

## Dynamic Data and Probability Modeling in the Middle Grades

NCTM 2012, Philadelphia

Delve into the middle school Common Core State Standards for statistics and probability using hands-on explorations and TinkerPlots. Through a series of activities exploring variability, modeling and simulating data, and investigating probability and sample spaces, learn ways to engage students in answering statistical questions.

In this session we will look at 4 activities (as time allows) that help students master the middle school standards for Probability. The first three activities each have a hands-on element. Once participants have experienced the hands-on activity, we will then model the activity using TinkerPlots Dynamic Data Software in order to explore larger samples. Each of the first three activities are effective classroom activities even if you are unable to use the software.

To download a trial version of TinkerPlots, go to <http://www.keycurriculum.com/products/tinkerplots/download-tinkerplots-free-preview> and download the appropriate version. **A temporary license valid through May 2, 2012 will be available at the session for those with laptops available.**

Handouts for each activity will be available at the session.

The activities **Roll It** and **Pinball Pupils** are used with permission from Kendall Hunt Publishing.

**Roll It** is taken from *Math Innovations Course 2: Driven By Data* ©Kendall Hunt Publishing.

**Pinball Pupils** is taken from *Discovering Algebra* ©Kendall Hunt Publishing.

The activities **Four-Child Families** and **Fish-Length Distributions** are used with permission from Key Curriculum.

These © Key Curriculum Press activities are available for free download at <http://www.keycurriculum.com/resources/tinkerplots-resources/free-activities-and-resources>.

Looking forward to seeing you there!