## DECEMBER, 1967, JOINT MEETING OF THE AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE AND THE NATIONAL COUNCIL OF TEACHERS OF MATHEMATICS

## Ray Cleveland

Mr. Cleveland, an associate professor at the University of Calgary and Faculty of Education Representative on the MCATA Executive, reviews a recent professional meeting which he attended in New York.

Of the sessions which I attended at the AAAS-NCTM meeting, three developments were of particular interest and impressed me very much.

One was related to the structure of mathematical models for particular phases of the biological sciences. "Graphical Analyses of Ecological Equations", "The Stability of Mating Behavior", and "Statistical Mechanics of Neutral Networks" were topics presented in a symposium which reinforced the opinions of those who believe that parts of probability, statistics, linear algebra, and calculus should be included in the secondary curriculum for those who wish to major in biological sciences.

Another was related to increasing interest in the various aspects of computer science in research and education. Representation of problems related to problem-solving itself is becoming an important field of research. The determination of lower bounds on the time and storage required by certain classes of programs, and the properties of programs which have such lower bounds are important research topics. Because of the necessity to refine bulk data, the computer is becoming a necessary part of research in high-energy physics.

Strictly related to mathematics education, talks were given by Stanley J. Bezuszka on a guessing approach to the solution of equations, Burt Kaufman on a new mathematics program for gifted students in the setting of an ungraded school based on the recommendations of the Cambridge Conference, and Carl B. Allendoerfer on the state of mathematics of the CEEB.

Mathematics and science are no longer top priority on the list of educational concerns in the United States, while social problems have gained first place.

> Mathematics is the first of the sciences and hence is the key to all other sciences.