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Help for Small Colleges

Undernourished small colleges are often talent traps, dulling the interest of their most promising students with inadequate facilities and out-of-date teachers. The effect on potential scientists is important, but the effect on other students is of at least as great importance. The president of the Research Corporation recently expressed the foundation's conviction that "the liberal arts colleges represent the major promise in education for development of the leaders and responsible citizens who will be needed to cope with and to shape the world in the years ahead. It is our further conviction that science—for the non-scientist as well as for the researcher or teacher of science—is an essential element in this kind of education." If the facilities are inadequate and the faculty is inferior, the attitudes of all students are adversely affected and their understanding of science is stunted and warped.

Shortly after World War II, to help combat these shortcomings, the Research Corporation began to make grants to liberal arts colleges. The primary reason was to strengthen science in liberal arts colleges, but many recipients reported that the grants had a secondary effect of stimulating improvements in the colleges' other academic departments. The program has been effective; it was expanded some 10 years ago; and now the budget is being doubled.

Some of the large grants of the Ford Foundation go to liberal arts colleges. The National Science Foundation, too, is seeking to help. The 1967 budget includes \$10 million for grants to aid science departments in liberal arts colleges and in small universities that grant few doctoral degrees. If Congress continues to provide the funds, NSF hopes to make grants to several hundred colleges during the coming years.

If the financial support promised by these, or other similar, programs is to be of maximum benefit, help is also needed from college administrators and from scientists. Several years ago Laurence Gould found that the administrators of some small colleges were uninterested in faculty research. Some were even hostile. Scientific societies can help overcome such difficulties by demonstrating their interest. The American Chemical Society makes research grants to chemists at small colleges. The Committee on Physics Faculties in Colleges, of the American Association of Physics Teachers, has conducted an illuminating study on the teaching of physics in colleges. One finding was that physics majors who received their bachelor's degrees at a university had a one-in-four chance of continuing to the doctorate. Those whose first degrees were from a college (except for a few of the prestigious ones) had only a one-in-twenty chance.

The widely held belief that a liberal arts college is the "best" place to get an undergraduate education has had hard sledding, at least in the sciences, against such evidence. Nevertheless, liberal arts colleges continue to be an important component of higher education. They can continue to be such, but now they can give a good liberal education only if science faculties and facilities are adequate. The new NSF program, Ford Foundation grants, and the increased emphasis of the Research Corporation will help, and will be of great significance if they stimulate other major efforts to improve liberal arts colleges.—DAEL WOLFLE

Science

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Dael Wolfle

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