

## Eliminating Exit Points & Increasing Student Success

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Imagine you are a student arriving to college at Solano for the first time. Which math course do you take?



You may talk with:  
A Counselor  
Assessment  
Admissions and Records  
Faculty  
Friends



Eliminating Exit Points &  
Increasing Student Success

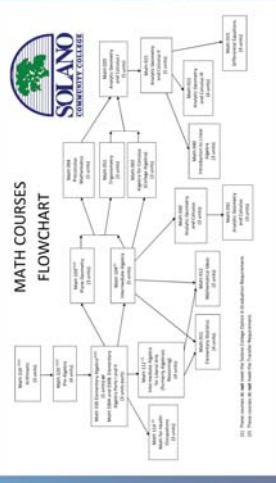
## What are your chances of success?

Let's say you began at Solano in Fall 2011. It is now the end of Spring 2016. Did you make it through a transfer-level math course?

Data from <http://datamart.cccco.edu/>

You decide to start at the beginning. After all, it's been a long time since you had math, right? You hope to transfer one day to a four-year university. And so, you enroll in Arithmetic, which is **4** levels below the transfer-level math course you will need to transfer.

If all goes well, you'll be done with your math in as little as 2.5 years.



216 students began in  
Arithmetic at Solano in  
Fall 2011.

13 of them completed a  
transfer-level math course  
by the end of Spring 2016.

6 %

76 students began in  
Pre-Algebra at Solano  
in Fall 2011.

12 of them completed a  
transfer-level math course  
by the end of Spring 2016.

16 %

326 students started  
in Elementary  
Algebra in Fall 2011.

64 of them completed a  
transfer level math course by  
the end of Spring 2016.

20 %

308 students began in  
Intermediate Algebra  
in Fall 2011.  
64 of them completed a  
transfer-level math course  
by the end of Spring 2016.

36 %

What are other  
community colleges  
doing to address this?

Deleting some basic  
skills courses or  
making them  
non-credit.

Creating pathways to  
transfer courses  
that eliminate  
common exit points.

Changing assessment  
using multiple  
measures to open  
math courses to more  
entering students.

**IF YOU WANT  
SOMETHING YOU'VE  
NEVER HAD,  
THEN YOU'VE  
GOT TO DO  
SOMETHING YOU'VE  
NEVER DONE.**

For students beginning in Arithmetic in Fall 2011  
Cohort Data

	One Level Below Transfer		Two Levels Below Transfer		One Level Below Transfer		Transferable	
	Students	Success	Students	Success	Students	Success	Students	Success
Students Total	216	244	121	131	49	52	24	21
Mathematics	216	244	121	131	49	52	24	21

do

Deleting some basic skills courses or making them noncredit.

Changing assessment using multiple measures to open math courses to more entering students.

Creating pathways to transfer-level courses that eliminate common exit points.

### What is Solano Community College doing?



Created Math 112, a course that is now an allowed prerequisite to Statistics.

Recently funded Transformation Gateway courses, adopt multiple measure assessment, provide student support services. **\$1,160,000**

Math 112  
Prepare for Math Success  
Students will receive better instruction and support through the use of multiple measures to assess readiness for the course. Students will explore options for support services.

Common Assessment is coming down the pipe for us. We will replace Accuplacer.

do

Created Math 112, a course that is now an allowed prerequisite to Statistics.

Math 112  
Algebraic Reasoning  
(Intermediate Algebra for Liberal Arts)

This course is designed for students who DO NOT plan to major in math, science, computers, engineering, or business.

Only 26.61% of incoming students in the last two years (2013-2015) identified their intended major to be one that required Calculus.



## 5 Core Elements in the approach to accelerated curricula and pedagogy

1. Backwards design from college-level courses
2. Relevant, thinking-oriented curriculum
3. Just-in-time remediation
4. Low-stakes, collaborative practice
5. Intentional support for students' affective needs

## Affective Domain

### TED Talks & Other Videos:

- The power of believing that you can improve
- Dare to Disagree
- Grit: The power of passion and perseverance
- How to make stress your friend
- Against Answer Getting

### Articles:

- When to let learners struggle
- Brianology
- Fixed mindset vs. growth mindset

## Math 305

### Prepare for Math Success

Students will review basic skills math topics from the last math course previously completed with the online math review program. In addition, students will explore and improve their math study skills.



Common Assessment is coming down the pipeline (Spring 2018, for us), and will replace Accuplacer.

Recently funded Transformation Grant will help increase the placement of students into gateway courses, adopt multiple measures assessment, provide proactive students support services.

**\$1,160,000**