



Quantway transforms introductory college math from a gatekeeper to a gateway, particularly for traditionally underserved students.

What is Quantway 1?

Quantway 1 is an accelerated quantitative reasoning course that:



Provides students and college institutions with a more successful alternative to the traditional developmental mathematics sequence for students who are placed two course levels below college-level mathematics.



Allows students to complete their developmental mathematics requirements in a single term so they can be eligible to enroll in a college-level quantitative reasoning course.



Is taught using a unique pedagogical approach that promotes collaborative learning and addresses socio-emotional factors that affect student success; employs innovative curricula supported by aligned assessments and an online student platform.



Provides students with a firm conceptual mathematical understanding in order to master developmental goals and use quantitative tools intelligently in their daily lives (aligned with AMATYC stance on the preparation of non-calculus-track students).



Traditional Mathematics Sequence vs. Quantway

Quantway

Quantway 1

Quantway 2
or other college
level course

Traditional Mathematics Sequence

Elementary
Algebra
(1 term)

Intermediate
Algebra
(1 term)

College-level
mathematics
(1 term)

Why should your institution adopt Quantway 1?



Quantway 1 students outperform students who take the traditional remediation track in half the time. Nationally, only 29% of students successfully complete the traditional sequence by the end of two terms, while 56% of Quantway students successfully complete the course in one term.¹



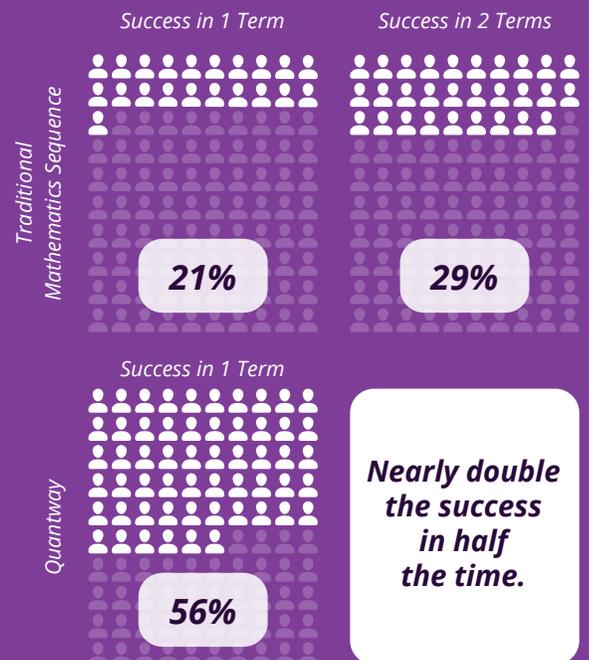
Many more first-generation, female, low-income, Hispanic, and African-American developmental mathematics students are able to achieve higher levels of education.



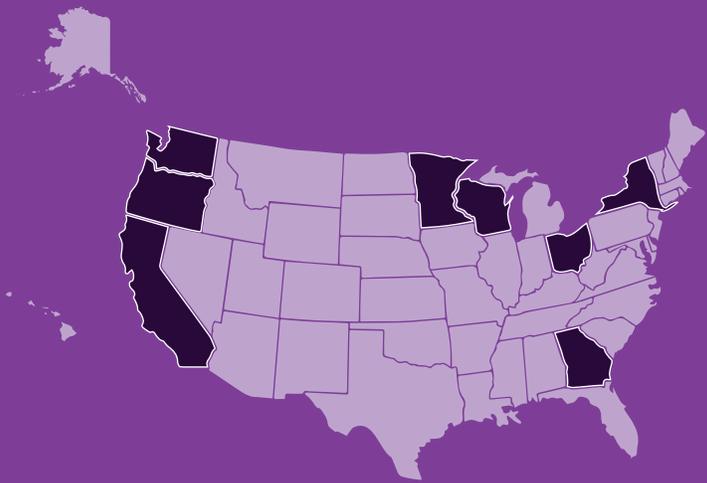
Quantway 1 has produced consistently positive and substantial improvement in student results, even as the national annual enrollment has tripled.



Students save time and money by completing transfer-level mathematics requirements more quickly. Institutions save money because Quantway 1 students go on to take and succeed in more courses.



Why should faculty join the network?



Quantway courses are being offered by more than 20 higher education institutions across 8 states and is expanding quickly.



Faculty teaching Quantway benefit from a comprehensive professional development program that includes online resources, faculty mentorship, and a community of support.



Network faculty lead the training and mentoring of all new faculty joining the network.



Faculty teams, each comprised of over a dozen faculty, lead all of the core aspects of the development and improvement of the program.



The Quantway instructional system also includes a common technology platform that supports teaching, rapid data analytics, and professional learning across the national network.

It's very inspiring to me as a faculty member that there are other people out there who are putting so much energy and so much intellectual power into helping us help students.

*-Kristin Spiegelberg,
Cuyahoga Community College, Quantway Faculty*

Most math classes I would go to I would have anxiety about. They'd just give me a sheet of equations and say, 'do them.' Now I actually enjoy coming to class...It has definitely changed the way I think about math, and it gives me inspiration that I can do it.

-Justin Daley, Quantway Student

How was Quantway 1 developed and designed?

Quantway 1 was created through a collaborative process that included community college and university faculty and was developed using a strong pedagogical research base. Researchers, practitioners, and the major mathematics professional societies worked together to establish the learning outcomes and design principles that guide student work.² Quantway 1 was developed and continues to be improved by community colleges for community colleges.

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References

¹ Sowers, N., & Yamada, H. (2015). Pathways Impact Report. Retrieved September 1, 2015, from: https://www.carnegiefoundation.org/wp-content/uploads/2015/01/pathways_impact_report2015.pdf

² The Mathematical Association of America (MAA), National Numeracy Network (NNN), and American Mathematical Association of Two-Year Colleges (AMATYC) all provided letters of support and endorsement for the Quantway learning objectives.

For more information, email info@carnegiemathpathways.org.