Achieving the Dream: Community Colleges Count is a national initiative focused on helping more community colleges students succeed, particularly low-income students and students of color. Built on the values of equity and excellence, Achieving the Dream advances community college student success through work on four fronts: transforming community colleges; influencing policy; developing new knowledge; and engaging the public.

Recognizing that Washington has a strong community college system that is worth investing in, College Spark committed more than $10 million to enable 16 Washington Colleges to participate in Achieving the Dream. Participating colleges received funding and other supports to help them build their research capacity; develop a culture of evidence and inquiry focused on student success; and pilot student success interventions aimed at increasing student success within the Student Achievement Initiative framework, with particular emphasis on increasing first year credit accumulation and improving success in pre-college courses.

PARTICIPATING COLLEGES

Phase I (2006-2010)
Big Bend Community College
Highline College
Renton Technical College
Seattle Central Community College
Tacoma Community College
Yakima Valley Community College

Phase II (2011-2015)
Bellingham Technical College
Clover Park Technical College
Edmonds Community College
Everett Community College
Grays Harbor College
Lower Columbia College
Northwest Indian College
Skagit Valley College
Spokane Falls Community College
Whatcom Community College
Math Reform
Lessons Learned and Implications for Policy, Practice, and Systems

**Set goals that target college math completion.**

There is increasing evidence that students are more likely to complete degrees if they finish college math within their first year of enrollment. Therefore, math reform needs to focus on completion of college math.

The Community College Research Center (CCRC) recommends this as part of its Guided Pathways model. And Washington’s Guided Pathways Initiative has set a target of having a majority of students earn degree math in their first year.

**Take a comprehensive approach to math reform.**

Working on math reform in a piecemeal approach tends to make for a slow process of change as well as a limited amount of progress in improving student outcomes. Looking at how students experience math in a whole-systems, comprehensive way is likely to make these reforms far more effective. This means fundamental, structural changes at scale, and includes placement, advising, and supports in the mix as well as changes in curriculum and instruction. One of the clearest lessons from the years of Achieving the Dream work, both here and nationally, is that incremental change is not fast enough or “big” enough.

**Embed math reform in broader systems change.**

Math reform is more likely to be effective at increasing college math completion and degree attainment rates when embedded in broader systems change rather than being approached as a stand-alone change.

CCRC’s Guided Pathways model includes essential practices that address math reform along with mapping of programs of study, exploration of career/college options, advising, student progress monitoring and intervention, and student learning.
Colleges that made the most progress on institutional change as part of AtD used specific, effective organizational strategies to do so. Some of these strategies are likely to be useful in moving math reform forward. These include:

• Active, engaged, intensely focused leadership from the top that communicates an ongoing, core commitment to improving math completion to the campus at large.

• Shared, distributed leadership, and broad, deep engagement. These strategies use the college’s structure in a strategic, intentional way from top to bottom and across functions and departments. In math reform work, this could include a mix of vice presidents, deans, department chairs, faculty, and staff, including those who are recognized as informal leaders and champions of innovation.

• Case making. Making the case for why change needs to occur in math is essential. At the AtD colleges, much of this conversation began with examination of institutional data on precollege and college math completion, with data disaggregated to identify equity gaps.

Beyond this, case making can include collaborative, structured conversations about findings from recent research on math reform and related Guided Pathways systems reform, and how those findings can inform college beliefs, values, and culture.

The adoption of evaluation as an essential feature of math reform work is important. This includes regularly examining institutional data to see if the reforms are working. For example, is the proportion of students enrolling in math their first year increasing? Is the proportion starting at college level, with supports, increasing? Is the proportion earning college math in their first year increasing? And are equity gaps closing? Likewise, it will be important for math departments to look at disaggregated course level data internally as they work to improve student outcomes. This kind of evaluation supports colleges in capturing what’s working and not working as well as lessons learned, making course corrections, and developing, testing, and improving new approaches.

Time and resources need to be built into math reform work so that evaluation is firmly established as a central part of the work.