



# PRE-COLLEGE MATH

## THE PROBLEM:

The majority of Pierce's new degree seeking students placed into developmental math and never progressed to college level math.

Pierce's **Pre-College Math** strategies focused on improving basic math skills and persistence, placing more new students into college level math, shortening the pathway through developmental math for those that need it, helping students progress through courses more quickly, improving consistency in instruction and course success rates, and providing STEM and Non-STEM math pathways.

## SKILL-BUILDING INTERVENTIONS

### COMPUTER-BASED MATH LABS

These labs provide for self-paced instruction. The program assesses students' math knowledge and delivers targeted instruction on the topics they are ready to learn. Students have completed up to three developmental math courses in only one quarter.

### AUTOMATICITY

Automaticity (fluency with math facts) is the result of repetition and practice. Pierce faculty designed a flash card program through the Washington Mathematics Assessment and Placement (WAMAP) platform. Automaticity is now an outcome of Pierce's two lowest level pre-college math courses.

### PRODUCTIVE PERSISTENCE

Productive Persistence is an evidence-based package of student activities and faculty actions to increase student motivation, tenacity and skills for math success. Through the Center for Engagement and Learning, Pierce offers training for faculty.

## PATHWAY INTERVENTIONS

### NON-STEM PATHWAY

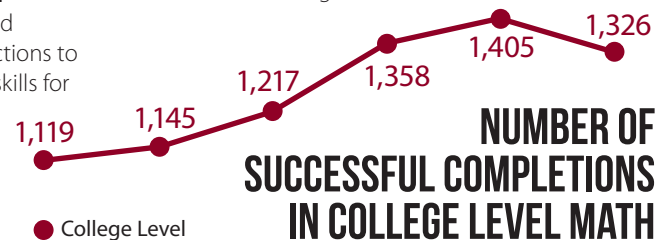
The pre-college pathway was shortened for non-STEM students from four to three courses that many pass in just two terms. Math faculty redesigned pre-college math and piloted the new curriculum in just one year.

### PLACEMENT POLICY

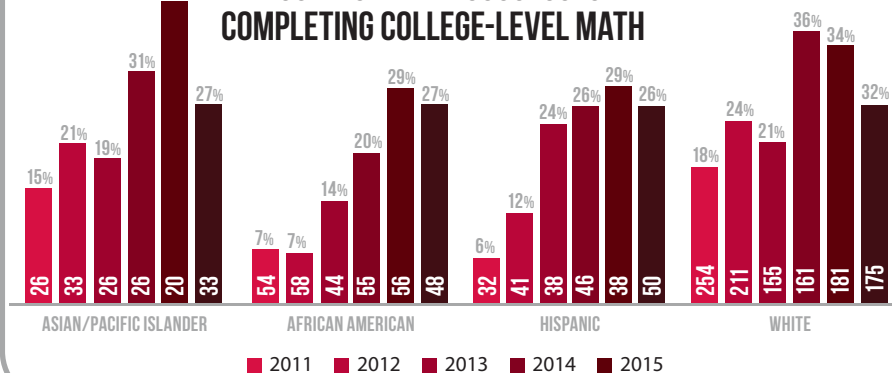
The college conducted a cut-score analysis and added high school transcripts as an option to replace the COMPASS placement test. Even though more students placed directly into college-level math, success rates did not change.

### OUTCOMES RE-ALIGNMENT

Pre-college math outcomes were re-aligned to include only what was necessary for students to succeed at the college level.



## PERCENTAGE OF STUDENTS BEGINNING IN PRE-COLLEGE MATH SUCCESSFULLY COMPLETING COLLEGE-LEVEL MATH



## ANNUAL ENROLLMENTS IN MATH COURSE BY LEVEL

