

without realizing it. We can, if we don't watch ourselves, permit our country to become a glorified ant hill. I do not, however, believe that this end result is inevitable. And here I take refuge in a statement which was once made by the great Disraeli. 'Circumstances,' he said, 'are beyond the control of man. But his conduct is in his own power.'"

Cerebrovascular Disease

The U.S. Public Health Service has announced that all known types of cerebral strokes have been classified and defined for the first time in a study which provides a common language for the exchange of information among researchers throughout the nation. This pioneering classification of cerebrovascular diseases appears in the May issue of *Neurology*, published in Minneapolis for the American Academy of Neurology.

The eight-member committee that conducted the study was appointed by the National Institute of Neurological Diseases and Blindness to explore means of increasing research progress in cerebrovascular diseases. Clark H. Millikan, neurologist of the Mayo Clinic, Rochester, is the committee chairman. He emphasizes that the 2-year study is a first attempt, and many statements will undergo changes as understanding of cerebrovascular disease increases. Copies of the study, *A Classification and Outline of Cerebrovascular Diseases*, may be obtained from the National Institute of Neurological Diseases and Blindness, Bethesda 14, Md.

NSF Grant to Yale to Improve Mathematics Instruction

The National Science Foundation has awarded \$100,000 to Yale University to initiate the work of the School Mathematics Study Group to improve instruction in mathematics in United States secondary schools above the sixth grade, including junior high schools. The study group will consider: preparation of textbook materials, together with teacher's manuals; the training of teachers in the use of such new materials; preparation of monographs designed for better students, secondary-school teachers, and the general educated public; various kinds of teaching aids, including films; experimental programs for gifted children; and psychological studies of concept formation in mathematics and of attitudes toward mathematics, and the like.

The study group, consisting of secondary school teachers and outstanding university mathematicians, will be under the direction of E. G. Begle, of Yale's mathematics department. An interim ad-

visory committee to assist Begle consists of the following: A. A. Albert, University of Chicago; R. L. Wilder, University of Michigan, and S. S. Wilks, Princeton University. An expanded advisory committee will be established by the presidents of the American Mathematical Society, the Mathematical Association of America, and the National Council of Teachers of Mathematics.

As its first activity, the study group is organizing a 4-week session at Yale, 23 June to 29 July, at which college and university mathematicians and high-school teachers, in equal numbers, about 40 in all, will be asked to prepare detailed syllabi for high-school algebra and geometry courses. The study group will cooperate with such organizations as the Commission on Mathematics and the Curriculum Committee of the National Council of Teachers of Mathematics, which have already made large contributions in this area.

In-Service Institutes for High School Teachers

Approximately 3000 high school teachers of science and mathematics will benefit during 1958-59 from 85 in-service teacher-training institutes conducted by United States colleges and universities. The National Science Foundation has announced that grants totaling \$607,250 have been awarded to support these institutes. The funds cover travel expenses, tuition, and fees. Participants in the program must be on the faculties of high schools that are within a radius of about 50 miles of the host institution.

The in-service institutes will offer especially designed work in the subject matter of science and mathematics. Institute meetings will be held outside regularly scheduled school hours so that teachers may attend while still teaching full time in their schools. Inquiries and applications for participation should be addressed to the directors of the individual institutes; these are named in a list that may be obtained from the National Science Foundation, Washington 25, D.C.

Deduction of Educational Expenses from Taxable Income

Many teachers in the United States at all levels—college, high school, and elementary—who have incurred certain educational expenses may be able to recover a part of their income tax payments for the years going back as far as 1955 as the result of U.S. Treasury Regulation TD 6291 announced on 4 April and published in the Federal Register for 5 April. In submitting an amended

return, the taxpayer must use the appropriate income tax form for the year's return which is to be amended. He must write at the top of page 1, "Amended," and must resubmit the return in complete detail. While many aspects of the new ruling remain to be interpreted by the Treasury, the text as it appears in the Federal Register offers nine specific cases as examples.

Experimental Program in Secondary School Science Education

Starting in December 1955, the Research Corporation, New York, undertook an experiment concerned with the teaching of science at the secondary-school level in the state of Connecticut. While the experiment as originally designed is not yet complete, a report on the project to date provides some information that may be of value to those concerned with plans for the betterment of education.

A 3-year program has been established to learn from science teachers themselves their requirements for improving their teaching activities. Under the experimental plan, a representative visits schools throughout the state asking each science teacher what he or she needs to teach more effectively.

The teacher is encouraged to apply for a Research Corporation grant to satisfy his needs. Purposely, no application form is provided, and no particular limitations are specified about the kinds of things for which a grant might be considered or the level in funds that might be appropriate. The teacher's application is expected to take the form of a statement outlining the current situation in science at his school and indicating the improvements that would be possible with the funds requested.

Preparation of such a statement requires a certain amount of self-evaluation and considerable analytical thought. Frequently composing the statement sets off a chain reaction. Starting with an individual teacher, it often involves other science teachers at the school and their administrative superiors, sometimes even including the local board of education.

The program moves slowly. The foundation is at present receiving applications which had their origin in the stimuli applied to teachers a year or more ago. However, meanwhile the attention of individuals, groups, and even communities has been brought to bear constructively on what was needed to improve science teaching in a given school or school system.

In the 2 years that the plan has been in operation, total costs, including all fees and expenses, have amounted to a little less than \$20,000. Forty-eight grants have