

Mathematics Pathways: Scaling and Sustaining Notes and References supplement

The brief *Mathematics Pathways: Scaling and Sustaining* presents information that is based on a large number of references. The printed version of the brief provides a short list of the most relevant citations. This document provides a more extensive list along with a few explanatory notes.

This list is organized by topic according to the sections of the brief.

Introduction

Mathematics Professional Associations on Mathematics Pathways

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Notes on the following statement, page 1: “Hundreds of colleges and universities have begun work on their campuses and tens of thousands of students are more engaged in learning meaningful mathematics and experiencing increased success.” This claim is based on the combined effects of the work across multiple projects and organizations.

- 88 institutions in Arkansas, Michigan, Missouri, Oklahoma, and Washington committed to implementing mathematics pathways through the Dana Center Mathematics Pathways (DCMP). Charles A. Dana Center at The University of Texas at Austin. (2018). *Implementation Connect - January 2018*. Austin, TX: Author. Retrieved from <https://dcmathpathways.org/sites/default/files/resources/2018-02/MPC-implementation-connect-january2018-v2.pdf>.

- 50 community college districts formed a collaboration with the Dana Center to implement mathematics pathways. In addition, 38 Texas universities have engaged in this effort. See lists of institutions by region at <http://dcmathpathways.org/where-we-work/texas>.
- 12 community colleges and universities participated in the University of Maryland's First in the World grant to implement a statistics pathway.
- 19 community colleges and universities in Tennessee implemented mathematics pathways as a part of a statewide initiative. This work went full scale in Fall 2015. See <https://www.tbr.edu/sites/tbr.edu/files/media/2016/12/TBR%20CoRequisite%20Study%20-%20Full%20Implementation%202015-2016.pdf>.
- 48 community colleges and universities in Montana and Ohio developed implementation plans for mathematics pathways through the joint Dana Center/Complete College America project "Building Math Pathways to Programs of Study. See <http://dcmathpathways.org/where-we-work/building-math-pathways-programs-study>, <https://www.ohiohighered.org/math>.
- 26 institutions in the University of Georgia system are implementing mathematics pathways as part of a statewide student success agenda. See <https://www.completegeorgia.org/math-pathways>.
- Over 90 institutions have implemented Statway and/or Quantway as part of the Carnegie Math Pathways network. See <https://www.carnegiemathpathways.org/#>.
- 45 California community colleges were offering accelerated statistics pathways in 2016. Rodriguez, O., Johnson, H., Cuellar Mejia, M., & Brooks, B. (2017). *Reforming math pathways at California's community colleges*. San Francisco, CA: Public Policy Institute of California.

Factor 1: Consistent and Predictable Transfer and Applicability

Obstacles to Transfer

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- Crisp, G., & Nuñez, A.-M. (2014). Understanding the racial transfer gap: Modeling underrepresented minority and non-minority students' pathways from 2-year to 4-year institutions. *Review of Higher Education*, 37(3), 291-320.

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Factor 3: Appropriate Placement and Acceleration Options

Placement

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Co-Requisite and Accelerated Structures

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