



## ***A Position Statement on Calculators in the Classroom***

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The National Council of Teachers of Mathematics encourages the use of calculators in the classroom as instructional aids and computational tools. Calculators give mathematics educators new opportunities to help their students learn mathematics and solve contemporary problems. The use of calculators, however, will not replace the necessity for learning computational skills.

As instructional aids, calculators can support the development and discovery of mathematical concepts. As computational tools, they reduce the time needed to solve problems, thereby allowing the consideration of a wider variety of applications. Furthermore, the use of calculators requires students to focus on the analysis of problems and the selection of appropriate operations. The effective use of calculators can improve student attitudes toward, and increase interest in, mathematics.

Other electronic devices, programmed to generate questions and activities, that provide immediate feedback to students, are not to be confused with calculators or computers. These devices can be used to reinforce computational skills through drill.

The NCTM Instructional Affairs Committee has identified the following justifications for using the calculator in the schools.

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