

High School to College Mathematics Pathways Opportunities and Challenges in Policy

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- What is the goal?
 - Ensure all students graduate from high school “college and career ready”, i.e. fully prepared academically for any and all opportunities they choose to pursue. (Achieve)
- Who are the key players who must be involved?
 - I.e., Whose job is it?
- What does success look like?
 - E.g., Will we eliminate the need for remedial mathematics courses in IHEs?
- Will policy changes or cultural changes make the greatest difference?
- How do you get there from here?
- How long will it take?
- How do we fund it?
- Why is this so hard?

30 years working to improve mathematics education – A brief history

- NGA – Goals 2000: First in the World in Math and Science
- NCTM – Curriculum Standards; PSSM; Focal Points; Principles to Action
- NSF – Statewide Systemic Initiatives
- CCSSO – The Mathematics Committee (Voluntary National 8th Grade Math Test)
- AMS – Towards Excellence
- CBMS – The Mathematical Education of Teachers (MET1; MET2)
- Achieve – Foundations for Success: Mathematics Expectations for the Middle Grades
- NSF – Math Science Partnerships
- BHEF – An American Imperative
- National Math Panel – Foundations for Success
- AMS – Task Force on First-Year Mathematics
- APLU – Science and Mathematics Teaching Imperative
- APLU – Mathematics Teacher Education Partnership
- NGA/CCSSO – Common Core State Standards for Mathematics
- AMTE – Standards for Preparing Teachers of Mathematics



Based upon Rittel and Webber (1973)



Research on “collective impact” (Kania & Kramer, 2011) suggests that, in achieving significant and lasting change in any area, a coordinated effort supported by major players from all existing sectors is more effective than an array of new initiatives and organizations.