

Electronic Seminar on Mathematics Education

Mathematical Proof, Online Assessment, and High School Connections in First-Year Discrete Mathematics

Douglas Ensley, Shippensburg University

This presentation will take the form of a brief tour of three parallel threads in recent work updating my freshman-level discrete mathematics course materials: (1) Explicit connections to secondary school content leverage common student experiences, promote communication within the class, and better serve majors pursuing teaching certification. (2) Computer-based interactions (retooled in HTML/JavaScript to be tablet friendly) provide support for an inquiry-based approach to students construct their own understanding of mathematical proof. (3) An extensive MyOpenMath library for discrete mathematics supports online assessment for all topics in the course. And of course, if it's sunny in Pennsylvania that day, there will be 6 more minutes of presentation.



Noon ET, February 2, 2021

Zoom link: <https://cornell.zoom.us/j/92078267146>, passcode esme

For more information on ESME: <http://math.mit.edu/seminars/esme/>