

Reed College: Hunting for Money, A President, and a Mission

Portland, Oregon. Reed College, which some have regarded as an educational prophet, has much honor in this country but, unfortunately, is completely without profit.

In fact, Reed is just beginning to stabilize itself from what might have been a catastrophic financial decline. The sad economic condition of this top-rated liberal arts college became publicly apparent in the fall of 1965 when Richard Sullivan, then Reed's president, told his faculty and students that "we have made too many financial commitments too fast." In his fall convocation address, Sullivan shocked many by telling them that for the academic year 1965-66, Reed would incur a \$1.3 million deficit.

In Sullivan's "mea culpa" address, he said that he took full responsibility for the college's financial plight. He explained that he had been anxious to make improvements in the institution and "overly optimistic about financial support for these improvements and, in the last analysis, imprudent." Whatever confessions of imprudence Sullivan made 2 years ago, people at Reed today do not seem to blame him for the college's financial crisis. Rather, faculty members and trustees praise his administrative abilities and give him full credit for doubling faculty salaries and benefits during the 11 years he served as president. In February, Sullivan left Reed to assume the presidency of the Association of American Colleges in Washington, D.C.

In the 2 years since Sullivan's alarm, many members of the Reed faculty, administration, and trustees have been busy working to devise remedies for their institution's financial problem. The "solution" which has been agreed upon is not universally appreciated at an institution which prides itself on its student-faculty ratio. The current plan of action is to maintain the faculty at its present size of about 100 while increasing the number of undergraduates from 980 to 1200 by 1971. At the same time, under-

graduate charges will be increased; tuition has been raised from \$2050 to \$2200 for the current academic year. The trustees have ordered the college to count on a gift income of no more than \$400,000 in preparing the annual budget. For the present, the college is following a more stringent policy on limiting costs by postponing maintenance tasks and by not filling some faculty and administrative vacancies. According to Byron L. Youtz, a physicist who is temporarily serving as acting president, the college incurred a \$510,000 deficit in 1966-67, \$400,000 of which was covered by gifts. Although this still leaves Reed more than \$100,000 in the red for last year's operations, at least it represents a marked improvement over 1965-66. The college is operating on an annual budget of about \$3 million.

Why is Reed So Poor?

One reason that Reed ran into such a financial crisis, Youtz explains, is that the college "didn't project well enough what would happen when the Ford Foundation money ran out." The college received a \$1.4 million Ford grant in 1961. But basically Reed is in financial trouble for the same reason that many other colleges are—educational costs are increasing rapidly, and income is not rising fast enough to meet this outflow. Besides, Reed is trying to compete with the top colleges in the country; many of these are well endowed. Reed has an endowment of only \$5.37 million.

Several other reasons are suggested for Reed's poverty. First, the school has relatively few alumni; this young college dates only from 1911 and was quite small in its early decades. Few alumni have left ample bequests to their alma mater; most Reed alumni are not rich enough to make bountiful bequests, anyway. Another explanation is that public university education is well established in the West; the habit of giving to private institutions is not as prevalent here as in the Northeastern

United States. Also, Reed, a bastion of Bohemian appearance and left-wing thought, has long been somewhat suspect in conservative Portland. What member of the bourgeoisie would have been reassured by this early Reed football cheer?—

"Lenin, Stalin, Marx, Trotsky

We gotta team that's really hotsky!"

Although Reed may sometimes be abrasive and has always been poor, this college does count on the American educational scene. An extraordinarily high proportion of its students are awarded Woodrow Wilson, Fulbright, Rhodes, and NSF scholarships. One study indicated that, in the 1950's, Reed led other liberal arts colleges in the percentage of male graduates awarded Ph.D. and M.D. degrees.

An Academic "Bootcamp"

It is not surprising that Reed produces many top-flight scholarly performers. Since its founding, Reed has concentrated almost solely on the academic side of undergraduate education. The first president, William Trufant Foster, said that Reed would promptly shut its doors on "idlers"; the first college catalog stated that Reed was open only to those "who want to work." From the beginning, Reed excluded such "diversions" as full-scale intercollegiate athletics and fraternities. Reed was one of the nation's educational pioneers in requiring a senior thesis from all students, in holding intensive junior qualifying exams, and in withholding grades from students so they would be motivated by learning for learning's sake. Reed has had its faculty members do much of their teaching in "conferences," small classes of 12 to 15 students. Reed has long had a comprehensive and demanding 2-year humanities program, the first year of which is compulsory for all students. Basically, Reed is an "honors" college with little provision for the less intellectually motivated student.

When compared to other liberal arts colleges in this section of the United States, it is apparent that Reed has an unexcelled academic reputation. As Senator Mark Hatfield (R-Oregon) said in an interview, "Reed is the college in my region which is most widely known in other parts of the country."

This geographical isolation from other comparable liberal arts colleges may partially explain why a portion of the Reed community seems to feel

a certain intellectual smugness, or even arrogance, about the quality of the institution. It is not uncommon to have people invoke the spirit of "the old Reed" or the "Reed tradition" in opposing change in their college.

In many ways, the "Reed tradition" is an admirable one. Much of it consists of an often fervent faculty belief that undergraduate education is important, that it is worth spending one's scholarly career teaching undergraduates, and that one should be given academic rewards on the basis of such teaching. Reed's devotion to its undergraduate nature was emphasized in recent years after President Sullivan suggested that the college might consider adding graduate training to its undergraduate program. There had been much talk in Portland about the need for a graduate school in that city (a topic discussed in *Science* on 8 September in an article on the new Oregon Graduate Center). Some connected with Reed, including influential trustees, thought it would be desirable to fill this community need. Some believed that Reed could not continue to be a high-quality college unless it could offer graduate assistants and the opportunity for graduate teaching to research-minded professors. Others thought that a graduate school would help Reed attract more financial support, especially in the natural sciences.

Defeat of the Graduate School

Many professors, students and alumni, however, thought that adding a graduate program would be a gross perversion of the "Old Reed." They feared that it would destroy the unique undergraduate experience at their institution. Since graduate education is much more expensive than undergraduate, how, they asked, can an impoverished college afford to add a graduate program? Others thought Reed had been able to attract a first-rate undergraduate student body but would be unlikely to find a comparable group of graduate students. In the end, much of the faculty and the rest of the Reed community reaffirmed Reed's role as an undergraduate institution; President Sullivan and the trustees had to back away from the suggestion of beginning a graduate school. The college did, however, adopt a policy that masters'-degree programs could be initiated and that research institutes could be established. So far, however, no new master's programs have been started, and only one re-



The acting president of Reed College, Byron Youtz, noted as a physicist and a trombonist, leads the 1967 senior thesis parade. Reed seniors, who are required to write a thesis to graduate, line up on thesis due day every spring for a musical march from the library to the registrar's office where they deposit their theses. The typical senior however, being a Reed individual, avoids this collective extravaganza and turns in his thesis by himself without fanfare.

search institute, in the humanities, is in operation.

The recent community struggles over graduate education and over financing the college illustrate a significant feature of Reed life—that the opinions of the faculty and the student body count for more in the running of college affairs than such opinions do in many other educational institutions. Reed's faculty advisory committee passes on faculty promotions and on budgetary questions. Whether or not they serve on this important committee, even the most junior Reed faculty members seem to have no hesitation about expressing their views on matters affecting their college.

Teaching Is Rewarded

Such freedom of expression is traditional at Reed, but has probably also been influenced by the institution's "benevolent" promotion practices. Reed is not a "publish or perish" college. Some Reed officials look with favor on research, but publishing research findings is not necessary for promotion. "We're happy if the man is spending a summer working on his course materials," Youtz comments. Although a Ph.D. is an important factor in determining whether an individual will be hired, especially in the natural sciences, it is not absolutely necessary for the

initial appointment and is certainly not a requisite for promotion if the individual proves himself a good teacher.

Not all Reed professors are exclusively oriented toward undergraduate teaching. For instance, all the members of the biology department have research grants and are actively engaged in research. One Reed administrator noted that other members of the Reed community sometimes "look askance" at the biologists because of their great preoccupation with research and their tendency to talk mainly to each other rather than to colleagues in other departments. Next to biology, chemistry and psychology are the most research-oriented departments, the administrator noted.

Gabriel Lester, the head of the biology department, said "a large part of the college sneers at big-time research." During the debate over the graduate school he found, he said, that "some are violently opposed to any kind of research on campus. They think that Reed should be a teaching institution and nothing else. I find this attitude quite shocking."

Like other faculty members, Lester believes that Reed presents "a very demanding teaching situation. These are very bright students; they aren't satisfied with what they call a 'Mickey Mouse course'." Others at Reed share

Lester's view of the intellectual aggressiveness of many Reed students. "These students are not at all reluctant to nail you to the wall," Lester exclaimed, throwing out his arms. "Sometimes I feel like Jesus Christ himself—crucified."

Many students who have been at Reed feel that they are more often in the role of the crucified than in that of the crucifier. For many undergraduates Reed is a deeply disturbing experience. Students here note a high suicide rate as well as the frequent seeking out of medical help to combat fatigue and despair.

Of course, many students are miserable before they arrive on campus. Some think it is the "alienated high school intellectual" who tends to apply for entrance to their college. This student arrives at Reed thinking that he has arrived at some sort of intellectual Mecca, only to find he has just as many problems here as he did in high school.

Most Applicants Accepted

It is not especially difficult for the fairly bright student to gain admission to Reed. Reed admits about 75 percent of those who eventually make a final application. Reed officials explain that there is a great deal of "self-selection" for admission. This judgment is at least partially justified by the College Board scores of the entering freshman classes. In recent years the average score on the CEEB verbal examination has been about 670; the average score on the mathematical aptitude portion has been about 680 for men and 635 for women. Reed students come from most parts of the western and northern United States. Approximately 28 percent are from California, 23 percent from the Pacific Northwest, and 21 percent from the mid-Atlantic states. Reed admits a large number of transfer students. Some applicants are attracted by the high reputation which Reed's natural science departments enjoy. Not too many years ago it was estimated that more than half of Reed's students majored in mathematics and the natural sciences; the figure is now somewhat over 40 percent.

The student who comes to Reed should be prepared to step into an academic "pressure cooker." Reed students, sometimes called "Reedies," often feel they have an overwhelming amount of academic work to do. One former Reed student, Jeremy Brecher, speculates that many Reed faculty members are receiving their primary scholarly satisfaction through turning

out students for the top graduate schools. At least some of the departments at Reed seem to be run almost exclusively for majors who are going on to graduate school. Among both faculty members and the students it is assumed that the formal educational process will not end with a Reed bachelor's degree. Many at Reed seem to believe that those who do not go on to graduate school are "second-class citizens." John A. Dudman, Reed's highly respected Dean of Students, tells about cases in which "a girl will come into my office and shyly, apologetically admit that she doesn't want to go to graduate school. When I say, 'Fine!' the girl will respond with embarrassing gratitude and will often break down and cry because someone at Reed thinks that not going to graduate school is legitimate!"

Although Reed has a high-pressure academic atmosphere, it has a very unorganized social life. Not only does the college lack social fraternities and an extensive intercollegiate athletics program, it also lacks most of the other organized extracurricular activities which traditionally characterize American college life. Reed activities, except for the Outing Club, tend not to continue from one year to the next.

Unstructured Social Situation

The social situation in which the students live is also characterized by a high degree of informality and freedom. "It's all sort of strange and disorganized here," one senior comments. Men and women are permitted to visit each other's dormitory room during a wide range of hours. Dormitories are supervised by older students, rather than by faculty members. One student noted that there were usually almost no adults on campus after 8 o'clock at night. Students must live in the dormitories during their freshman year but, with parental permission, can move to lodgings elsewhere in the city any time after the first year. These apartments are never inspected by the college, and various social arrangements are said to flourish.

Use of drugs is reported to have increased greatly in the past 4 years; one student estimated that about two-thirds of Reed students had tried marijuana at least once. Drugs such as LSD, while fairly widely used, are less common. In this respect, as in other aspects of college life, Reed shows similarities to social developments at many other colleges.

The appearance of many "Reedies" seems to bother Portlanders. One Portland physician commented: "They just look terrible. They smell under their armpits. I get a little nauseated when I see them." It is the male student without a beard who stands out at Reed. Burrowes Hunt, a mathematics professor, comments, "There are lots of hippies around." Hunt feels that more students are coming to Reed now for social rather than academic reasons, and he attributes a declining rate of majors in the natural sciences to this change in the composition of the student body.

For whatever combination of social and academic factors, Reed has an extremely high dropout rate. A study made by one Reed College professor indicated that only 35 to 45 percent of those who entered during the 1950's eventually earned their degree from Reed. This dropout rate is difficult to understand when one considers that Reed students are among the most academically talented in the country.

Explanations for Attrition

Several reasons are suggested for the high attrition rate: students become interested in a specific field of study in which more courses are offered at a larger college; Portland is a dull city where it rains all winter; and the social life at Reed fails to satisfy some students. One important explanation for the high attrition rate is that the student can only receive gratification from the Reed community by high academic and intellectual performance. The Reed undergraduate cannot achieve much satisfaction or solace from participation in organized extracurricular activities. As former student body president John Aiken comments: "If students are not getting it out of academics, they may be getting it out of a relationship with another person or out of drugs, but eventually if they're not getting it out of academics, they'll leave Reed." John Dudman thinks that part of the high attrition rate is attributable to the "demands of the academic environment when coupled with many agonizing personal choices—what their sex behavior should be, how much sleep they should get. Many look for a more structured environment."

One of the things that worries some Reed educators is the fact that 40 percent of those who drop out never receive a B.A. from any institution. Dudman says that many leave feeling "personally defeated and worthless." He

adds that even those who want to go on to get a degree elsewhere are often hampered from entering the kind of high-quality institution they prefer by the "inappropriately tough grading standards" which have been applied to them at Reed.

Reed officials are concerned about the high dropout rate. Mathematician John D. Leadley, who headed a committee on Reed's attrition, has written that he personally believes that half the Reed dropouts could be retained. Reed faculty members have commented that the dropout rate at Swarthmore College is less than a third that of Reed. "We can't feel smug about our attrition rate when a school that's as good or better is keeping many more of its people," Dudman argues. The attrition rate is especially painful to Reed in a period when it needs every tuition dollar that it can legitimately collect.

Reed is not likely to make substantial progress in educational reform or in tapping new sources of money until it finds a president. Reed has

been looking for a leader since April 1966 when Sullivan announced his resignation. So far, three presidential prospects have turned down firm offers from Reed. Physics professor William L. Parker comments that before Sullivan's tenure "Reed was once known as the graveyard of presidents." Sullivan, who served longer than any other Reed president, is given high marks for breathing new life into the college, especially during the first years of his tenure. Some at Reed wish that Byron Youtz, who is now the acting president, would be chosen, but Youtz and others at Reed think that "it is important to bring in a person with new ideas to start new controversies." A search committee of trustees and faculty is looking for a man with a "tough hide" from outside the Reed faculty to direct the institution's future.

The new president of Reed will have a lot to cope with: financial deficits, high student attrition, and a faculty and student body that demand consultation on the major decisions affecting

their community. Furthermore, some professors feel that Reed is now adrift in the educational "doldrums." On the faculty, "people are looking for a new deal on the educational front, but they don't know what it is," mathematics department chairman Lloyd B. Williams comments.

In their more pessimistic moments, some Reed faculty members wonder if their kind of educational institution will survive. "There is an awareness that the day of the private liberal arts college may be over," B. Hunt notes. Physicist W. Parker thinks that "the liberal arts college is going to have to do something different to justify these costs. I'm not sure it warrants this tremendous expense; most of our experimenting was done several years ago." The new president of Reed will have to do more than raise faculty salaries to convince some members of this community that an expensive undergraduate college is still a viable part of American educational life.

—BRYCE NELSON

Theoretical Astronomy: New Institute in Cambridge

Cambridge. A new institute of theoretical astronomy, tucked away in trees near the university observatories on the fringe of Cambridge, is a visible sign that astronomy's star continues to rise in Britain.

Establishment of the institute under its director, Fred Hoyle, however, came after several years of negotiations which were at times so troubled that the project appeared in real jeopardy. Reports of the difficulties, in fact, filtered into the press, giving the public an unaccustomed glimpse of the workings of British science politics.

In 1959 the government's Advisory Council on Science Policy agreed that it would be desirable for theoretical astronomers to have a place where they could get together and have access to a computer. Hoyle, as a distinguished theoretician in the field, was asked to comment on the situation.

In his response Hoyle pointed out that investment in radio astronomy in

Britain had been relatively heavy, but that very little had been spent on theoretical astronomy. He recommended establishment of a research institute in theoretical astronomy whose members would be free of the responsibility of teaching undergraduates.

Hoyle's suggestion seems to have been favorably received in government, and something might have been done about it in the early 1960's if the project hadn't bogged down in arguments among astronomers over where the new center should be located. This was a period when new universities were being established and sentiment was strong for putting new programs at new places.

Hoyle, who had taken his degree and made his career at Cambridge, felt that conditions were right at Cambridge for establishment of the new institute, particularly since it is generally recognized that the brightest mathematicians among British school and university

graduates are attracted in large numbers to Cambridge.

Approaches to the university at that time, however, were not warmly received. Hoyle had insisted that a computer was an essential, if expensive, part of the concept, and not enough university funds were available at the time to supplement the government contribution.

By 1964 Hoyle felt that circumstances at Cambridge had changed and that it was time to move on the project, particularly since major help from private sources was in the offing. At Cambridge, however, the situation was complicated by a split in the mathematics faculty over policies and personalities. Hoyle and some other senior men in the Department of Applied Mathematics and Theoretical Physics had in effect pulled out of that department.

Hoyle says he feels that traditionally a university is an uneasy mixture of teaching and research, but that the balance built up between the two functions during the first third of this century has been destroyed by the demand for teaching large numbers of students as well as by administrative chores. Unless something is done to redress the balance, he fears, research will suffer seriously.

In 1964 an election for the chair-