

How did students at a rural high school in Central California not only acquire the necessary skills to become college ready, but also pass college-level math classes, all in the span of their senior year?

Raising the bar was key. The real magic happened, however, as everyone banded together — from teachers and counselors to leadership and administration — propelling the project to long-term success.

# **Background**

In early 2018, a team from College Bridge set off to California's Central Valley to find new K–16 partners for a longitudinal college readiness project: The Math Pipeline Readiness Project (M-PReP). Focused on rural communities, M-PReP was the expansion of a previous project that had great outcomes in urban schools in Los Angeles. We were seeking high schools interested in improving college readiness metrics, specifically in mathematics.

The major metrics for the project were 11th grade state test scores, pass rates for college-level math classes, and, ultimately, college persistence. In our search we were looking for schools that served minority, low-income students who were performing below state averages on our selected metrics.



# **Setting**

Dinuba is a small city in California's Central Valley. Located in the heart of the San Joaquin Valley in Tulare County, Dinuba is located about 180 miles north of Los Angeles and 200 miles south of San Francisco.

Tulare County is the second-leading producer of agricultural commodities in the United States, with Dinuba producing 40% of the world's raisins. **Of the approximately 25,000 residents, 86% are Hispanic or Latino and 26% live below the poverty line.** The major employers are in agriculture and at distribution centers.

### Challenge

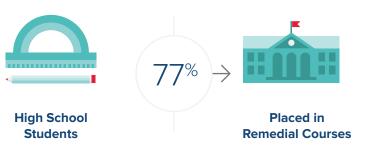
Dinuba High School is the only high school in the Dinuba Unified School District. In 2018 the school served 1,988 students, of which 82% were socioeconomically disadvantaged and 93% Latinx. Their data from the previous year showed 15% of 11th graders meeting or exceeding standards on the state test compared to 38% statewide. According to the state dashboard, 65% of graduating students at Dinuba were prepared for college.

The AP math program consisted of two small sections resulting in few, if any, students passing the AP exam and earning college credit. Students fed into Reedley College, which had 77% of students placed in remedial courses and only 39% of those completing a degree, certificate, or university transfer. Based on the data, Dinuba and Reedley were a perfect fit for the project.





GRADUATING STUDENTS PREPARED FOR COLLEGE





# The project launched in the 2018–19 school year with three essential components supporting its success.

**First,** a math professor at Reedley College was eager to collaborate with his high school counterparts. **Second,** both the site and district leadership shared a vision for the project.

**Third,** the entire math and counseling departments were included in the project's development.

The plan utilized dual-enrollment with support as an intervention strategy. Counselors pulled up course data and student data. Math teachers and professors chimed in on course readiness, and administrators presented course sequencing options. Together they developed a multi-year plan that identified the ideal students and teachers for the project.

The goal for the first year was to target non-STEM-bound students by offering a pre-statistics course followed by a college transfer-level statistics course. So many students applied that two sections were offered. In year two the plan was to extend the program to include a college algebra and trigonometry STEM pathway. Adding calculus was the plan for year three.

#### Results

In the 2018–19 school year, **29% of 11th graders met or exceeded standards on the state test,** an increase of 11 percentage points from the previous year. Of the high school seniors, 60 participated in the dual-enrollment course and 98% passed. Additionally, 79% of seniors were prepared for college, an increase of 12 percentage points from the previous year.

In the 2019–20 school year, the STEM pathway was added, creating three separate pathways for students to earn college math credit. **Of the 71 students who participated, 94% earned college math credit. The** 

**college readiness rate increased to 81%.** No other data was available, as exams were cancelled due to COVID-19.

Despite the pandemic, calculus was added in 2020–21 with 22 students and a 100% pass rate. **Overall, nearly one-third of Dinuba's seniors participated in dual-enrollment, with 85% earning college credit.** 

Of the students in the 2018–19 cohort, 22 had matriculated to community college and 89% were persisting.



11TH GRADERS
MEETING STANDARDS



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SENIORS PARTICIPATING IN DUAL-ENROLLMENT

4 KEYS TO SUCCESS

In addition to the shared decision-making, we credit Dinuba's success to the following:

**First,** the dedicated math coach continually looked at the big picture and led the department toward a common goal.

**Second,** the collaboration between teachers and counselors kept everyone focused on shared student outcomes.

**Third,** leadership actively involved and supported both teachers and counselors throughout the project.

**And fourth,** everyone put the students first and focused on how to best prepare them for the next phase of their academic journey.

