Andrew M. Ross* (aross15@emich.edu), Stephanie Casey, Randall Groth, Rrita Zejnullahi and James Albert. Prioritizing Statistical Knowledge for Teaching: Designing and Testing a Curriculum Module on Categorical Association.

We will share our work in designing, implementing, and evaluating a curriculum module for pre-service teachers that addresses statistical knowledge for teaching categorical association (e.g., contingency tables, graphical representations of data, and chi-squared testing) in introductory statistics classes. Categorical association is an important topic taught at both the middle and high school levels, as required by the Common Core State Standards in Mathematics. As our module introduces pre-service teachers to the required content, it also has them consider aspects of how to teach it to their future students, addressing all six domains in the Mathematical Knowledge for Teaching (MKT) framework. We will present portions of the curriculum module and data from pilot studies showing how pre-service teachers performed both before and after using the materials, particularly on creating appropriate graphs, interpreting and responding to student-created graphs, and identifying potential student misconceptions. This curriculum will become part of a larger NSF-funded project, MODULE(S2), that is creating secondary teacher education materials for college classes in statistics, geometry, modeling, and abstract algebra. (Received September 25, 2017)