R & D in the defense budget—roughly 10 percent—is considered, it is clear that education is not a research-intensive enterprise. Furthermore, much good education research literally moulders in the files because—as it was put in the hearings—the "transportation system" for education R & D is defective.

Correction of this problem of putting research into use is one thing NIE must manage if it is to close the circle of research, development, and utilization. Considering the slow responses of the system, the last stage in innovation could prove to be the biggest challenge for NIE.

The relationship of NIE to OE and to other agencies is, of course, an essential question. The NIE legislation calls for a major restructuring of the education section of HEW. The bill follows the Rand study in making NIE a separate agency equal to OE. The NIE is to have a director appointed by the President and confirmed by the Senate who will occupy the same grade level as the Commissioner of Education.

A 15-member advisory council is to give the agency advice on matters of general policy and review the state of education R & D. Advisory councils are standard equipment for agencies created by social legislation and unfortunately are often peopled with those who are simply thought to be deserving of one of the minor honors an Administration can bestow.

Chances that a research agency will succeed are improved if research administrators can deal with potential investigators on a basis approaching professional parity. Federal programs in education research have been generally underpowered in terms of management. The OE research branch, for example, in recent years has had four people in civil service supergrade posts —with salaries in the upper 20's and the 30's—compared with 50 such positions in NSF and 90 in NIH. The new bill calls for a big boost in the number of supergraders.

The size of NIE's budget will have an obvious effect on the scope and character of its operations. The Rand report calls for a $155-million budget in fiscal year 1973 and over $1.1 billion by 1982. Congressional sources expect that the Administration will seek the target figure for 1973, but it should be noted that perhaps $90 million of that represents funding for programs which will be transferred to NIE and presumably will be continued, at least in the short run. The expectation is that NIE will put most of its resources into extramural projects but run a small intramural program.

In recent years, OE has to some degree overcome its inhibitions about funding large projects involving some elements of risk or controversy. The much-discussed children's television series "Sesame Street" cost about $8 million and its "Electric Company" successor series considerably more. The ambitious National Assessment Program is expected to cost about $40 million over a decade. So with this precedent and the permissive legal language defining the functions of NIE, the new management will have considerable freedom to set priorities for the institute.

What Congress apparently would like would be a mix—more "Sesame Street" successes at one end of the spectrum, more adventurous basic research at the other end. Brademas hinted broadly at what he hoped for in NIE leadership in a speech at a meeting of the American Educational Research Association in 1971. "It seems to me," he said, "to be most important that the initial staff of the NIE be of the highest scientific caliber, and must represent not only all that is best in the educational research of the recent past but also those fields in which new contributions to learning about learning might be found.

"In fact, I can easily foresee in the membership of the American Educational Research Association many more anthropologists, political scientists, communications engineers, cyberneticists, and neurophysiologists than you may have now."

With its limited resources and facing truly formidable problems, NIE cannot reasonably be expected immediately to engender the science of education that John Dewey hoped for. But the new institute should manage to put more good science into education R & D.

—JOHN WALSH

Columbia Loses Ewing to Texas

Texan largesse and the lure of home have deprived Columbia University of the head of its Lamont-Doherty Geological Observatory, one of the world's leading geophysical institutions. Maurice Ewing, director of the observatory since he helped found it in 1949, is to create another oceanographic institute from scratch for the University of Texas.

Ewing, a native of Texas, may not exactly have put the oceans on the map, but he has devised many of the modern instruments for studying them, charted the Mid-Atlantic ridge, discovered the Hudson River's offshore canyon, and laid bare many other unexpected features of sea floor topography and history. In inviting Ewing to Texas, the university regents last week voted $1.5 million for a preliminary building and over the next 5 years intend to provide "whatever is necessary for him to build up a fine institute." The institute will be part of the university's marine biomedical center at Galveston.

Under Ewing's direction over the last quarter-century, Lamont has grown to support a staff of 500 and two oceangoing research vessels on a budget of $10 million. Ewing says his reasons for leaving are the limited opportunities for expansion at Columbia, either in buildings or faculty positions, and the fact that he is approaching Columbia's retirement age. Some of Ewing's colleagues may follow him to Galveston, where there is an initial establishment for 30 scientists. But there is no mass exodus in the offing; Ewing said last week he was offended by incorrect reports that he would be taking with him 30 of Lamont's scientists and the *Robert D. Conrad*, a Lamont research vessel owned by the Navy.

Truman G. Blocker, president of the University of Texas Medical Branch at Galveston, says Ewing's name was first suggested by a committee studying the expansion of the university's marine science faculty. "When we found out that he was a Texan, we went right after him," Blocker says. The university's desire to build up its marine science activities is not unconnected with the continental shelf off the Texan coast and its oil-laden salt domes, which, in fact, were discovered by Ewing.—N.W.