

support of research or discharge of responsibilities to war veterans or to the disadvantaged: that only recently has the federal government begun to support higher education for its own sake and in so doing only on a hesitant, fragmented basis that could best be described as backing into a federal policy.

He would also discover that at the present time every federal department except the Post Office and Treasury and at least 16 independent agencies have direct relationships with institutions of higher education and that the Office of Education alone is responsible for administering over 60 separate programs in this area under the authorization of 15 different legislative enactments.

Finally, he would find out that there is no single place in the federal government where all of this activity is directed or coordinated, or its collective impact on the colleges and universities even assessed—no locus of concern about the health and welfare of higher education per se.

Our visitor, while recording his astonishment at all of this, would, however, have to recognize the good side of the lack of a national system and clear federal policy within it. He would, along with the shortcomings, have to note the relative freedom and autonomy our colleges and universities have enjoyed, the high degree of academic freedom in most of them, the relative breadth of democratic access to them and the great intellectual distinction achieved by some of them. He would have to note the immense vitality that has existed in this non-system—the freedom to duplicate what others could do better, to waste money, to perform useless, even meretricious functions, yes, but also the freedom to develop and experiment so that higher education could remain as dynamic as the nation itself.

Our objective observer from another planet, having now served his purpose, can be allowed to be apprehended by the U.S. Immigration Service and sent to Cape Kennedy to await repatriation while we move on to consider what the new era may be like, and some of the problems it may bring. First, let us look at a few figures on the growth of the higher educational enterprise.

BY 1975—\$34 BILLION AND 9 MILLION STUDENTS

Twelve years ago, in the academic year 1955-'56, there were enrolled on a degree-credit basis in our junior colleges, four year colleges and universities some 2.6 million students. That figure last year was 6 million students. By 1975 it is conservatively projected to be over 9 million, an increase of three-and-a-half fold in just two decades.

In 1955-'56 the total capital and recurrent expenditure by all higher educational institutions was \$4.1 billion, of which 12 per cent, including research and development support, was supplied by the federal government. Last year the figure was \$16.8 billion, of which 23 per cent, including research support and loans, was from federal sources.

The figure for 1975 can, of course, be no more than rough guesswork because of the wide variation possible in the assumptions on which it might be developed. An estimate provided by the Office of Education, based on a projection of cost increases for the past decade applied against anticipated enrollment increase and expressed in current dollars unadjusted for inflation puts the amount at about \$34 billion. My own guess, however, is that because of soaring personnel costs it may quite possibly be rather higher, perhaps as high as \$40 billion. Such a figure, if we do reach it, would then represent a tenfold increase in funds spent by higher educational institutions in two decades, or a rise in such expenditure as a proportion of GNP from about one per cent to something over there per cent—during a 20 year period in which student numbers will have increased three-and-a-half fold.

FEDERAL SHARE IN 1975 MAY BE 50 PERCENT

To estimate what proportion of expenditure will be covered by funds from federal sources by 1975 is difficult indeed. Yet one can predict with little risk that it will be far larger than the present 23 per cent. The Office of Education, again extrapolating from past experience predicts a rise to about 30 per cent. I, however, believe that the federal share will be even greater. Indeed if the Vietnam war ends by 1970, the federal share by 1975 may go as high as 50 per cent. This would suggest that, of an estimated total annual expenditure then by higher educational institutions of \$40 billion, as much as \$20 billion may come from federal sources, including, of course, research and development support, as well as other kinds