

While there is common agreement among experts as to the long-run value and need for research in education, tools for measuring the effects of research or even isolating the effects so that they can be measured have yet to be developed. Moreover, since the research programs of the Office of Education were established less than 10 years ago and research expenditures have been relatively small, the economic effects have not yet had a large nationwide impact. Even if economists could account for "other things being equal" outside the sphere of educational expenditures, it would still be difficult to determine which kinds of educational expenditures are causally related to specific economic results. (Will the size of a pupil's future salary be related to his studying the new math developed through research, going to school in a modern building, or being able to attend college on a Federal loan, or all three, or none?)

Leaving aside the problem of measurement, it is possible to point out some of the relationships between educational research and the economy. One aspect of this is the growing interplay between research and industrial firms which promises to be of mutual benefit to both business and education. Increasingly the private industrial sector is recognizing all parts of education, not only technical or vocational, as being directly relevant to its interests. Private enterprise is also increasing its interest in the market which education offers for a spectrum of products, all of which are designed to contribute to better education. The interchange of information and interests, and the coordination of these efforts, will alter the pattern of research in education which has previously been directed and conducted almost exclusively by professional educators. The ingenuity and talents of the private sector, both stimulated and utilized by educational research, are developing new materials and new devices which augur a significant change in educational practices.

The most important economic contribution of educational research is, of course, its development of more efficient uses of human resources. As a result of advances through research, children are already learning more at earlier ages. For example, first graders are now learning fundamentals of economics and algebra, and fifth graders are studying mathematical logic usually taught in college. Ideally, research efforts to provide each child with individualized instruction tailored to his own needs and talents will result in each child learning as much as he can, as soon as he can, and as quickly as he can.

The Office's research program, in particular the educational research laboratories now being established, will result in continued improvement in the efficiency of the Nation's educational system. The interest in, and the ability to cope with, the problems which are being researched means that for the first time every level of American education will have available to it the means to effect its own improvement and renewal. Efforts such as these will create a new and more effective partnership in the improvement of American education. The fact that colleges and universities, State educational agencies, and local schools may be both beneficiary and participant in this effort will make the administration of research much more responsive to the needs of education and should result in more rapid improvement in education, contributing to the greater economic and social progress of the Nation.