

**You are cordially invited to attend the  
MSU Mathematics Education Colloquium**



**Dr. Nina Bailey**

**Thursday, April 17, 2025**

**1:00pm—2:30pm**

**Wells Hall B243 or Zoom: [https://  
msu.zoom.us/j/95072681584](https://msu.zoom.us/j/95072681584)**

**Passcode: PRIME**

**“Insights into Critical Statistical Literacy Habits of  
Mind Enactment”**

**Abstract:**

This talk will provide a brief overview of my current work on Critical Statistical Literacy Habits of Mind (CSLHM). CSLHM are the thinking behaviors called upon to make sense of statistical messages produced by others with a specific emphasis on how the statistics and/or statistical message are used to uphold or dismantle structures of inequity. The main focus will be on secondary preservice teachers' enactment of CSLHM. In addition, some preliminary findings from a study focused more broadly on adult enactment of CSLHM will be shared.

**Bio:**

Nina's passion for critical statistical literacy began in her early teaching career (pre-Ph.D.). She often asked students (high school and undergraduate) to make sense of data representations from the real world. She found that many students often considered the statistics superficially by avoiding or not addressing controversial issues in conjunction with statistics and/or not connecting the statistical messages to issues of power. She had very few students who seemed to integrate their critical understanding of the world with their statistical knowledge. Thus, she hypothesized this was in part due to the lack of opportunities given to students to consider the non-neutral nature of statistics and mathematics. Such experiences made Nina wonder about how to best support students and teachers in developing these skills, specifically seeing how statistics is inextricably linked to decision making and issues of power. This curiosity sparked Nina's dissertation research and continued research focus. The literature on statistical literacy focused primarily on the statistical content knowledge needed to make sense of statistical messages. Additionally, the overwhelming majority of frameworks for statistical literacy did not incorporate a critical\* lens. Thus, Nina's early CSLHM work aimed to clearly articulate critical statistical literacy habits of mind (CSLHM), develop a usable conceptual framework for classrooms, provide an analytic framework to inform further research, and explore how individuals enact those habits of mind.

\*Note that Nina is using the word critical to refer to how it is generally used in critical literacies to emphasize the relationship between literacy and power (Lankshear & McLaren, 1993).

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