Oregon Mathways Project

CBMS Math Pathways Conference
May 6, 2019
Mark Freed – Oregon Department of Education
Oregon Policy Context

• Mathematics requirements are standards-based rather than course-based.
• High school credits are proficiency-based rather than time-based.
• 3 credits of high school math required to graduate.
• Course sequences and options are local decisions.
• 40-40-20 Goal.
Participatory Leadership: Personal to Systemic

2014 beginning of a concept

2016 Clarify the idea (small group from ODE including applied math specialist, schools, cc, and university.)

2017 Invite broader conversation (math content panel, willing districts, higher education, other agency teams)

2018 Pilot with willing districts and learn from those pilots

2020 Act on what we have learned during math adoption
Mathways Initiative

On Track
Engagement
Pathways

Strong Focus
Finding Focus

Issues
• Too many high school standards
• Lack of consistency as educators choose which standards to focus on.
• Recognition the role of Algebra 2 & Pre-calculus to prepare for enrollment in Calculus, but other options also could exist.
• A number of assessments students may need to take in grade 11

Moving Forward
• Identify draft conceptual framework that identifies core content for first two credits
• Use NCTM Essential skills as a framework to organize content.
• Gather feedback as schools pilot courses aligned to proposed framework
• Begin work on updating state assessment framework
Mathways Initiative

- On Track
- Strong Focus
- Engagement
- Pathways
Pathways Model: 
*Student Math Reality*
Proposed 2+1 Course Model

College and career math opportunities

Optional additional high school math electives or dual credit college math

HS Algebra 2/Pre-Calculus (Preparation for Engineering & Physical Sciences Careers)

HS Statistics and Modeling (Preparation for Life Sciences, Social Sciences, & Business Careers)

Applied Mathematics & Mathematical Modeling
- Construction Geometry
- Financial Algebra
- Math in Computer Science
- Other Applied Courses (Preparation for Technical Careers)

High School Content – Math 2

High School Content – Math 1

K-8 Mathematics Content
Equal vs. Equitable 11-14 Math Pathways

Equality

Equity
Thank You

Mark Freed, Math Education Specialist, mark.freed@state.or.us
Tom Thompson, STEM Education Specialist, tom.thompson@state.or.us