RESEARCH

Federal Control and Basic Research in Education

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In spite of the heavy fiscal demands currently placed on the U.S. government, Federal support for research and development has remained relatively constant since 1967. Nonetheless, it is an open secret in academic circles that funds for basic research have been cut back drastically.

While the most vocal of the protesting professional groups have been associated with space and medicine, there are other areas where the situation has become even more critical. In education, new funds for basic research by independent investigators have been effectively and completely cut off. At the present time, almost all of the Federal aid for research and development in education is going directly to local school districts, which typically are not equipped for research or development; regional educational laboratories for the dissemination of largely unproven educational products; and university research and development centers, which are being forced more and more to emphasize development at the expense of basic research in education. The problem becomes more serious when one considers that Federal aid for so-called project research in what is rapidly becoming America's largest industry (education) is infinitesimal when compared with the amounts going into medicine and space.

Even recent plans of the U.S. Office of Education to "increase" support for basic research seem fraught with danger. In the words of R. Louis Bright, former Associate Commissioner for Research, U.S. Office of Education, "[we are going] to try to attract outstanding people in a number of related disciplines into thinking about how their basic research might possibly [emphasis added] relate to education." Apparently, the Office of Education is intent on repeating the mistakes of other agencies like the National Institutes of Mental Health and the various Armed Forces Research Offices. While education, like medicine and military science, has benefited from related work in other disciplines, real progress necessarily will depend on individuals with a strong commitment to education. Dr. Bright's statement sounds more like a "come on" to opportunists than an opportunity to increase basic understanding of the problems and processes of education.

Perhaps most important, Federal control has reached the point where research workers in education no longer are allowed to follow what they consider to be the most productive lines of inquiry. The present Congressional mood has forced officials at the U.S. Office of Education, for example, to specify not only what kinds of research will be supported, but effectively how that research is to be done. It is worth noting, in this regard, that the more specific priorities are made, the more severely will an investigator's course of action be curtailed. The new "teacher education program" is a case in point. The guidelines for preparing proposals were both self-contradictory and ambiguous. On the one hand, they called for new and innovative programs for teacher education and, on the other hand, they specified the precise form that these innovations were to take. They were ambiguous in that they failed to distinguish properly between pre-service and in-service teacher education. The call was for single all-inclusive systems for doing both. To anyone who has thought about this problem seriously, it is obvious that the needs of pre-service and in-service teachers are quite different. The former are typically full-time students who are without teaching experience. The latter are more likely to be part-time students, with highly diverse backgrounds and varying amounts of teaching experience. This is not to say that educational programs for pre-service and in-service teachers have little in common, but that the two can and should be treated separately when it comes to planning. In short, the restrictions imposed on the investigator were such as to eliminate practically the possibility of a significant breakthrough. Equally important, the conditions set forth by Washington bureaucrats must have discouraged many self-respecting and competent researchers from even applying.

This short-sightedness could have disastrous effects for a nation that increasingly is looking to education as the major means for solving the gigantic social problems of our time. For one thing, the lack of adequate basic research in education is undoubtedly one of the major reasons why the expected advantages of individualized instruction and related technologies in education have failed to be as dramatic as systems and computer enthusiasts would have us believe. The really difficult problems in developing systems of computer-assisted instruction are not due to inadequate hardware, but to grossly incomplete information about the instructional process. The same thing might be said of teacher education. Any serious investigator would have to agree that no one...
knows, in any detailed behavioral sense, what the most important things are for teachers to know. At the present time, we simply are guessing and promoting.

Rather than dissemination and development, I would suggest that what is most needed is renewed vigor in, and support for, basic research in education to clarify some of the problems involved in such important areas as individualized instruction and teacher education. There is a strong parallel between recent failures in devising truly individualized learning and the inability of applied physicists to harness the H-bomb on the basis of the presently very incomplete knowledge about the particles and forces comprising atomic nuclei (with the loss of billions spent on development). The failure of development and engineering to achieve its set objectives is usually good reason to return to the laboratory to find out what is going on. In the long run, it is much cheaper.

Hopefully, for the future, a number of legislators are becoming increasingly aware of the folly of the present approach. As Rep. Emilio Q. Daddario (D., Conn.) remarked in reacting to the above comments, "I especially agree with you in your view that we need 'renewed vigor in and support for basic research in education. . . ."