SCIENCE NEWS

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THE POSTWAR SHORTAGE OF PROFESSIONAL MEN

A PLAN for meeting the acute postwar shortage of trained professional men by an accelerated program of graduate study was outlined before the Cleveland meeting of the American Psychological Association by Professor Sidney L. Pressey, of the Ohio State University.

In the college year 1942–43 the number granted advanced degrees in institutions of the United States dropped 30 per cent. from the 25,000 who received graduate training the year before. Soon afterwards some graduate schools were reporting that the graduate student is practically extinct. It is estimated that even after the war is over, it will take three or four years before the normal flow of students from undergraduate colleges to graduate work is reestablished.

In addition to the acute need for professionally trained persons, demand for acceleration of graduate programs will come from returning service men, already mature and experienced in positions of authority who will want their degrees without further delay.

Graduate training needs overhauling, anyway, according to Dr. Pressey. It is just about as it was imported from Germany about eighty years ago and put on top of an entirely different and longer system of earlier education. Before the war in Germany, the average age for receiving a doctor's degree was twenty-four years. In the United States it was thirty years—an age when some of the most creative years and the prime of life, physically, are already past.

The first change that Professor Pressey would make in the graduate program would be to admit students to graduate study on the basis of ability rather than previous degrees. He would count relevant war or work experience in the assessment of ability. Then he would find out experimentally just what kinds of work those with graduate degrees actually do, and plan the curriculum to fit them for those specific duties. We should get away he said, from the feeling that actual doing of a particular type of professional work is relatively unimportant if only there have been enough courses and readings about it. He would increase internships.

He would do away with the final oral examination as the main criterion for granting a degree. It is, he said, literally a heritage from the middle ages. It should be kept, but its role would be supplementary. The students' work in internships as well as in class would be considered as well as abilities and personality.

Professor Pressey suggests that the graduate programs would improve rapidly if graduate students were given more hand in things. At present they have less to say about policy than do undergraduates in many colleges or even students in high schools. Real participation by students would bring invaluable help in understanding and dealing with student problems, especially those of returned veterans.

Finally, Professor Pressey urged that his colleagues act more like scientists and less like lawyers in putting into effect reforms in the graduate training. Try new things, experimentally, he recommended, and see how they work.

ITEMS

AVIATION engineers and physiologists are getting together, to make modern high-performance aircraft safer and more efficient mechanisms by taking into account the capabilities and limitations of the human body, was reported by Dr. D. W. Bronk, of the University of Pennsylvania, at the Cleveland meeting of the American Association for the Advancement of Science. The organs and senses of human beings were not evolved for the stresses, speeds and other demands made upon them in present-day flying; gadgets and instruments installed in the planes are designed to serve as extensions of the human parts, to enable them to meet these demands. As specific examples, he mentioned a new oxygen-supplying valve, which turns on the oxygen when the wearer begins to breathe hard, and shuts it off again when breathing returns to normal; and the various instruments in the cockpit that tell him when the plane is actually wrong side up, when sudden turns and steep banks have confused the flyer's ordinary senses.

AMERICA'S resources are capable of supporting an immensely greater population than the country now contains, Dr. William J. Berry, of the Western Michigan College of Education declared before an audience of geographers at the Cleveland meeting. He set a total figure of 551,000,000 as a definite possibility. Dr. Berry arrived at what he terms this population potential by comparing distinct geographic regions in the United States with regions of similar soil and climate, but greater population density, elsewhere in the world. Thus, the Po Valley in Italy is more or less equivalent to the Midwestern Corn Belt in soil and climate, but has a population of 455 per square mile, as against only 50 to the square mile in our Corn Belt. Making 50 such comparisons between American and foreign geographic areas, the speaker built up his high estimate of more than half a billion people in a future United States.

ABOUT 20,000,000 persons in the armed services and in present civilian employment will change occupations in the conversion and postwar periods. This estimate was given the meeting by Dr. Carroll L. Shartle, of the Division of Occupational Analysis of the War Manpower Commission. To assist in the re-conversion of manpower from war to peace, the commission has been conducting research, developing tests to aid in occupational counseling and working on the problem of the training of qualified persons to act as couselors. Of the 30,000 civilian occupations which, it is estimated, exist in the United States, 22,000 have been studied, defined and classified. There are 3,000 occupations in the armed forces and for each military job there are some twenty to thirty comparable civilian jobs to which the returning service man might be directed.