Online Seminar Series on Programming in Mathematics Education

Friday, July 17, 2020, 11:00 am - 12:15 pm EDT

Michelle Wilkerson & Edward Rivero
University of California, Berkeley, USA

Computing with Data as a Window on the World

Our talk will focus on an ongoing project called Writing Data Stories (WDS). In WDS, students create “data stories” that integrate data analysis, multimedia, and other argumentative strategies to appeal peers to action around key socio-scientific issues such as nutrition and environmental racism. Informed by theories of syncretism (Gutiérrez & Jurow, 2016), data stories hybridize “everyday” and “academic” practices associated with both data and storytelling. Learners use computational tools and “data moves” (Erickson, Wilkerson, Finzer & Reichsman, 2018) to wrangle datasets, including by exploring and addressing discrepancies between data and their own experiences. They then build multimedia stories that put those datasets and findings in personal and social context and address the strengths, limitations, histories, and biases of data. We will share our theoretical motivations, curriculum, and emerging findings from our work with emerging multilingual students in middle school science classrooms in northern California.

Michelle Wilkerson, Assistant Professor at UC Berkeley, researches educational technology and the use of computers in K-12 education. She is interested in the role of technology-based simulations and visualizations in student learning, and how this learning can be encouraged through software and curriculum design. Edward Rivero is a PhD candidate in Education at UC Berkeley in Learning Sciences and Human Development. His research focuses on the intersections of learning, power, and technological design.

FREE registration - visit the MKN website

Next Seminar: Friday July 31 2020, 11:00 am EDT
Chronis Kynigos (University of Athens, Greece)
Designing for Mathematics through Baking

For all seminars in this series, please visit the MKN website

This series is co-hosted by Chantal Buteau (Brock University) and George Gadanidis (Western University). It is supported in part by funding from the Mathematics Knowledge Network and the Social Sciences and Humanities Research Council.