I think I have said enoughto give a general idea of this "mathematics for the scientific world" and to show its great difference from the "new mathematics" now appearing in Alberta, which is more like "mathematics for the mathematics philosopher".

It is my own personal hope that every mathematics teacher in Alberta can see that mathematics in any grade has value only to the extent to which it may be used to solve problems. The final test of the value of a mathematics course in, let us say, Grade Four, is in discovering how many kinds of problems each individual pupil can solve after having completed the course.

REPORT ON THE 40TH ANNUAL CONVENTION OF THE NCTM, by W. F. Coulson and E. E. Andrews

Editor's Note: Messrs. Coulson and Andrews of the Faculty of Education, University of Alberta, attended the NCTM Convention held in San Francisco, April 16-18, 1962.

The organization for each day's activities consisted of general sessions in the morning and evening, and special sessions for elementary, junior high and senior high teachers during the remainder of the day. There were also special activities for supervisors of mathematics curricula, and for those concerned with teacher training in mathematics.

Two areas seemed to receive major attention throughout the various sessions.

First, concern with the modern mathematics curriculum is still very much in evidence. This concern is not only with the content of the curriculum but with the grade placement of specific topics. Several nationally known experimental courses have now been in use for five years or more. Speakers such as Herbert F. Spitzer, Max Beberman and J. Fred Weaver are taking a critical look at many of these courses. Some significant points made were.

Over-emphasis on such features of "higher" mathematics as the axiomatic approach, rigorous development, and precision of language,

can lead to a new kind of sterile formalism in school mathematics. The need for and interest in mathematics must still come from familiar aspects of the child's environment.

Many new courses attempt to introduce topics from geometry and algebra at a much earlier grade level than has been traditional. Topics completely new to school mathematics are also appearing. It was felt very strongly by some speakers that the question of grade placement is not primarily "how early may a topic be introduced" but "when is the optimum time for introducing it". Introduction at this optimum time will lead both to the furthering of mathematical insight and its application in meaningful problem situations.

Secondly, much interest was shown in the role that programmed learning can take in the teaching of mathematics.

J. E. Forbes of the Britannica Centre stressed the following points: (a) programs are not just a new form of textbooks, they cannot do the whole job; (b) there is no doubt that many programs are dull, repetitive and make no provision for abler students to leave out unnecessary repetition; and (c) there is no simple "yes" or "no" regarding the use of programs, each teacher must decide the best use to which they can be put in a given classroom situation.

J. Fred Weaver expressed concern as to what extent programs will foster or repress creativity in mathematics. In particular, he questioned the ability of these programs to provide for flexibility of approach, divergent thinking and "tolerance for ambiguity".

TWO ALBERTANS RECEIVE NSF GRANTS

Each year the National Science Foundation in Washington, D.C., through its Academic Year Institute program, provides opportunities for teachers of science and mathematics to study fulltime for an entire academic year. This year about 1,700 experienced secondary school teachers and supervisors, and 100 experienced college teachers will be supported as participants. In addition, about 50 recent college graduates who are fully certified to teach, but who have had no teaching experience, will be granted support.