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*For the  
2007–08  
school year,  
NCTM's  
Focus of  
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Data Analysis  
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## TAKE A LOOK AT THE DATA!

Each year, NCTM focuses attention on one of the Principles, Content Standards, or Process Standards that are identified in *Principles and Standards for School Mathematics*. To help in meeting your professional development needs on the topic, we offer activities at our conferences and provide useful resources online. For the 2007–08 school year, the Focus of the Year (FOY) is Data Analysis and Probability—“Becoming Certain about Uncertainty: Data Analysis and Probability” is the official theme.

References to data are all around us. Just think about the popular *USA Today* and the graphs that introduce each news section. Similarly, books, the Internet, and the television news supply data displays to hook us into watching, reading, analyzing, and perhaps wanting something. And so evaluating data and arriving at our own conclusions are becoming skills that we all use regularly to make sense of information and determine if there is truth in different claims or not.

The Data Analysis and Probability Standard is one of five Content Standards identified in *Principles and Standards* for grades prekindergarten–grade 12. Each Content Standard requires a different degree of emphasis, depending on grade level; however, charts, graphs, tables, and other data displays present a rich context for thinking about and using the mathematics learned in the other content areas—particularly number and operations and algebra. And probability has applications throughout the study of rational numbers and algebra.

Given the tremendous amount of data swirling around us, the selection of the context and the development of specific data analysis tools to complement the mathematics learned in the classroom are important content-related considerations for the mathematics curriculum. Orga-

nizing data allows students regular use of the mathematics they are learning.

Here's an example of how analyzing data can help us discern what the facts tell us and what the truth is. Did you know that the data indicate that the average age of an NCTM member is 54 years? At least one NCTM staffer really dislikes my reference to this piece of information. Why? It is a classic example of “lying with statistics.” This information doesn't reflect the fact that the majority of our members do not furnish their age on our annual survey. That notwithstanding, the analysis of the data is based on the information received and allows the current NCTM president to make the claim that there is great need for “emerging” (can I say “young”?) leaders in mathematics at the NCTM Affiliate and national levels.

Now here's an example of how an understanding of probability can affect our decision making: I once led a first-grade class discussion concerning five counters in a paper bag. There were four blue counters and one red counter. I asked a student to predict the color that might be selected from the bag. His response? Red. Why? Because red was his favorite color. No amount of modeling or discussing would change his mind. Could red have been selected—absolutely! Would such a selection have been likely? Nope. The lesson this activity reinforced was to consider the developmental and curricular appropriateness of all activities, especially those involving probability at the early childhood level.

Yes, we have to take a look the data. We collect, organize, and display such information. And I hope that the 2007–08 Focus of the Year activities will help us all as we assist students in gathering, analyzing, and interpreting data—in the news, on the Internet, and in life. 