

Improving Understanding and Instruction of Probability and Statistics for Middle and High School Teachers

June 21, 2019, 8:00 a.m.–3:30 p.m.

Brevard Public Schools

Viera High School, 6103 Stadium Parkway, Lab 4-114, Viera, FL

8:00 a.m.

Welcome, Introductions, and Objectives

Dr. Phyllis Underwood

REL Southeast

The goals for this bridge event are to:

- Enhance teachers' content knowledge related to key concepts and ideas in statistics
- Provide teachers with background information on statistical concepts and their relationship to Florida Mathematics Standards
- Model sample problems and provide interactive activities dealing with the concept of describing and comparing distributions with a specific emphasis on measures of center and variability
- Model sample problems and provide interactive activities dealing with the role of randomness in interpretation of results
- Provide teachers with sample student assessment items and facilitate interactive activities, and explain how these items stem from, and are in the spirit of, relevant standards
- Provide teachers with a list of resources supported by the What Works Clearinghouse, the American Statistical Association, and the National Council for the Teachers of Mathematics
- Provide opportunities for teachers to ask clarifying questions

8:05 a.m.	Introduction to the Statistical Problem-Solving Process <ul style="list-style-type: none"> ▪ Formulate Question ▪ Collect Data ▪ Analyze Data ▪ Interpret Results 	Dr. Tim Jacobbe
8:30 a.m.	Variability in Data and Distributions <ul style="list-style-type: none"> ▪ Formulating a Question ▪ Collecting Quantitative and Categorical Data to Address a Question ▪ Mean, Median, Mode ▪ Range, IQR, MAD ▪ Assessment Items 	Dr. Tim Jacobbe
10:30	How Long is 30 Seconds Activity	Dr. Tim Jacobbe
11:30 a.m.	Lunch	
12:00 p.m.	Comparing Distributions <ul style="list-style-type: none"> ▪ Formulating a Question ▪ Collecting Quantitative Data to Compare Two Groups ▪ Similarities and Differences Between Distributions ▪ Assessment Items ▪ Double Stuffed ▪ Laetoli 	Dr. Tim Jacobbe
1:30 p.m.	Role of Randomness in Interpreting Results <ul style="list-style-type: none"> ▪ Methods of Data Collection ▪ Generalizability of Results ▪ Assessment Items 	Dr. Tim Jacobbe
2:00 p.m.	ASA Poster Competition	Dr. Tim Jacobbe
3:00 p.m.	Questions and Wrap Up	Dr. Tim Jacobbe
3:20 p.m.	Stakeholder Feedback	Dr. Phyllis Underwood