

NATIONAL COUNCIL OF
Teachers of Mathematics



NOTICES

New Resource Focusses on Math Avoidance

Guidelines for schools to assess the extent of mathematics avoidance by girls and to promote the study of mathematics by girls (and boys) are provided in the new NCTM information resource, "Mathematics Education of Girls and Young Women." An instrument for assessing enrolment in mathematics is included as well as a listing of resource organizations.

Many students are exposed to powerful influences that discourage them from continuing their study of mathematics beyond that required by school policy. Individuals and organizations must make commitments to assure truly equal opportunities for girls and young women to achieve in mathematics. Teachers must help students recognize their accomplishments and potential in mathematics. Information must be given to students explaining how the study of mathematics will affect their future. Too many doors to both employment and continuing education opportunities are closed to those without a sufficient mathematics background.

Single free copies of this resource and NCTM's position statement "The Mathematics Education of Girls and Young Women" are available from the Headquarters Office in Reston.

How to Study Mathematics

One NCTM publication that takes the mystery out of learning mathematics is *How to Study Mathematics*, by James Margenau and Michael Sentlowitz. This clever, enjoyable book gets right to the bottom of the student's math difficulties by exposing the most common study problems and offering easy, effective cures. Available from the NCTM for \$1.70, this 32-page book continues to be one of the NCTM's best sellers.

Crisis in Mathematics Classrooms

"The shortage of qualified mathematics teachers in United States classrooms is one of the most pressing problems facing education today," according to Dr. Max A. Sobel, president of the National Council of Teachers of Mathematics. Sobel claims that "if we are not able to supply our students with qualified teachers of mathematics, we will not be able to prepare them for participation in the technological age of the 1980s. Already there are reports that the Soviet Union is far ahead of the United States in providing all of their secondary students with advanced programs in mathematics. We face a serious crisis in this technological decade if steps are not taken to insure an adequate supply of mathematics teachers for our schools."

In a survey just completed by the NCTM in co-operation with the Association of State Supervisors of Mathematics and the National Council of Supervisors of Mathematics, the majority (61 per cent) of mathematics supervisors reported that "certified teachers of mathematics are *very* difficult to find." In some large cities there was a ratio as low as one applicant for each ten mathematics teaching vacancies. The supervisors felt that over the next two years the situation would worsen, with 73 per cent predicting it would be *very* difficult to fill mathematics teaching vacancies with qualified people.

The survey also found that almost 25 per cent of the reported teaching positions in mathematics for the 1980-81 school year were filled by teachers not permanently certified in mathematics. Faced with classes of students and no certified mathematics teachers, school systems have found that the most popular strategy for dealing with the shortage of qualified applicants is to assign teachers from other fields of preparation to teach mathematics. Competition with industries' salaries and the difficult teaching conditions are the two most frequently cited causes for the shortage.

According to NCTM's *An Agenda for Action: Recommendations for School Mathematics of the 1980s*, "public support for mathematics instruction must be raised to a level commensurate with the importance of mathematical understanding to individuals and society."

Free Calculator Information

The NCTM, in co-operation with the Calculator Information Center, has just announced the availability of *Uses of Calculators in Secondary Mathematics*, by Betty J. Krist, West Seneca Central Schools/State University of New York at Buffalo. In addition to suggested activities, this

four-page information bulletin provides pragmatic suggestions and comments with regard to using calculators as an aid to student learning of secondary mathematics. Also, NCTM's eight-page listing of "Calculator Information Resources" has just been updated and is available without charge from the NCTM Headquarters Office.

Toronto: 60th Annual Meeting

The Meetings Committee and the Toronto Program Committee have developed three opportunities to involve you in the 60th Annual Meeting in Toronto, April 14-17, 1982.

Theme Papers

The Toronto Meeting will have an added dimension in that, instead of one theme, it will have three: *motivation, problem solving, and the role of technology*. Would you like to speak on one of these topics? Speakers will be selected on the basis of a review of submitted papers. Send five copies, typed and double spaced. Include a title, brief program description (25 words or less), the proposer's name and school as they should appear in the program, and a preferred mailing address. The reviewing teams will make their selections known by July 1, 1981.

Short Subjects

Any member who has a novel teaching strategy, a special treatment of some content area, or any combination of these is invited to submit a proposal for a 30-minute presentation for the annual "Short Subjects" feature. Proposals should be submitted in triplicate, typed and double spaced, and should contain (1) the title; (2) the proposer's name and school as they should appear on the program; (3) NCTM membership number; (4) preferred mailing address and telephone number;

(5) interest level (early childhood, intermediate grades, junior high school, senior high school, two-year college, teacher education, research, or general interest); and (6) a brief overview of the idea (not more than 200 words). The Program Committee will review the proposals, select those to be presented, and notify participants on or before July 1, 1981.

Research Proposals

Program space has also been reserved for those interested in research

and its implications for classroom teachers, supervisors, and curriculum developers. If you wish to be considered for a place on the program, write for full details. Final submissions must be postmarked no later than July 3, 1981 to be considered.

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Papers or requests for information should be sent to Jesse Rudnick, Program Chairman, Ritter Hall 334, Temple University, Philadelphia, PA 19122.

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(Grades 1 - 6)

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