2016 Focus Issue

Probability and Statistics

Statistics and probability, rarely studied at any grade level as a stand-alone course, are encountered frequently by the general public. Data and statistics are gathered about consumers—students and teachers—for marketing; sampling is involved in protecting the foods and products we purchase; data in actuarial tables help determine insurance rates; probability and perceived risk intersect potential investments; probability in baseball uses sabermetrics; and the list goes on.

Statistics and probability are tools for analyzing the past and making predictions about the future. However, most students pursue courses of study that end in high school with algebra 2, precalculus, or calculus, leaving them without a thorough understanding of statistics and probability. The pervasiveness and influence of statistics and probability in our daily lives, as well as the recurring theme of "big data" in public discourse, merits extra focus in the middle grades.

The Editorial Panel of *MTMS* therefore invites authors to explore statistics and probability by sharing ideas and classroom experiences. *MTMS* is especially interested in manuscripts that include classroom-tested activities for grades 5–9 that are supported by examples of student work. Manuscripts that address one or more of the following questions are encouraged:

- What constitutes best practices in assessing the learning of statistics and probability?

- What enduring understandings should students have about statistics and probability to become well-informed adults?
- What effective methods help students understand the difference between statistics and probability?
- What opportunities exist for students to explore data for statistical purposes outside school life?
- How can studying statistics and probability strengthen and enhance opportunities for other math topics, such as rational number, percentages, fraction operations, linear equations and slope, and for interdisciplinary learning?
- What skills and knowledge do students need to design statistical experiments?
- In what ways can technology be used effectively to enhance student learning about statistics and probability?
- What innovative approaches have you found to teach statistics and probability beyond the common spinners, dice, and bags of marbles manipulatives?

The manuscript should be no more than 2500 words, not counting references and figures. To submit, access **http://mtms.msubmit.net**. On the tab titled Keywords, Categories, Special Sections, select the 2016 call from Department/Calls. Manuscripts are due **January 6, 2015**.

NATIONAL COUNCIL OF
TEACHERS OF MATHEMATICS

mathematics
teaching in the **MIDDLE SCHOOL**