The oft-quoted National Science Foundation report (*1*) mentioned by Abelson provides data on the status of respondents to a questionnaire which was sent to the respondents of a previous questionnaire (*2*). It is doubtful whether this kind of sample is a representative one.

A 1971 study (*3*) by the Engineers Joint Council (EJC) identifies some of the inadequacies of a companion NSF report on engineers (*4*) and indicates substantially higher unemployment rates than does the NSF report. But even the EJC's method of selecting respondents results in limitations in the applicability of the data.

U.S. Department of Labor figures, as well as those of individual states, have inherent problems of classification as well as sampling technique. In Massachusetts, for example, extrapolation techniques developed for use in "normal" times are of questionable value when used during a period of prolonged unemployment. These techniques resulted in an official unemployment figure for scientists and engineers in mid-1971 of 4200 (*5*). Others have estimated that there were between 10,000 and 20,000 unemployed scientists and engineers in Massachusetts at that time, and between 100,000 and 200,000 in the nation (*6*); these estimates correspond to an unemployment rate of about 10 percent, which is more consistent with my own observations.

During the past year, an inordinately large number of frustrated, disillusioned, and desperate scientists and engineers have accepted underproductive and unrewarding employment. But government questionnaires (*7*) have not been designed to elicit data on underemployment, and government analyses ignore it. This accounts in part for the questionable credibility of government figures and analyses.

Abelson suggests that researchers enter the overcrowded arena of technology-oriented companies as a step toward solving the researcher's employment problem. The answer to their problem does not lie in displacing others from their jobs or in scrambling for the meager scraps that are being strewn among us for political mileage. This approach results in the community of scientists and engineers being divided and conquered, as it is at present.

The current administration made a conscious decision to permit the unemployed, including scientists and engineers, to bear the brunt of controlling inflation. This was implemented despite the severe human cost and the long-term compounding of national problems.

The federal government, and the Administration in particular, control the purse-strings that must be adjusted to promote employment, increase productivity, and address the pressing problems of national concern, toward which technology can contribute substantially. These goals are in the interest not only of scientists and engineers, but of the nation as a whole. We must not be sidetracked by cautions against overindulgence, while ignoring the continuing unemployment and underemployment crisis. Current economic practice, which inevitably results in personal disaster for many of us, is unacceptable.

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Old-Fashioned Virtues

Maesen and Maesen (Letters, 28 July, p. 293) suggest that universities return to "such 'old-fashioned' virtues as academic competence, high intellectual standards, and far-reaching preparation, rather than 'the customer (student, public, and so forth) is always right' mentality." I am unable to decide whether this is a serious comment or whether it was meant ironically. It closely parallels numerous passages in C. P. Snow's books, in which he describes the reactions of Greek and Latin scholars to the demand for relevance by their students, who had the temerity to insist that science should be added to the university curriculum.

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