1 4 9 6 8 NASA Education for Public Service - Challenge

One of the political myths of America is that public narrow set of techniques, focused on fiscal, manpower, and organization management. This is paired with a view of public servants as those men and women who work in an official capacity for the government, usually in agencies having stodgy names. Such conceptions have always been inadequate and disrespectful; in the world of today they may turn out to be disastrous. At this time, no authorities are in a better position than our universities and their professional schools to expand the notion of what public administration is all about and what persons constitute the public service; but in order for them to do so, there will have to be a change of mind about the nature and degree of their responsibilities to the commonweal. Like most revisions, this one is bound to provoke controversy.

In 1967, in a refreshing report on "The Professional School and World Affairs," a New York research institute, Education and World Affairs, observed:

> "Engineering schools tend to be without internal arrangements for the social sciences and seem to devote little of their energy to generalized problems. Social issues are relegated to other colleges and departments. Accordingly, the planning of the engineering colleges is carried forward without the benefit of broader social viewpoints. However, it is not fair to single out engineering schools for this observation: Many, perhaps most, professional schools suffer a similar handicap. It is a growing problem with great consequence for the vitality of professional education."

In conclusion, EWA declared:

"There is emerging today a dramatic clash within U.S. society both university and non-university, between those who want to hold on to the time-honored university functions of imparting increasing knowledge, and others who want the university to concentrate a substantial portion of its intellectual resources in serving directly the needs of society. This is in part the result of the accelerating impact of the university and its people's skills and knowledge upon the world outside."

Bureau of the Census figures show just how great the role of the professionally educated in American society has become. Between 1900 and 1968 the entire labor force grew by 123%, but the persons in professional occupations multiplied by nearly 500%. In 1900 only about one in twenty-four in the total labor force was a professional; today the ratio is about one in eight.

The rise of professionalism is even more dramatic within the public services. Currently among civilian employees in government, professional and technical personnel - including teachers - number about one in three. If teachers are excluded, the proportion is still one in five; two and a half times the comparable proportion in the private sector. Indeed, Professor Frederick C. Mosher, of the University of California, Berkeley, an authority on the professions in the public service, has observed, "There are few institutions in our current society which rely more heavily upon educated, skilled, and specialized personnel than our governments."

Our society's use of vast numbers of highly trained men and women is hardly surprising in this industrialized, scientifically-minded, urbanized nation. Nor is it surprising that our Federal, state, and local governments use the well-educated in profusion. The building of great public works, exploration of space, renovation of our cities, these and a multitude of other endeavors call for every type of trained person that our universities produce.

But the scant concern about the preparation of men and women for the requirements of the public service does seem extraordinary. It is symptomatic that the private foundations, which have been so energetic in identifying many problem aspects of the education establishment, supported the major effort of EWA to examine professional schools and world affairs. What to some observers is a more basic issue, namely that of university and professional education as it relates to public service within the nation, has been for the most part ignored.

Why is this so?

To begin with, the public service is no longer a simple thing to describe. Should its definition be confined to persons and positions which are formally classified as governmental? Surely not, for when one reflects on the host of non-governmental organizations - private welfare agencies, private schools, nonprofit research institutes, service organizations, and so on - one finds all of these groups performing services that affect society's well-being.

Lack of concern for public service education also relates to the fact that professional educators have implicitly taken the line that there is a discreet body of technical knowledge which, once learned by an individual, enables him to perform as a professional under any circumstances. He can work anywhere - in industry, in government, in the universities - so long as he is responsibly equipped with the techniques of his trade. Hand in hand with this is a factor of time; for the more technical the knowledge which must be imparted, the less time there is for exploring social or public service issues of the profession. Medicine and engineering are illustrative.

The neglect of public service in university education also derives from the limited resources of the government agencies that are centrally responsible for staffing the public service. Civil service commissions have typically been lacking in prestige among governmental units. They have acquired a negative image from their functions of control and regulation. In spite of the fact that they sometimes have imaginative and innovative leadership, they seldom are positive stimulants to the educational community. While this situation is slowly changing, the present state of affairs is illustrated by the fact that the U.S. Civil Service Commission has virtually no means for conducting research on public service manpower problems or for supporting such research in the universities.

In the universities, responsibility has resided primarily in schools and programs of public administration or public affairs. The universities, of course, also have schools and colleges of public health, social work, and education, and others as well, all preparing substantial numbers of persons for careers in public service. But the emphasis in these programs has been on technical content and on the acquisition of the scientific skills which will make of the individual student a genuine professional.

Years ago the public administration and public affairs programs themselves settled into the pattern of providing "scientific" knowledge and of creating a profession of public administration. Influenced by industrial interest in scientific management, the scholars of public administration became preoccupied with the abstract world of "principles" and staked out a limited number of governmental activities, such as the budget processes and the management of employees, for study. Since World War II, there has been some breaking out of this mold, but it has occurred slowly and unevenly.

There would be less cause for concern if elsewhere in the universities, either in over-all leadership, in the professional schools themselves, or in the departments of politics and political science, there were broad and lively interest in educating for public service. But this is not so. The few schools of public administration which have sought, by working with the professional schools in their universities, to provide a perspective on the processes and the social and economic objectives of government have been frustrated by lack of prestige and resources. Of course, good students with a desire to contribute to the public service may be guided into a graduate program in public administration and thence into public employment; but it is a measure of how little influence these programs really have that fewer than 3% of the higher echelons of Federal,

state, and local personnel have been exposed to the curricula of the schools of public administration and public affairs.

It can be argued that the primary function of the university is to generate and transmit knowledge, not to prepare men and women to serve particular needs, either private or public. From there, one can reason that orientation to a particular setting for one's endeavor should come after university training, either through on-the-job learning or, in mid-career, through return to the campus for advanced study. If an engineer, doctor, scientist, or businessman is to assume broader policy and administrative responsibilities in either public or private life, let him go back to academia and get ready. . .get set.

In these associated views there are both merits and weaknesses. Clearly the central function of universities is to discover and communicate knowledge. To divert them from this basic purpose would be to undermine our most important intellectual resource. And if we take a leaf from academic practice, the idea of a sabbatical for the professional who is about to embark on a new career or, more likely, on a new phase of his present one, makes sense. A return at midcareer to the university can, indeed, be invigorating. Nonetheless, can anyone propose that the function of the university should be frozen for all time - or, at the very least, for our own time? And is it wise to rely on sufficient numbers of men and women going back to school to equip themselves for some form of public service?

For answers to these questions, it is helpful to look for a moment at two things: the present state of knowledge, and the projected state of the nation.

To begin with, it is clear that the generation and transmission of knowledge in any age - are powerfully influenced by the nature of society and by the almost
inevitable response of scholars to social and public requirements. After the

Civil War, for example, the rise of our agricultural and engineering colleges was the result of needs in both the farming community and the burgeoning industrial establishment. In the 1950s, the renewed emphasis on fundamental learning and on science education was a response to such events as the launching of Sputnik. Today as in the past knowledge must be reassessed, not simply to assure that a curriculum or discipline has internal consistency but also to make certain that what it transmits is both up-to-date and useful.

Secondly, we find that in our time fundamental and applied knowledge are increasingly drawing together. It is no longer possible to proceed very far in economics without some study of individual and social psychology, in psychology without some knowledge of bio-chemistry, or in engineering without a minimal grasp of economics. Persons engaged in research and those in important public and private problem-solving endeavors know this all too well. The constant plea of executives, in or out of government, is that the universities provide professionals who have the capacity to comprehend large complex problems, who can formulate solutions to problems which go beyond their particular fields and technical skills.

Thirdly, one must recognize that decisions on employment situation are usually made in the college and professional-school years. The man or woman who understands what kinds of broad social issues his profession grapples with, who is led to see the important connections between his field of learning and the problems of the time, and who begins to understand the responsibilities of government for meeting these issues, will be in a better position to make a career choice in line with both his interests and those of the commonweal.

Lastly, we come to the projected state of the nation. There is growing evidence that the United States will face enormous difficulty in coping with the

demands upon it if the educational system fails to produce the kinds of men and women required by the public service. Right now the Federal government employs two and a half million civilians. Between 1956 and 1964 there was a $4\frac{1}{2}$ per-cent increase in Federal employees, but white collar workers in Federal service rose by 15% and so-called blue collar employment declined by 19%. State and local governments presently employ over eight million persons, a doubling since 1946, and the same trends are evident with regard to the increase of the highly trained and the decline of blue collar workers. For example, between 1957 and 1965 the number of full-time public employees in education rose by 60% and those in public welfare by 62%. According to a report of the Municipal Manpower Commission, by the early 1960s almost half of the nation's municipal executives had done their university work in the physical sciences and in such professions as engineering, planning, architecture, and medicine. Certainly this trend toward professionalism in the public service will continue.

Looking ahead, one must also keep in mind the burden imposed by the "Great Society" programs. Over the past five years, thirty-five major pieces of social legislation have been approved by the Congress. Virtually each of them requires highly trained men and women working not only at the Federal level, but in administrative units of state and local governments.

The President, the Vice President, the Secretary of Health, Education and Welfare, and the Administrator of the National Aeronautics and Space Administration have all raised questions about just where the leadership is coming from to execute these programs. Are the medical schools turning out physicians who are informed about the distribution of medical services in the United States; who are apprised of rural and ghetto health needs; who understand relationships between social and psychological deprivation and physical illness; who are aware

of the institutional resources that exist or are needed to provide adequate sociomedical care to the aged and infirm; who know the political and administrative
systems which surround medical research and clinical practice? Are the business
schools - important suppliers of personnel to the public service - teaching not
only about the functions of profit-making, capital accumulation, and market mechanisms,
but also about the growing responsibility of the private sector for administering
space, defense, poverty, and other programs, and about private industry's increasing
role in urban redevelopment, in educational plant construction, in socio-economic
growth in the modernizing nations? Are the engineering schools educating their
students to understand the psychological and economic issues involved in transportation construction; the problems of resource management and of conservation;
and the widespread social consequences of technical decisions?

Clearly much will be required of our universities and their professional schools. Fortunately some moves are now under way which, if pursued vigorously and soon, will strengthen their contributions. Involved are legislative proposals affecting the universities; investigations within the universities and professional schools; and cooperative endeavors of governments and universities.

Speaking at the Woodrow Wilson School of Public and International Affairs at Princeton University in May, 1966, the President said:

"There was once a time when knowledge seemed less essential to the process of government. Andrew Jackson held the opinion that the duties of all public offices were so plain and simple that any man of average intelligence could perform them. We are no longer so optimistic about our public servants.

"The public servant today moves along paths of adventure where he is helpless without the advanced tools of learning. He seeks to chart the exploration of space, combining a thousand disciplines in an effort whose slightest miscalculation could have very fatal consequences.

"He is embarked on this planet on missions that are no less filled with risk and no less dependent on knowledge. He seeks to rebuild our cities and to reclaim the beauty of our countryside. He seeks to promote justice beyond our courtrooms, making education and health and opportunity the common birthright for every citizen and he seeks to build peace based on man's hope rather than man's fear.

"These goals. . .will call for enormous new drafts of trained manpower....Over the next four years the Federal Government will need 36,000 more scientists and engineers and 60,000 more specialists in health and technology and education. By 1970 our state governments...must grow by more than 600,000 to keep pace with the times....

"I've asked (for a) survey (of) Federal programs for career advancement (and) study (of) an expanded program of graduate training....

"I also intend next year to recommend to our Congress a program of expanding opportunities for those exceptionally talented who wish to go into training for our public service. And we will assist students that are planning careers in Federal and state and local governments, colleges and universities that are seeking to enrich their own programs in this field and local and state governments that are seeking to develop more effective career services for all of their employees."

Following the President's proposals, two pieces of legislation were prepared in early 1967, and they now await action in the Congress. One of them, drawn up by the Department of Health, Education and Welfare, is the Education for the Public Service Act. This provides funds to universities and other nonprofit educational institutions for improving the preparation of graduate and professional students for the public service. The awards may be used to expand existing programs, to establish new ones, or to develop such things as workstudy programs with public service as the work component. The Act also provides public service fellowships for graduate and professional study, funds for development of research and curriculum, preparation of teaching materials, and so on.

It is not clear whether the Act, if passed, will primarily benefit existing schools of public administration or be used to launch new programs. The need is, of course, much broader. But with the very limited funds likely to be available, at least in the first few years, it is doubtful that much impact, if any, will be made on the professional schools such as law, medicine, engineering, or business. It is also doubtful that the Act will affect the universities' present passive stance on their responsibilities for educating for public service.

The second measure before Congress was prepared by the U.S. Civil Service Commission. This is the Intergovernmental Manpower Act. Basically it extends financial and technical help to state and local governments in recruitment, examination, and training of their employees. Government service fellowships are also provided to state and local civil servants for full-time graduate study.

Now for a look at proposals made from within the Congress. The Honorable Edward Muskie of Maine has been by far the most articulate member of the Senate in urging Congressional action that will assist state and local governments in meeting their manpower needs. In 1966 and again in 1967, he introduced an Intergovernmental Personnel Act (S. 699) which is in essence the model for the U.S. Civil Service Commission bill. And in the House, Congressman John Brademas of Indiana introduced a Public Service Education Act (H.R. 5989) early in 1967. This bill, while similar to the HEW Act mentioned above, goes on to provide fellowships for Federal officials.

Prospects are dim for the passage of these bills in the present Congress.

But the commitment of the President, backed by two important members of Congress and several of their colleagues, heralds a time when Federal legislation will be enacted. In such event, there could be the following situation: the public

service responsibilities of the universities and their professional schools would at best be indirectly addressed, and there would be funds and authority but no clear idea of how to proceed.

Awareness of all this has led the Council on Graduate Education for Public Administration into action. Composed of the deans and directors of public affairs schools and programs, the Council commissioned a report on "Higher Education for Public Service," with support from the Carnegie Corporation and Ford Foundation. This report, published in 1966, relates the inadequacies of schools of public administration in part to their own limited view of their roles in, and responsibilities for, public service training, and in part to an outside factor - the failure of governments to acknowledge their total dependence on the universities for highly trained persons, and to make provision accordingly.

The Council's report contained a number of action proposals, and most of them appear in legislation pending before the Congress. It also recommended that two major investigations be undertaken, preferably with support from private foundations. One would be a study of "The Universities and Education for Public Service," aiming "to show how various types of institutions are now approaching their public service educational and other tasks...to identify stimulating and innovative developments as well as deficiencies and problems. The roles of schools and programs of public administration and public affairs, in universities which have them, will be an important part of this inquiry."

The second study endorsed by the Council would examine "The Professions, Professional Education and the Public Service," with such fields as law, engineering, medicine, nursing, educational administration, social work, public health, librarianship, forestry, and business and public administration being included. As the report states, "The analyses of the professions would be concerned with an appraisal of the role of each profession in the public service;

the ethical posture of the profession and its implications for public service; the nature of curricula in the professional schools with special attention to those elements...which bear on an understanding of the public service, the professionals role in it and the career opportunities...; the relationships of the professional school...especially to the program or school of public administration or public affairs; special educational opportunities such as internships, seminars, worktraining assignments, study, travel and other similar schemes; arrangements for examining important public policy issues like medicare and urban redevelopment; etc." These proposals are now under review in the foundations.

In the meantime at least one university has moved ahead on its own. The University of California, Los Angeles, has set up a Chancellor's Committee on Public Service Education and Training. It includes representatives of all the major professional schools in the university, the Director of the Institute of Public Affairs, and the Assistant Chancellor for Research and Development. And it is charged with reviewing the entire public service education program of the University.

In another encouraging development the Harvard Medical School is revamping its curriculum partly with the intention of opening up opportunities for students to learn about social, economic, and even political attributes of the practice of medicine. As the Dean, Robert Ebert, puts it, "We want to produce physicians who are attuned to working in the latter third of the twentieth century."

Federal, state, and local governments, when it comes to encouraging educational relationships that will result in personnel better prepared for the public service, have a strong lead over the universities and the professions. They offer summer employment to college students with the objective of interesting them in public service careers; a variety of internships financed by government and

foundations, which permit a student, frequently at the graduate level, to work on government programs; plus assignments in Congress and state legislative bodies, in executive agencies, and in the offices of chief executives including the President, governors, and mayors. Some internships are provided to professionals such as journalists and lawyers; some to graduate scholars in the natural and social sciences.

Especially at the Federal level, one finds encouragements to academic and practical study in public administration: among them NASA's new public administration fellowship program; the National Defense Education Act fellowships; and a new project handled by the American Society for Public Administration which gives Federal work opportunities to young professors of government who lack practical government experience. Under the Government Employees Training Act of 1958, Federal agencies may send their personnel to universities for up to a year of advanced study. A Career Education Awards Program, administered by the National Institute of Public Affairs, is designed to prepare outstanding mid-career civil servants for the demands of high-level policy-making posts through university instruction, in part devised especially for them. About forty government agencies, principally Federal, support mid-career training programs in universities, which run from a week to as long as an academic year. These, too, are for broadening the officials's skills and horizons.

Possibly the most inventive thinking about government-university relationships comes from the National Aeronautics and Space Administration, headed by James E. Webb. As former Budget Director, Under-Secretary of State, and past president of the American Society for Public Administration, Webb has seen a vast reservoir of government experience that he believes should be channeled into the universities. The new ideas proposed by NASA began with his specific conviction that university teaching and research could profit from what men have lærned in managing the unpar-

alleled complexities of the Space Program. Better still, there could be an exchange, from which NASA itself would benefit.

NASA's requirements for scientists and engineers are, of course, extensive. Its needs for managers are also great. It has found that too often the technically and professionally trained lack the breadth of preparation and outlook either to cope with widespread ramifications of technical problems or to work readily in an interdisciplinary environment. Thus its concern with the quality of education. The NASA approach, now under discussion, is to develop a more or less permanent association with one or more universities. The program will have various elements: faculty of engineering, law, business, education, public affairs, and probably other schools will have the opportunity to study NASA's managerial and control systems and will be encouraged to take up actual positions in NASA for as long as a year. Graduate students will be given opportunities to undertake research on NASA problems and practices, and internships and summer jobs will be available. Some NASA personnel will be "practitioners in residence" at a university both to participate in seminars and research and to enjoy a period of leave akin to the academic sabbatical. To disseminate the results of its own research, the university may conduct seminars for NASA officials.

In this association three guidelines are of particular importance. First, university faculty should have the opportunity to explore within NASA, and its field establishments, the possibilities for assignments closely related to their own intellectual interests, thus assuring the continued independence and integrity of the individual scholar. Second, insofar as possible the skills of a number of disciplines should be brought to bear on the study of particular NASA-related problems, an experience benefiting both NASA and participating faculty. Third,

where choice exists, issues with larger, more general implications of a public policy nature should be selected over ones that require narrow and highly technical studies.

While this long-term association of a university and a major government agency is still in an exploratory stage, the prototype may exist here for numerous arrangements in which Federal, state, or local agencies and individual universities would work together. Gradually the flow back and forth of experience and ideas might transform many aspects of higher education and, in due course, of the public service.

Impressive as these efforts are, they cannot by themselves fill the nation's immense need for well-trained public servants. And, significantly, they reflect initiatives coming principally from governments rather than from the universities. Absorbed as the universities have been, in the years since World War II, with the necessity to expand rapidly; with institutional survival in the face of rapidly rising costs and keen competition for public and private funds; with much attention riveted on science as a result of Sputnik; they have understandably had little time to take a fresh look at their relationships to society at large and their responsibilities to the several parts of the social system.

Writing to the New York <u>Times</u> in 1948, shortly after the death of Alfred North Whitehead, Justice Felix Frankfurter said, in a letter of appreciation:

"Who will deny that Professor Whitehead was right in his belief that the fate of the intellectual civilization of the world today is to no inconsiderable extent in the keeping of our universities? 'The Aegean Coastline had its chance and made use of it; Italy had its chance and made use of it; France, England, Germany had their chance and made use of it. Today the Eastern American states have their chance. What use will they make of it? That question has two answers. Once Babylon had its chance, and produced the Tower of Babel. The University of Paris fashioned the intellect of the Middle Ages.'

"The awful question that confronts American universities is, What are they doing with their power and their duty?"

This question is more urgent now than when it was asked; it confronts the academic community from coast to coast. With governments shaping, molding, rebuilding American society as never before, can our universities neglect,

without misusing their power and abandoning their duty, the preparation of men and women for public service?