man doesn't devote that many years of his life to building an institution and then criticize after he leaves."

When this writer served as a faculty member at the University of Pittsburgh, he first came to know Chancellor Litchfield, who then seemed like the aloof head of a big corporation, a businessman in the scholarly community, an academic empire builder. As the writer learned more in subsequent years, this early judgment seemed a much too simple view of a highly complex person.

People who knew Litchfield discussed him a great deal; he was the kind of man whose personality attracted deliberation about his motivations and worth. Through the years, one learned of facts that did not fit into a simple characterization of the man—that Litchfield had taken a leave of absence as a student at Michigan so that he could pursue his love for Byzantine history, or that he was greatly respected in his position in Germany, partly because of his unusual concern for those who worked for him. During 1965, his most precarious time at Pittsburgh, Litchfield did not hesitate to take a controversial stand by backing some Pitt students involved in civil rights demonstrations in Alabama. And, as the facts of Litchfield's treatment as chancellor at Pittsburgh became more clear, it was apparent that he had a case in his defense that should have been more widely appreciated.

Like other men, Litchfield had his faults, but many of these faults were shared by the systems which he served. Litchfield made grand statements about the future of the University of Pittsburgh, but those who, perhaps unthinkingly, commissioned him to bring "instant excellence" to the university must share in the blame that the visions were never fully realized. At times, Litchfield's University of Pittsburgh may have resembled a hustling corporation, but in that respect it was no different from many other American universities which are "on the make." What should be remembered about Litchfield's career as an academic administrator is that the University of Pittsburgh did improve markedly while he was chancellor and that he deserves much of the credit for that forward movement. He was too courageous a man to have rejected the commission to build Pittsburgh into one of the nation's great universities.

Edward Litchfield was a proud and ambitious man. When this reporter talked to him a few months ago, Dr. Litchfield could not keep the hurt out of his voice when he said, "It will take me 10 years to put myself into the position of leadership in the American business community that I formerly had in the academic community." Those who knew him regret greatly that he did not have those years.—BRYCE NELSON

Dainton Report: British Youth Swings—Away from Science

London. "Brain drain" and "technology gap" have a catchier ring, but "the swing away from science" is causing similar disquiet in Britain. Now a new report with the noncommittal title "Enquiry into the Flow of Candidates in Science and Technology into Higher Education"* documents a dwindling esteem for careers in science among the young.

Named informally after its chairman, F. S. Dainton, a Fellow of the Royal Society and vice-chancellor of the University of Nottingham, the Dainton Committee offers the general analysis that the places in science and technology created so hopefully in higher education in Britain will not be filled satisfactorily unless reforms in lower echelons of British education make science more attractive.

The swing has been dramatized by demographic trends: the numbers in the age group which feeds the university have taken a downturn. But even in terms of percentages the proportion of students in the secondary school "science stream," which prepares them for entrance into the university, has dropped decisively. From 42 percent of the total in 1962, the proportion declined to 31 percent in 1967. If projections prove accurate, the fraction in the "science stream" will be down to a quarter of the total in 1971.

Effects of the swing are already apparent at the university level. Admission to science and technology faculties, expressed as a proportion of the total, declined from 45.9 percent in 1962 to 40.6 percent in 1967. On the other hand, demand for places in the arts and especially in the social sciences has been soaring. Admission to social science faculties, expressed as a percentage of total admissions, virtually doubled between 1962 (11.9 percent) and 1967, and it is widely argued that the competition for places is now keener in the social sciences than in any other field. At the same time, there is muttering that some science faculties are hard put to find qualified candidates.

If there is a common denominator to the Dainton committee's recommendations it is despecialization. The relatively intense specialization which sets British secondary education apart from its continental and American equivalents is probably most readily explained in terms of university education. In British universities the first degree is customarily taken in 3 years, and the graduate's level of attainment in his field is usually higher than that of his American counterpart's. This means that a science student must concentrate solely on science and mathematics in the final 2 years of secondary school in order to meet entrance requirements and to cope with university work in his field. Actually, if he is to do well in the final two "sixth-form" years of school, which are the launching pad for the university, the student must begin specializing earlier, usually at the age of 13.

The key recommendation of the committee is that "there should be a broad span of studies in the sixth form of schools, and irreversible decisions for or against science, engineering and technology should be postponed as late as possible."

*Cmnd. 3541, Her Majesty's Stationery Office, London.

To keep the options open, the committee would like to see most students taught mathematics until they leave school. On the larger question of broadening the sixth-form curriculum, the committee puts forward some tentative suggestions. But the committee members seem to recognize that, in seeking fundamental changes in teaching, curriculum, examination practices, and governing attitudes in both schools and universities, they are asking for the transformation of a system which operates to the satisfaction of many of the people who run it. This makes educational reform difficult to achieve.

Premature specialization and the tightly interlocking relationship of secondary and university education are a peculiarly British phenomenon (to be more precise, an English and Welsh phenomenon; the Scots are credited with managing things better). And the chief value of the Dainton report is likely to be its authoritative demand for reform in these sectors, rather than anything new it adds to the discussion. Because despecialization is the dominant theme, the report has somewhat limited relevance for explaining the swing from science as an international problem.

The committee acknowledges that much remains to be done in determining how the image of science affects young people's decisions on careers. They grant that the swing from science is difficult to explain, since "the root causes lie more deeply in the individual." But the committee members are scientists and civil servants, and in the main they keep to the familiar territory of the schools, where, reasonably, they feel they may have some direct effect. They give little emphasis to the small but interesting body of research on ways in which attitudes toward science vary according to an individual's personality type and social class. They do not put much stress on indications that disenchantment with science may come at a very early age. Nor are they disposed to speculate on the impact of such things as television, the new avatar of social awareness, or juvenile emancipation brought about by affluence, permissive child-raising, and better nutrition and health, which may be the sort of influences that are really decisive in determining an individual's choice for or against a scientific career in the industrialized countries.

—JOHN WALSH

Hospitals: HEW Advisory Committee Urges More Supervision and Planning

"Disorganization" is the "key fact" about American health services today, an advisory committee on hospital effectiveness stated in a recent report. The committee, headed by John A. Barr, dean of the Graduate School of Business at Northwestern University, was appointed by the Secretary of Health, Education, and Welfare last year; most of the committee's recommendations can be expected to exert considerable influence inside the federal health establishment. The 16-member committee, many of whom are hospital directors or otherwise professionally familiar with hospital management, suggested a series of recommendations for establishing greater supervision and planning for American hospitals, and stated that their purpose was to hasten the day when hospitals would be "not just where the capabilities are but where the action is."*

The committee found that, at present, all too much of the "action" is in the realm of unnecessary duplication of facilities and ever-increasing costs. The group noted that hospital costs had increased by 16 percent in 1966 and again by 16 percent in 1967, and that average costs now totaling $65 a day may rise to as much as $100 daily within 5 years. "There can be no question that hospital costs are leading the charge" in the overall trend toward rising medical costs, the group stated.

One reason for pressure on hospital facilities, the committee noted, is that prepayment and insurance benefits have generally emphasized hospital care as opposed to service in nursing homes, physician's office, or the patient's home. To obtain reimbursement under many of these insurance plans, the patient must be sent to the hospital, even if it is more rational and less expensive to treat him elsewhere.

One of the main thrusts of the committee's report is that hospitals should be required to adopt the kind of planning that is imposed on private industry by "the forces of supply and demand, competition, and the drive for profits." Hospitals have not had to engage in such planning because of the breadth of community support and because of the power of the physician over hospital management. Nonetheless, "health-care institutions must be required to engage in the planning process—the rational ordering of means to achieve stated ends—if they are to continue to have the public confidence, and the public support, and the public funds which most of them still enjoy, albeit with some shrinkage of enthusiasm in recent years."

The committee hopes to get hospitals to engage in planning not only for the immediate future but for the next 5 years. It states that, ideally, long-range planning should be the full-time responsibility of a member of the institution's administrative staff. It also hopes that requirements for planning and budgeting will make hospital trustees and physicians associated with hospitals more conscious of long-term needs of their institutions.

The committee decided to concentrate its suggestions on topics which it thought would have a good possibility of achieving favorable action; it agreed that "its specific recommendations would be few in number, high in priority, and pregnant with potential consequences." The committee added, however, that no recommendations or laws could eliminate hospital abuses all at

* In addition to Barr, members of the HEW Secretary's Advisory Committee on Hospital Effectiveness are: Karl G. Bartscht, Ann Arbor, Mich.; Ray Brown, Affiliated Hospital Center, Boston; C. Wesley Eisele, professor of medicine, University of Colorado Medical Center, Denver; Ray Eppert, trustee, Harper Hospital, Detroit; Scott Fleming, Oakland, Calif.; Jack C. Haldeman, president, Hospital Review and Planning Council of Southern New York; Raymond Francis Killion, Metropolitan Life Insurance Company, New York City; Eleanor Lambertson, director, Division of Nursing Education, Columbia University Teachers College, New York City; Lawrence Martin, Massachusetts General Hospital, Boston; John Mayne, Mayo Clinic, Rochester, Minn.; Walter J. McNerney, president, Blue Cross Association, Chicago; Walter J. Rome, Children's Hospital, Pittsburgh; Harvey Stephens, Automatic Retailers Association, Philadelphia; James W. Stephan, Minneapolis; and John Tomayko, United Steelworkers of America, Pittsburgh. After 15 April, copies of the 59-page report can be obtained from Max Fine, Bureau of Health Services, Public Health Service, 7915 Eastern Avenue, Silver Spring, Md. 20910.