



Volume II, Number 1, March, 1963

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1962 ANNUAL REPORT OF MATHEMATICS COUNCIL

PREPARING TEACHERS FOR CURRICULUM CHANGE, by Eugene Wasylyk

Editor's Note - Mr. Wasylyk, vice-president of the Mathematics Council and a member of the planning committee for the week-long arithmetic seminar sponsored by the Council last July, makes this report in retrospect.

In September of 1962, Alberta's elementary schools were given a new program in arithmetic. The Department of Education authorized two series of textbooks: Arithmetic We Need, published by Ginn and Company, and Seeing Through Arithmetic, published by W. J. Gage. The latter series is so different in emphasis and approach from the previous authorization that many of the teachers who began teaching it, particularly those whose professional training was not very recent, soon encountered difficulty. Recognizing this difficulty and anticipating that it would increase as the new arithmetic program became established, the Mathematics Council of The Alberta Teachers' Association undertook a seminar to familiarize teachers with the concepts and teaching approach basic to the new

program. This seminar was held at Alberta College in Edmonton from July 3 to 10, 1962 and was attended by a total of 158 educators, mostly elementary teachers, but including also some junior and senior high school teachers, principals and superintendents.

The six-day seminar consisted of a two-hour general lecture session each morning, followed by a film and a two-hour group discussion and activity session each afternoon. Conducting the morning sessions was Merrill B. Hill, field editor in mathematics of Scott, Foresman and Company. His lectures, much enhanced by the use of an overhead projector, were of a general nature and dealt with the fundamental concepts of the new arithmetic. He was assisted by Ray Cleveland, the supervisor of mathematics, Rahway Public Schools, Rahway, New Jersey. The afternoon sessions dealt mainly with specific instructional topics and teaching procedures. In these sessions, each of the six groups into which the members were divided studied the textbooks and did actual problem work in the new arithmetic. Instructors in the afternoon sessions were N. M. Purvis and H. R. Ross of the Department of Education, and Mrs. G. J. Kirkpatrick, Mrs. M. Palmeter, Mrs. J. C. Oldham, and J. Kirkconnell of the Edmonton public school system.

The seminar was directed by J. M. Chernwihan, Salisbury High School. He was assisted by Mrs. Jean Martin, Ponoka Elementary School, and the writer (Thorhild High School). Instrumental in the planning stages of the seminar was the assistance given by T. P. Atkinson of Victoria Composite High School and M. T. Sillito, ATA executive assistant, chairman of the planning committee. Instructional materials, including textbooks, were supplied by W. J. Gage, who at the conclusion of the seminar donated the entire lot of materials to the Mathematics Council. Additional texts were supplied by the Edmonton Public School Board.

Participants were enthusiastic. Their cooperation and hard work seemed to indicate successful realization of the immediate objective of the seminar: to familiarize individual teachers with the concepts and teaching approach basic to the new arithmetic program. However, the seminar had a broader ultimate purpose: to prepare resource personnel who would direct inservice work in arithmetic at local and staff levels of the Association in an effort to help all arithmetic

teachers. (Representation at the seminar had been sought from each local organization of the Association and some locals even assumed the costs of the teacher or teachers representing them.) A survey has confirmed that in this second objective the seminar was more than moderately successful.

THE EXPERIMENTAL PROGRAM IN GRADE VII, by R. Plaxton

Editor's Note - Mr. Plaxton addressed one of the sessions of the Mathematics Council's annual conference, held in Edmonton on July 11, 12 and 13, 1962, about experiments with the new mathematics program. This item summarizes his talk.

The term "modern" does not mean that mathematics as we know it will be other than the backbone of the mathematic course in Grade VII for many years to come.

In 1960, a subcommittee was formed to study what changes should be made in the junior and senior high school mathematics programs in order to keep pace with the volume of new material available. Two committees were formed; one for the senior high and one for the junior high. After study of the junior high school text the subcommittee reported evidence of: (a) unsatisfactory relation of work with that of previous grades (b) repetitiveness (c) too great a stress on application, and (d) lack of "new" approaches and "new" concepts.

Choice by the committee of an experimental text was Seeing Through Mathematics because of its obvious content of new materials. Examination of differences between this program material and previous material shows emphasis on sets and subsets. Mathematicians believe this topic is one of the most unifying of all ideas in mathematics.

The "point set" approach is used in geometry: space being an infinite set of points - like a darkened room full of dust particles; a line would be a beam of light passing through it. A plane is a beam of light allowed through a door left slightly ajar. Closed curves are