

Report April meeting of the Iowa section of the  
Mathematical Association of America, 1970.

The fifty-seventh regular meeting of the Iowa section of the Mathematical Association of America was held at Wartburg College, Waverly, Iowa on April 24, 1970, Chairman Elsie Muller presided. Total attendance was sixty-two including forty-two members of the Association.

The meeting was originally scheduled to be held at Grinnell College, Grinnell, Iowa, however a strike of the maintenance employees at that school forced a change in meeting place late in April. This unfortunate change came late enough that the membership could not be personally circulated, and this is a partial cause of the below normal attendance.

Professor Donald Sanderson, governor of the Iowa Section gave a report to the section concerning items of interest suggested by the national office. The auditing committee reported the treasurer's books to be in good order with a balance of \$161.84 indicated. The following officers were elected:

Chairman, Timothy Robertson, State University  
of Iowa, Iowa City

Vice-Chairman, Donald Pilgrim, Luther College,  
Decorah, Iowa

Secretary-Treasure, Basil E. Gillam, Drake  
University, Des Moines, Iowa

The program consisted of two sessions, one in the morning from 9:00-10:50 A.M., the afternoon session followed the business meeting and adjourned at approximately 4:00 P.M. The theme of the program was "Mathematics Education on The College Level". Following is an abstract for each facet of the program.

Morning Session.

Basic Computer Programming As Taught By Audiscan A-V  
Tutorial Instruction, Stephen Jones, Westmar College,  
LeMars

During this academic year, the Mathematics Department of Westmar College has offered a no-prerequisite course in basic computer programming using the Audiscan Audio-Visual Tutorial System to present the instructional material. The mechanical equipment consists of an Audiscan projector and a set of sixteen cartridges. Each cartridge consists of sychronized film strip and sound tape. Students can work at their own rate and do not have to attend scheduled classes. Grading is based on turning in programs on time and two examinations.

Forty Years Of Involvement In Elementary Mathematics,  
Orlando C. Kreider, Iowa State University, Ames.

The speech traces concepts, content and methods that have continued to be effective during the speaker's forty years of teaching as well as changes that have occurred. Tests given in the two-year program forty years ago and the four-year program last year indicates that the early teachers were better prepared in metric geometry than were last year's classes in elementary geometry. A warning that too many elementary teachers graduating today are poorly prepared to teach the mathematics they are expected to teach was sounded.

Mathematics For Liberal Arts Students, Henry Alder,  
Secretary Of Mathematical Association of America,  
University of California at Davis.

A course was outlined for students whose major does not require a mathematics course and who have only minimum mathematical preparation. Objectives of such a course include: giving students an appreciation of mathematics; presenting interesting mathematics, which can be achieved by maximizing the ratio of ideas and theorems to definitions; letting the student solve some real mathematical problems, specifically letting him make discoveries, formulate conjectures, and prove theorems; and making the students aware that mathematics is a fruitful field for research (unsolved problems should be stated wherever possible). This was illustrated by examples, including the representation of fractions by sums of distinct unit fractions, the representation of fractions with odd denominators by sums of distinct unit fractions with odd denominators, by a discussion of perfect numbers, the four-color problem and others.

Afternoon Session

Panel discussion on the problem of Articulation, George Peglar, Iowa State University, Merlin Fischer, Iowa Central Community College of Eagle Grove, and David Q. Porter of Eastern Iowa Community College of Muscatine.

The State Mathematics Articulation Committee met at The University of Iowa, Iowa City, on Dec. 6, 1969, for the eastern half of the state and at Iowa State University, Ames, on Dec. 13, 1969, for the western half of the state. The purpose of the two meetings was to discuss the problems of articulation as they relate to various subject areas.

Panel discussion, Enrollment Trend In Undergraduate Mathematics, moderated by Arnold Adelberg of Grinnell.

A panel discussion with Professor Lawrence A. Hart,

Loras College, Professor Charles A. Lindsay, Coe College, Professor E.R. Mullins, Jr., Grinnell College, and Professor Kenneth S. Robinson, Iowa Wesleyan College, moderated by Professor Arnold M. Adelberg, Grinnell College.

Professor Adelberg presented the results of his survey of the pattern of undergraduate enrollments in the colleges and universities of Iowa over the past five years. He pointed to the decline in the percentage of students enrolled in mathematics courses, in the percentage of mathematics majors. The panel members spoke to the significance of the trend and its implications, citing the demands for social relevance, the need for more creative teaching, for increased applications to the social sciences, and for greater use of the computer.

Panel discussion, Use Of A Computer In The Classroom, James J. Hurt, James W.L. Cole, and Ted J. Sjoerdsma of University of Iowa, Iowa City.

The use of a computer to enhance the learning of concepts was discussed as this use pertained to Statistics courses and to the elementary Calculus sequence.