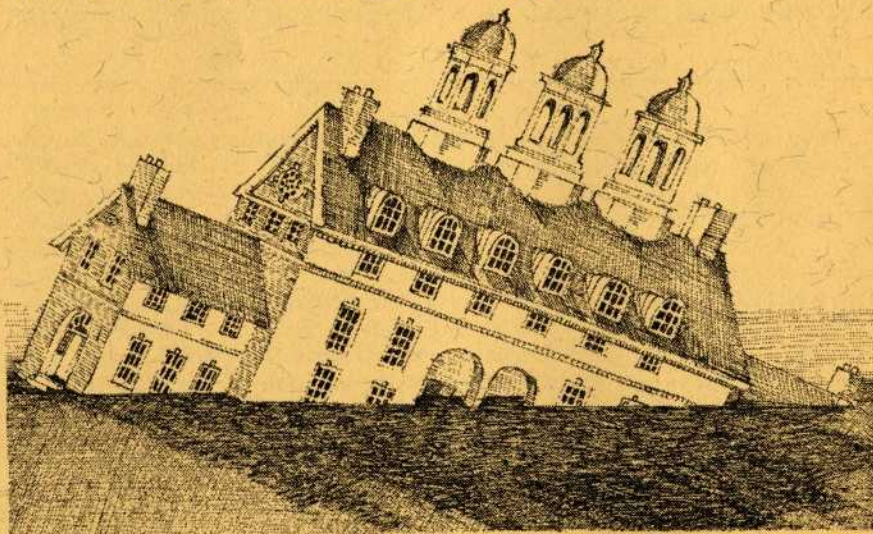
The problem is worse this year than ever before. The total number of freshmen in four-year colleges has actually declined. Colleges across the country have room for 110,000 more freshmen, with most of the empty seats found in private schools. The decline in enrollment comes at a particularly bad time: many colleges are just completing large—and expensive—building programs that they started in the booming sixties.

Public colleges are not immune

from the academic depression. They receive about 53 per cent of their income from state and local governments, and many are suffering from a taxpayers' revolt. Some state legislatures are cutting back on funds for higher education; others are dictating ways money can be saved.

Public colleges are under pressure to raise tuition, but many administrators fear this might lose students at the cost of raising dollars. Tuition at public colleges and universities is relatively low, when compared with private colleges, but it still has doubled in the last decade. The National Association of State Universities and Land-Grant Colleges warns that if it keeps going up it could lead to a "serious erosion of the principle of low tuition, which has been basic to the whole concept of public higher education in the United States."

Most college administrators, therefore, are looking to the federal government for help. The Carnegie Commission estimates that the federal government now pays about one-fifth of all higher education expenditures in the U.S.—or \$4 billion a year. The Commission says this must increase to about \$13 billion in five years if the nation's colleges and universities are going to be in good health. It is only problematical whether such an increase will occur.



Are Alumni Still Important?

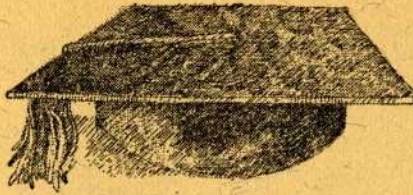
ALUMNI may return to the campus for reunions, fund-raising dinners, or occasional visits, but often their closest contact with their alma mater is the plea for money that comes in the mail.

When student unrest erupted a few years ago, however, college administrators quickly realized that alumni could make their opinions felt. Thousands of telegrams and letters flowed across the desks of presidents and deans in the wake of sit-ins and demonstrations; some alumni withheld money even though they had given before, or made their unhappiness known in other ways.

In the campus preoccupation with internal power struggles, alumni and alumnae usually have been bystanders. They are rarely involved in day-to-day life of the campus; unlike students, faculty members, and administrators, they are not present to exert an immediate influence in the struggles that often paralyze a school.

Many colleges now are searching for new ways to involve their alumni, particularly those who feel estranged from the contemporary campus by a growing gulf of manners, morals, and concerns. The impact of alumni, however, will grow as their numbers grow. It probably will be channeled into the following areas:

As voting citizens: Alumni will have an increasing influence as voters, as more and more of the questions af-



fecting higher education are decided by elected officials. Even private institutions will receive more financial support from state and federal sources in the next few years. Congressmen and legislatures will, through government loans, grants, and institutional aid, make more and more decisions about who can attend college and where. In the 1980's, colleges and universities may value their alumni as much for their votes as for their dollars.

As donors: No matter how much more they receive from tuition or from governments, America's colleges and universities will not have enough unfettered money to do all the things they want to do. Contributions are still the best means of giving them a chance to experiment, to perform with extraordinary quality, and to attract new kinds of students.

As parents: Alumni will have vast influence over the education of their children. By encouraging new approaches to teaching—and by encouraging their children to take advantage of them—alumni can help broaden the structure of higher education. They can give their sons and daugh-

ters additional opportunities to appraise their future careers and make more efficient and intelligent use of college and university resources.

As employers: Alumni influence the qualifications that are demanded for entry into many jobs. They can help eliminate some of the current educational overkill now demanded for many occupations, and they can provide on-the-job apprenticeships and other opportunities for employees moving up in the system.

As citizens: Alumni can lead in efforts to make elementary and secondary education respond to the needs of all children, thereby reducing the burdens placed on colleges to provide remedial help. They can make sure that public education serves the public at all levels.

As members of a changing society: Alumni can develop tolerance and understanding for change in their own colleges, and prepare themselves for new opportunities in society.

As partisans of their colleges: They can increase their effectiveness by remaining alert to the changes in higher education, placing the changes at their own college in the context of broad structural changes in colleges across the nation.

As educated men and women: They should hold on to their faith in learning as a hope of civilization, and their faith in colleges and universities for nurturing that hope.

The report on this and the preceding 15 pages is the product of a cooperative endeavor in which scores of schools, colleges, and universities are taking part. It was prepared under the direction of the persons listed below, the trustees of EDITORIAL PROJECTS FOR EDUCATION, INC., a nonprofit organization informally associated with the American Alumni Council. The trustees, it should be noted, act in this capacity for themselves and not for their institutions, and not all the editors necessarily agree with all the points in this report. All rights reserved; no part may be reproduced without express permission. Printed in U.S.A. Trustees: DENTON BEAL, C. W. Post Center; DAVID A. BURR, the University of Oklahoma; MARALYN O. GILLESPIE, Swarthmore College; CORBIN GWALTNEY, Editorial

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