

Minicalculators in our Schools 1975

We have just entered the AGE OF THE MINICALCULATOR. Pocket calculators are now appearing in our society with a frequency approaching that of the pocket transistor radio. The price of the basic minicalculator has dropped below \$10. In addition, the National Council of Teachers of Mathematics (NCTM) continues to endorse the minicalculator as a valuable instructional aid for mathematics education and to recommend the use of the minicalculator in the classroom:

With the decrease in cost of the minicalculator, its accessibility to students at all levels is increasing rapidly. Mathematics teachers should recognize the potential contribution of this calculator as a valuable instructional aid. In the classroom, the minicalculator should be used in imaginative ways to reinforce learning and to motivate the learner as he becomes proficient in mathematics.

The position statement above, adopted by the NCTM Board of Directors in September 1974, is still relevant today. As its September 1975 meeting, the NCTM Board of Directors approved a report from the Council's Instructional Affairs Committee that identified nine ways in which the minicalculator can be used in the classroom:

1. To encourage students to be inquisitive and creative as they experiment with mathematical ideas.
2. To assist the individual to become a wiser consumer.
3. To reinforce the learning of the basic number facts and properties in addition, subtraction, multiplication, and division.
4. To develop the understanding of computational algorithms by repeated operations.
5. To serve as a flexible "answer key" to verify the results of computation.
6. To promote student independence in problem solving.
7. To solve problems that previously have been too time-consuming or impractical to be done with paper and pencil.
8. To formulate generalizations from patterns of numbers that are displayed.
9. To decrease the time needed to solve difficult computations.

In an article appearing in the current issue of *Today's Education*, published by the National Education Association, entitled "A Calculator in Their Hands ... The Minicalculator in Our Schools," Dr. E. Glenadine Gibb, the president of the NCTM, stated:

Creative use of minicalculators after the mathematical understandings have been extracted will establish the minicalculator

as a valuable asset among the collections of instructional devices already found in today's mathematics classroom.

The NCTM, through its Instructional Affairs Committee, its conventions, its affiliated groups, and its official journals, *The Mathematics Teacher* and *The Arithmetic Teacher*, will continue to identify and share imaginative ways of working with minicalculators in the mathematics classroom.

The NCTM Teacher/Learning Center contains materials that provide teachers and parents with concrete ideas on the effective use of the minicalculator. The Council, serving as the communication center for all persons interested in the teaching of mathematics, welcomes visitors (from 8:30 a.m. to 4:30 p.m.) at the Center, which is located in the NCTM Headquarters Office at 1906 Association Drive, Reston, Virginia 22091.

Help Wanted



NCTM's Metric Implementation Committee (MIC) is collecting ideas for adequately teaching the metric system to those high school students who are not enrolled in mathematics and science classes.

If you have devised a program to reach such students, or if you know of someone who has devised such a program, please send details to the chairman of MIC, Boyd Henry, Department of Mathematics, College of Idaho, Caldwell, Idaho 83605.

Gridmatics

Grades VII - X

These two books contain nearly 200 self-checking grid format puzzle sheets which provide interesting practice in fundamental arithmetic operations. Book One covers addition, subtraction, and multiplication of whole numbers, and briefly introduces addition and subtraction of integers. Book Two deals with addition, subtraction, and multiplication of integers. It helps lay the ground work for algebra by giving practice in simple formula construction, elementary equation solving, and touches on other number bases. The puzzle quality of the gridmatics will make them very popular with your students. Permission is given to reproduce the sheets and the answers are shown in position in nonreproducible blue.

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