

crucial feature was the involvement of university scholars, especially mathematicians, physical scientists, and life scientists, in the programs. The point was that it became respectable, and more, for university scholars to engage in education R & D. At about this same time, interest in educational uses of new technology—language laboratories, teaching machines, educational television, computerized instruction—was increasing and drawing new kinds of people into education R & D. In addition, a growth of activity in research in child development and problems of cognition were attracting numbers of behavioral and life scientists—experimental psychologists, physiologists, anthropologists—into what could be legitimately regarded as basic research in education.

The next major impetus came in the middle 1960's from Great Society social legislation. It had become increasingly evident that simply pumping more money into poor rural and inner city schools would not overcome the effects of deprivation. The major rationale of the Elementary and Secondary School

Act of 1965 was that it provided a guarantee of significant federal support for school districts with concentrations of children from low income families. To meet the needs of educationally deprived children, the Office of Economic Opportunity launched the Head Start program for preschool children. Head Start, however badly needed, was a crash program with a narrow intellectual basis and no time for pilot projects. Started by OEO and later shifted to the Department of Health, Education, and Welfare, Head Start never really recovered from its ad hoc origins.

The need for more and better R & D was recognized in the Elementary and Secondary School Act's education research and training section, which provided more money for research and for financing graduate education and post-doctoral work in education research. To help break the patterns of the past, the bill also called for the creation of regional centers for research in education. The hope of the proponents of the new regional research labs, as they came to be called, was that they would

be detached from the established education-research institutions and provide the locus for new kinds of interdisciplinary research in education that would involve people in the arts, as well as sciences, who had previously been little represented in education R & D.

By most accounts, the regional labs have been a mixed failure. Two or three of the score of labs seem to have fulfilled the original hopes; the rest, by and large, are said to have been captured by the education establishment and to be producing unimpressive results.

This recitation of dismal events is, of course, not the whole story of education research. In fairness it must be noted that education R & D is meagerly financed in relation to the size of the educational enterprise. An estimated \$200 million a year is spent on education R & D, while annual expenditures on education are near \$70 billion. Health expenditures run at something over \$60 billion a year, but R & D costs in the health sector are put at about \$2.5 billion. When the even greater proportion of investment in

Wakelin to Leave: New Council Rumored

Several straws currently in the wind indicate that the Nixon Administration has new plans for science. One is the not-yet-official departure from government of James H. Wakelin, Assistant Secretary of Commerce for Science and Technology. Although his letter of resignation had not been sent to the White House, Wakelin confirmed in a telephone conversation last week that he would leave Commerce by August because, he said, he has "other things" he would like to do. Other knowledgeable sources, however, have described Wakelin's leaving as "precipitous"; his boss, the new Secretary of Commerce Peter G. Peterson, is said to have "his own ideas" about science and technology.

With Wakelin's departure, two key science jobs in Commerce are vacant, the other being that of Lewis S. Branscomb, who resigned last month as director of the National Bureau of

Standards. Wakelin is said to have been heading up the search for Branscomb's successor. Now, Peterson will have a free hand to choose his two science lieutenants, and in doing so, to shape the main features of the Commerce Department's growing role in science.

Another indication with import for the future is the increased consideration now being given in Administration circles to the establishment, after the elections and assuming (as they do) that Nixon will win, of a prestigious council of science and technology advisers.

The three or four member council would supposedly do for science and technology what the Council of Economic Advisers does for economics: providing the White House with top level, highly visible advice which can counterbalance the stratagems of the federal agencies.

As for its effect on the status quo, while such a group would bolster the relatively weak hand of the President's science adviser, it would probably use the Office of Science and Technology (OST) as its staff—thus

lowering OST's visibility—and perhaps make obsolete the President's Science Advisory Committee (PSAC).

According to knowledgeable sources, this proposal, which has been in the files for years, has now become "very much alive."

Not only alive, but kicking, however, is the issue of what the proposal implies for PSAC. The prestigious PSAC jobs have long been coveted in the scientific community, but PSAC's orientation toward university science and basic research is a far cry from the Administration's bias toward applied science and industrial participation. There seems to be little question that PSAC's influence has declined in recent years. Three vacancies now exist on PSAC, and the last appointments were made in March 1970, before the present science adviser took office. No one in the Office of Science and Technology could be reached last week for comment, perhaps because it is likely that the White House science apparatus will be in for big changes, even if Nixon wins in November.—D.S.

Briefing