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The American Association for the Advancement of Science was founded in 1848 and incorporated in 1874. Its objects are to further the work of scienin 16.74. Its objects are to further the work of scientists, to facilitate cooperation among them, to improve the effectiveness of science in the promotion of human welfare, and to increase public understanding and appreciation of the importance and promise of the methods of science in human progress.

## The Appropriate Function of a University

Today the dominant trend in our universities is toward trying to do too many things. What is the appropriate function of a university? Should it emphasize community service; should it provide a base of operations for its faculty, or should it exist to teach? Obviously it should exist primarily for educating the young. This is the one function which it can uniquely perform and, in the long view, the most important. Other organizations can provide community service or furnish housing for those whose only interest is research.

It is difficult to know when a university is doing a good job of teaching, and those who judge university administrations seldom evaluate them on the basis of the quality of their human output. Rather, institutions are judged by some on the basis of their football teams; by others, on their budgets, rate of increase of endowment, or new buildings. Among professionals, standards are employed which in their way are as false as the criterion of athletic prowess; for example, institutions are rated on the number and brilliance of their academic stars.

By "stars" I mean men who in various ways have made a name for themselves. But does the presence of such men necessarily contribute much to the teaching function of the university? Sometimes it does, but many of these men are only occasionally on campus or have little or no time for students.

Another fashionable standard for judging a university is the amount of research activity. Thus, university administrators tend to follow the "publish or perish" approach. As a result, many scientists find it expedient to neglect teaching duties. Those engaged in research have always enjoyed advantages over the teachers, few of whom gain recognition even in their own institutions. Under the present rules of the game, any scientist who teaches when he can do research must be unusually public-spirited or blind to his own interest. The result is to demean teaching. How can a professor approach a class with enthusiasm and adequate preparation if he is convinced that education of undergraduates is a secondary function of the university?

Few administrators would admit publicly that they give low priority to education, and indeed most would prefer to provide excellence in teaching. The difficulty is that academic stars and research output can be easily identified and can bring acclaim to an institution. How many universities have gained renown for their instruction?

The problem of establishing criteria for performance in teaching is difficult. Many components must be considered in judging whether a man has been educated. Surely the accumulation of knowledge is important, and achievement tests are one objective means of measuring performance. In scientific fields it should be possible to establish additional criteria. On completion of his doctorate in science, a man begins to publish papers, or if he is in industrial research he begins to rise in the company. After 3 or 4 years one can judge his scientific competence and potential.

Among the needs in education today are well-established, nationally recognized performance standards for educational achievement. Creation of such criteria could assist in redressing the present imbalance between research and teaching in our universities.-P.H.A.