

Focus on Upper-Division Pathways
Baltimore, Maryland
June 14, 2017

This day-long meeting, designed to help inform TPSE implementation plans, brought together faculty members from some 15 colleges and universities who have done pioneering work relevant to upper-division math pathways; representatives of organizations whose employees require strong undergraduate math preparation; and professional association representatives.

Discussion centered around the need for innovation in mathematics and math-related curricula at the upper-division level, and how successful models can be evaluated, scaled up, and disseminated to other institutions.

Agenda

9:00-9:10

Welcome and Introduction to TPSE Math
Phillip Griffiths, IAS & TPSE Math

9:10-9:30

The Upper-Division Pathways Initiative
Mark Green, UCLA & TPSE Math

9:30-11:00

Industry Panel on Workforce Demand in the Mathematical Sciences

Moderator: Daniel Goroff, Alfred P. Sloan Foundation

Panelists: Margaret Holen, Goldman Sachs & Co. (Retired)

Charles Johnson-Bey, Lockheed Martin

David Saltman, Center for Communications Research - Princeton

Josh Sullivan, Booz Allen

Arthur Szlam, Facebook AI Research

11:00-11:30: Break

11:30-12:00

Discussion: Strategy for Collecting and Analyzing Data on Workforce Demand

Moderator: Daniel Goroff

12:00-1:00

Working Lunch: Informal discussion of successful pathways initiatives

1:00-1:30

Association Presentations

Moderator: Karen Saxe, AMS & TPSE Math

AMS: Douglas Mupasiri, Chair, Committee on Education, AMS; University of Northern Iowa

ASA: Donna LaLonde, Director, Strategic Initiatives and Outreach, ASA

MAA: Michael Boardman, Chair, Cmte for the Undergrad Program in Math, MAA; Pacific Univ

SIAM: Peter Turner, Fellow & former VP for Education, SIAM; Clarkson University

1:30-2:45

College/University Panel on Strategies for Creating Upper-Division Pathways

Moderator: Uri Treisman, Dana Center, UT Austin & TPSE Math

Panelists: Jeffrey Humpherys, Brigham Young University

Peter Olver, University of Minnesota

Suzanne Weekes, Worcester Polytechnic Institute

Scott Wolpert, University of Maryland

2:45-3:15: Break

3:15-4:45

Facilitated Discussion: Implementation strategy for adaptation and scale-up of upper-division pathways;

Funding strategies

Moderator: Brit Kirwan, University System of Maryland & TPSE Math

4:45-5:00

Meeting wrap-up

Phillip Griffiths