editorial

Needed for education: a cooperative effort

The report by the National Commission on Excellence in Education (see page 44) comes as a shock-even to physicists and others in the science community already aware of the sorry state of secondary education in science and mathematics. In essence the Commission finds that, in spite of Sputnik-inspired efforts of the late 1950s, the educational level of Americans has since steadily declined in the last 25 years from the pre-Sputnik level that everyone had agreed at the time was alarmingly inadequate. The Commission's report helps us to see the education problem in science and mathematics as part of a much broader national crisis involving a growing functional illiteracy (inability to read, write or comprehend). (This report is not to be confused with the report of the National Science Board's Commission on Pre-College Education in Science, Mathematics and Technology, which will appear later this year.)

We were deeply disappointed that, in reacting to the Commission's report, the Adminstration continued to dwell on "ending the Federal intrusion" in education. Surely it should be clear to all that rebuilding our educational system is a task of such mammoth proportions that it will require the cooperative effort of both local and Federal governments, as well as help from many other quarters, including (as the Commission suggests) students themselves, parents, teachers, school boards, colleges and universities, scholarly, scientific and learned societies, industry and labor. It is the obligation of the White House to take the lead in motivating and organizing this effort.

Much has already been accomplished over the past year in addressing the problems of revitalizing physics education in high schools, mainly through the efforts of the American Association of Physics Teachers and the Education Committee of The American Physical Society. We will summarize the status of the thinking and planning by the physics community in this area in our special issue "The crisis in high-school physics teaching" to appear in September.

The experience so far of the physicists working on the education problem should be of value in approaching the broader problem identified by the Commission. In response to the Commission's report the Department of Education

now proposes to "hold meetings all across the country" to promote a "commitment to excellence" in education. Some time ago, AAPT and APS had concluded that the first step toward improving physics education should be a massive campaign to educate the public leaders to the urgency and the consequences of the problem. Beginning efforts to this end have already met with some success and should be shared and coordinated with groups confronting the broader educational problem.

One of the aims of the authors contributing to our special issue in September will be to encourage the active participation of physicists as individuals (whether in academia or industry) in the work of restoring high-school physics to a state of health. They will identify many ways in which you as a physicist can help, ranging from running for the school board, to inviting the science teacher to your lab, to getting money from a local corporation, to appearing on local television and so on. We hope you will resolve over the summer to find the way *you* can contribute when September comes.

Harold L. Davis