

NCTM Issues New Guidelines to Help Schools Home In on the Essentials of Math

by Sean Cavanagh

More than 15 years after its publication of influential national standards in mathematics, a leading professional organization has unveiled new, more focused guidelines that describe the crucial skills and content students should master in that subject in elementary and middle school.

The National Council of Teachers of Mathematics released “**Curriculum Focal Points for Prekindergarten Through Grade 8 Mathematics**,” a document that supporters hope will encourage the polyglot factions of state and local school officials, textbook publishers, and teachers to set clearer, more common goals for math learning.

Learning Progression

Focal Points offers grade-by-grade advice for what students should be taught in various areas of math. Here is how students should progress, for selected grades, in the area of number and operations:

- **Pre-K:** Develop an understanding of whole numbers and how to count and compare them.
- **Kindergarten:** Use numbers to solve quantitative problems, count numbers in a set, and create a set within a given number of objects.
- **2nd Grade:** Learn how to count in units and multiples of hundreds, tens, and ones; understand multi-digit numbers in terms of place-value, and how to compare and order numbers.
- **4th Grade:** Develop understanding of multiplication, including “quick recall” of multiplication and division facts; select correct methods to make mental estimations and calculations.
- **6th Grade:** Know the meanings of fractions, multiplication, and division; understand relationships between decimals and fractions, and how to multiply and divide them, using multistep problems.
- **8th Grade:** Use linear functions, linear equations, and their understanding of the slope of a line to solve problems; understand verbal and graphical representations of functions; describe how the slope of a line and the y-intercept appear in different verbal, graphical, and algebraic representations.

SOURCE: National Council of Teachers of Mathematics

Free downloads at <http://www.nctm.org/focalpoints/downloads.asp>