Scaling Math Pathways: Key Resources for Colleges

The following resources are available at the Dana Center Mathematics Pathways Resource Site, www.dcmathpathways.org.

To receive monthly updates about the DCMP and new resources, email dcmathpathways@austin.utexas.edu.

Research and Background

Making the Case for Math Pathways: Brief summarizing the drivers that negatively impact student success in mathematics and how math pathways address these issues.

DCMP Annotated Bibliography: Summaries of research that influenced the Dana Center’s work on math pathways.

Implementation Resources

DCMP Implementation Guide: Comprehensive guide to prepare for effective implementation including:

- Key action items
- Guidance on engaging stakeholders
- Templates and exemplars

DCMP Institutional Scaling Toolkit: Readiness assessment to guide users to resources that address the following challenges:
- Aligning math pathways to programs of study
- Setting long-term goals for scaling
- Developing effective advising tools
- Increasing faculty engagement
- Using high impact practices to increase enrollment and improve student success

Advising and Multiple Math Pathways: Video outlines a step-by-step guide to develop a comprehensive advising plan using Dana Center resources and tools.

Working Across Disciplines and Sectors

Examples of math pathways alignment to programs, state and institutional: Emerging Texas Math Pathways, Indiana Meta-Majors List, Victoria College Student Math Pathways Graphic Continued.
Modernizing Mathematics Pathways at Texas Universities: Recommendations for effective implementation of math pathways for 4-year institutions and their community college partners.

Curriculum and Professional Learning

Statistics pathway design: Mathematics Prerequisites for Success in Introductory Statistics and A Call to Action to Expand Access to Statistics.

STEM-Prep Pathway: Content and Structure: Summary of the research base and thinking that have gone into the Dana Center’s re-envisioning of the path to Calculus. One of several papers about the Dana Center’s work on to develop a more effective STEM-Prep pathway.

Frameworks for Mathematics and Collegiate Learning Course: Free curriculum for a learning frameworks course designed to help students develop the strategies and tenacity necessary to succeed in mathematics and in other college coursework.

DCMP Mathematics Courses: Course design standards, learning outcomes, course outlines, and sample materials. For those interested in reviewing or using the full courses, please contact a Pearson representative: http://www.pearsonhighered.com/educator/replocator/.