

linkage between the philosophy of progressive education and the techniques of the more objective methods of evaluating outcomes of college instruction." Professor Rex B. Cunliffe, of Rutgers University, gave a rapid survey of the changes in the life patterns of workers, concluding that "vocational guidance is fundamentally concerned with preparing and helping people make wise decisions, to solve vocational problems intelligently, to meet vocational situations effectively." Dr. Wm. T. Melchior declared that "there are two aspects of science that relate to creative, cooperative supervision. First, science as a body of organized knowledge; second, science as a mode of thinking. In democratic supervision there is danger of basing method too much upon a body of organized knowledge. The findings of science are not fixed according to Dewey's concept of the scientific method. Scientific method in supervision must first of all consider the teachers mind set. She must be put, not on the defensive, but on the offensive. She initiates testing, objective data-gathering and remedial measures. The method is inductive."

Dr. Warren W. Coxe, of the State Department of Education, New York, said that there was no definite conclusion to be made on the desirable size of a high

school, for "we can say with some assurance that the very small high school fails to offer a curriculum of sufficient variety and we can say that the very large high school becomes too impersonal." He also felt that "the addition of more courses has not generally solved the question of meeting individual needs, even in the large high schools where the offering is most varied." He concluded that the way to meet pupil needs was through the adaptation of subject-matter and methods rather than by adding courses.

Dr. C. H. Thurber, dean at Colgate University, reported on the new arrangement of tutorial and honors work at his institution, bringing to light information which would validate the continuation of such work at his institution and the initiation of similar work at other institutions.

Dr. Donald Durrell, of Boston University, concluded that: "(1) A group intelligence test score is meaningless unless accompanied by a reading test score; (2) group intelligence tests are greatly affected by school achievement; (3) makers of group intelligence tests have given too much weight to reading ability in these tests; (4) that 'nurture' in the form of achievement in reading has a marked effect on intelligence test scores."

OBITUARY

GEORGE FREDERICK KUNZ, 1856-1932

DR. GEORGE F. KUNZ, whose death occurred on June 29, was a man of eminent attainments in science, of vigorous personality and of indomitable energy. During a long and useful life he has filled with distinction so many high offices that it may well be said that there are few organizations representative of the earth sciences, either local or national, among whose officers he has not served as president or vice-president, and in whose councils his opinion has not helped in the shaping of policy.

Dr. Kunz was mainly educated at the Cooper Union of Arts and Sciences in New York City, an advantage to which he gives grateful credit in the dedication of one of his books. Very early in life he showed a marked talent for the science of mineralogy, and began the building up of a number of collections of minerals which are to-day on display in as many colleges and museums.

His knowledge of gems and gem minerals was recognized as international, a fact that is attested by his lifelong connection as gem expert with the greatest firm of jewelers in the world.

From early youth a New Yorker, Dr. Kunz was associated through five decades with his fellow citizens of prominence from a social as well as from a

scientific view-point, and it is doubtful if any of these lived a fuller or a more interesting life, or were more highly honored in the community.

In addition to between 400 and 500 papers on subjects as varied as minerals, meteorites and folklore, Dr. Kunz was the author of "Gems of North America" (1890), "The Book of the Pearl" (jointly with Charles H. Stevenson, 1908), "The Curious Lore of Precious Stones" (1913), "The Magic of Jewels and Charms" (1915), and "Rings" (1917). This extensive list of writings, however, by no means exhausted the field of his interests. He was prominent in such movements as the introduction of the metric system into this country, the development of the uses of radium, and the preservation of scenic and historic monuments.

Inevitably a personality favored with such gifts and attainments must claim honorable recognition. Dr. Kunz was not only the recipient of several honorary degrees but was also distinguished by the decorations of Officer of the Legion of Honor (France), Knight of the Order of St. Olaf (Norway) and Officer of the Rising Sun (Japan).

His scientific interest was always closely linked with the American Museum of Natural History, at which institution he served as research curator of gems from

1904 to 1918, and as research associate from 1918 to the time of his death.

In his passing away science has lost an enthusiastic and prolific contributor, New York, one of her most prominent and distinguished citizens, and a considerable part of America's men of science, a generous and devoted friend.

HERBERT P. WHITLOCK

AMERICAN MUSEUM OF NATURAL HISTORY

RECENT DEATHS

DR. MICHAEL OSNATO, director of the department of neurology of the New York Post-Graduate Medical School, died on June 15.

DR. HERMANN VON W. SCHULTE, dean of the Creighton University Medical College since 1917, died on July 15, at the age of fifty-six years.

THE death on July 10, at the age of seventy years, is announced of Sir Richard Threlfall, consulting engineer, formerly professor of physics at the University of Sydney, Australia.

A CORRESPONDENT writes: "Miss Adelaide Ames, research assistant in the Harvard Observatory, was drowned in a canoe accident in Squam Lake, New Hampshire, June 26. Her scientific work, thus suddenly ended at the age of thirty-one, had already gained for her a wide recognition. She was a member of the Commission on Clusters and Nebulae of the International Astronomical Union and was Secretary of the Local Committee for the entertainment of the Union in Cambridge in September. For several years Miss Ames had carried on investigations in the field of extra-galactic nebulae; her principal publications deal with the Coma-Virgo cloud of galaxies. Her most important work has been in connection with a photometric survey of all extra-galactic objects to the thirteenth magnitude—a census of the inner parts of the Metagalaxy to a distance of five to ten million light years. This survey was completed in June and will be published during the next month in collaboration with Dr. Shapley."

SCIENTIFIC EVENTS

THE TEACHING LOAD IN THE LABORATORY SCIENCES

A COMMITTEE of the Virginia Academy of Science, with Professor Wm. A. Kepner as chairman, has under consideration Standard 7 of the Association of Colleges and Secondary Schools of the Southern States. This standard reads "Teaching schedules exceeding sixteen hours per week per instructor shall be interpreted as endangering educational efficiency. In general, two laboratory hours will be counted as equivalent to one recitation hour."

This committee regards with grave concern violations of the first provision of this standard and commends attention of the association to the desirability of giving consideration to cases of excessive teaching loads.

The committee is equally concerned with excessive loads apparently permitted under the second provision of Standard 7. As early as 1927, the Virginia Academy of Science adopted a resolution directing the attention of the Association of Colleges and Secondary Schools of the Southern States and of the administrators to the inequity that this standard's application had caused.

Further notice of this situation was taken by the academy at its recent meeting. It adopted the following recommendation of its committee.

The committee recommends that the Virginia Academy of Science direct the attention of the Association of Colleges and Secondary Schools of the Southern States to the fact that its Standard 7 imposes a serious handi-

cap upon the teachers of science by its method of evaluating the teaching load of laboratory instructors and that in this manner its standard endangers educational efficiency and hinders the development of research in southern institutions.

This move on the part of the academy is based upon the conviction that experience does not sustain the inference that an hour's teaching in the laboratory requires less total time, energy or quality of effort than one hour of instruction by lecture. Indeed, when it is taken into account that collection of material and construction of equipment and the care of materials and apparatus are usually a part of the burden of laboratory instructors, it must be recognized frankly that an hour spent in the laboratory represents quite as great a load as does an hour of lecture-room effort.

The committee was instructed to inform the Association of Colleges and Secondary Schools of the Southern States, the National Research Council and the American Association of University Professors concerning the academy's action. It was further instructed to present an account of the academy's attitude towards Standard 7 to the editor of *SCIENCE* with a request for publication as an invitation to other individuals and organizations interested to join in the effort to remove this handicap under which instruction in the sciences is being conducted.

THE DENVER MEETING OF THE AMERICAN CHEMICAL SOCIETY

THE eighty-fourth meeting of the American Chemical Society will be held in Denver, Colorado, from August 22 to 26.