

## EDUCATION

## More College Degrees

► THE NUMBER of bachelor's degrees granted by American colleges in 1975 will be almost twice the current total. The U.S. Office of Education of the Department of Health, Education and Welfare estimates that the number will be 815,000 compared with the 1963 total of 450,592.

The fastest growing college subject is mathematics and the 16,121 degrees in 1963 will rise to 52,000 in 1975.

Foreign language is the second fastest growing field—9,868 degrees in 1963 increasing to 21,000 in 1975. Engineering shows the slowest growth—from 33,458 degrees in 1963 to 51,000 degrees in 1975. Physical science degrees are expected almost to double from 17,575 in 1963 to 32,000 in 1975. Biological science degrees are expected to double from 20,479 in 1963 to 41,000 in 1975.

If master's degrees follow recent trends, the number will rise from 91,418 in 1963 to 163,200 in 1975, almost doubling the number granted in 1963. At the master's level, degrees in mathematics and foreign languages again are among those leading in growth, with mathematics going from 3,323 in 1963 to 7,000 in 1975, and foreign languages from 2,035 in 1963 to 3,900 in 1975. Master's degrees in engineering will increase from 9,635 degrees in 1963 to 20,300 in

1975 and physical sciences from 4,399 in 1963 to 9,500 in 1975.

A much slower rate of growth is expected for biological sciences, for health professions, and for education. In 1975, all three of these fields are expected to have about one and one-half times the number of degrees granted in 1963. Master's degrees as projected in 1975 for these fields are 5,200 degrees in biological sciences, 2,600 degrees in health professions, and 50,200 degrees in education.

Total doctor's degrees are expected to rise at a slightly faster rate than either bachelor's or master's degrees. The fastest growing of the selected fields at this level is engineering. The number of engineering doctorates is expected to rise from 1,378 in 1963 to 3,300 in 1975.

Other fast growing fields are mathematics, physical sciences, biological sciences, and foreign languages, which are expected to rise as follows: mathematics from 490 to 1,000; physical sciences from 2,382 to 4,100; biological sciences from 1,457 to 3,200; and foreign languages from 277 to 600. Much slower growth rates are expected for health professions and for education—from 157 to 200 for health professions and from 1,943 to 3,200 for education.

• Science News Letter, 87:50 January 23, 1965

## MEDICINE

## USSR Trains More MDs

► MEDICAL SCHOOLS in the Soviet Union have turned out a greater proportion of doctors to serve their population than have medical schools in the United States.

In a synopsis of the report, "Medical Education in the Soviet Union," prepared by the Delegation on Medical Education that visited the Soviet Union in the fall of 1963, Dr. William L. Kissick of the Department of Health, Education and Welfare, noted that in 1963 the Soviet Union had a ratio of 198 physicians per 100,000 population, which was approximately one-third higher than the ratio of 149 per 100,000 population in the United States.

However, this doctor-patient ratio falls short of the goal of 210 doctors per 100,000 population established by the USSR Ministry of Health. Therefore, medical school enrollments are being increased.

The visiting doctors estimated that approximately 180,000 students are currently studying medicine in Russia—60% of them women. But the proportion of women studying medicine has been declining since World War II.

The report cited two impressive features of Soviet medical education not found in the U.S.: the opportunity for nurses, technicians, midwives and others working in related medical fields to study medicine full-time and in the evenings and the "re-

fresher training" courses offered to practicing health personnel every three to five years.

Members of the delegation, Boisfeuillet Jones and Drs. George N. Aagard, H. Stanley Bennett, Sylvan Brandon and Edward W. Dempsey, found that the uniform curriculum which is prepared for all Soviet medical institutes by the department of personnel and higher education, USSR Ministry of Health, leaves little room for innovation and experimentation with either course content or teaching techniques. Elective courses are virtually non-existent.

However, every five years the medical school faculties can participate in a revision of the curriculum.

Entrance to a Soviet medical institute is based primarily on results of a competitive exam that approximately one out of four applicants pass. Students may apply for admission after completing 10 or 11 grades of primary and secondary education. But preference is given to individuals who have worked for two or more years in the Soviet economic system.

As with all Russian educational programs, no tuition is charged at medical school, and about three-quarters of all medical students receive some kind of stipend.

The report synopsis was published in the *Journal of Medical Education*, 39:1069, 1964.

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## Television Through The Looking-Glass

► TELEVISION LESSONS for students have taken a new twist at the Ecole Nationale de Radiotechnique and d'Electricite at Clichy, France. A classroom system there has the receivers installed in the ceiling and the picture is reversed.

The student sees the television picture by looking down into a mirror on his desk, thus seeing the correct reflected picture.

The new system is aimed at preventing the distraction caused when a student must continually look from a text on his desk to a TV screen across the room.

The system, developed by the French Thomson-Houston Company, has already met with strong approval both from teachers and students.

The one possible drawback is that this arrangement will make it easier for a student to take a short doze. With his head down all the time, no one can be sure if he is napping or looking.

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## SOCIOLOGY

## Australian 'Peace Corps' Helps Shed Stone Age

► AN AUSTRALIAN self-created "Peace Corps" is working wonders in leading primitive peoples from the stone age into a modern society.

The Manus people of New Guinea and Papua have made great strides in shedding their stone age culture of only 40 years ago and learning eagerly about rockets and satellites, schools and modern civilizations.

Dr. Margaret Mead, curator of ethnology at the American Museum of Natural History, has just returned from studying the drastic cultural changes in that part of the world. She found that the people want to become part of modern society and an Australian educational program somewhat like the U.S. Peace Corps is sending young people to teach in remote New Guinea villages, where two million very primitive people speak more than 500 languages.

Turning Papua and New Guinea into a modern country, Dr. Mead feels, is perhaps the most formidable educational and administrative task any modern society has ever undertaken.

The territories of Papua and New Guinea, in which the Manus live, are being prepared for independence under the urging of the United Nations. Papua is an Australian possession and New Guinea, which was captured from Germany in World War I then lost to Japan in World War II, is now a United Nations Trust Territory.

Only ten years ago Dr. Mead observed that the people of this area were in a primitive cul-de-sac, where men still wore paint and carried spears and each village was pitted against its neighbors.

In one area where there was only an informal elementary school in 1953, there is now an established primary school.

• Science News Letter, 87:50 January 23, 1965