AN OVERVIEW

Multiple Paths Forward
Diversifying Mathematics as a Strategy for College Success

Policy changes by California State University, along with the new AB 705 law, give California community colleges greater ability to diversify math pathways and ensure that students learn the quantitative skills necessary for success.

In response to recommendations from mathematics associations and faculty organizations, and research that shows algebra-intensive math requirements can be a barrier to completion, California has joined more than 20 states in implementing multiple math pathways that align with students’ programs of study and enable them to complete a non-remedial math course within a year.

ACROSS THE US ABOUT HALF THE STATES ARE IMPLEMENTING MULTIPLE MATH PATHWAYS

HERE ARE EXAMPLES OF HOW COLLEGES MIGHT ALIGN MAJORS AND PROGRAMS WITH ENTRY-LEVEL MATH COURSES

STATISTICS
- Psychology
- Social Sciences
- Public & Protective Services
- Library and Information Services

QUANTITATIVE REASONING
- Arts, Humanities & English
- Applied Arts and Sciences
- Hospitality & Culinary Arts
- Agriculture & Natural Resources

ALGEBRA-TO-CALCULUS
- Biology
- Engineering & Architecture
- Math
- Physical Sciences

Media & Communication
Health Technologies
Journalism
Social Work

CALIFORNIA IS A LEADER IN OFFERING MULTIPLE PATHWAYS, with statistics a common alternative to algebra. But making intermediate algebra a pre-requisite for transferable math has limited the types of quantitative skills students learn. Further diversifying math pathways and aligning pre-requisites can help students leave college with the skills necessary for ongoing study, careers, and life.

Highest-level math course taken by California community college students

- All Students: 46% Remedial Math, 25% College Algebra or Above, 25% Non-Algebra, Transferable to 4-Year Institutions, 4% Non-Algebra, Non-Transferable
- Students who dropped out: 64% Remedial Math, 17% College Algebra or Above, 15% Non-Algebra, Transferable to 4-Year Institutions, 4% Non-Algebra, Non-Transferable
- Students who earned a certificate: 56% Remedial Math, 13% College Algebra or Above, 13% Non-Algebra, Transferable to 4-Year Institutions, 18% Non-Algebra, Non-Transferable

Percentages based on analysis of courses taken by 900,000 students over 7-year period.

For the full report — WestEd.org/resources/multiple-paths-forward

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