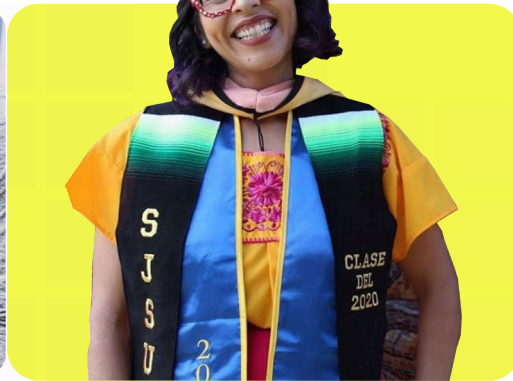


CASE STUDY



Downtown College Prep

IM[®] 6–8 Math





Community and Curriculum Drive College-bound Success

Downtown College Prep (DCP) has a reputation for two things: creating environments that nurture students like they are family and an unwavering belief that every student is college-bound.

DCP has prioritized enrolling first-generation and low-income students at rates higher than other neighboring schools and has become “a statewide leader in postsecondary success”* by identifying and removing barriers and providing college preparation supports for students and families.

“The teachers who were not using the curriculum as intended, their students’ math scores . . . stayed stagnant or went down. The teachers who used the curriculum as intended, their students showed growth.”

Katrena Andrist-Pope, assistant principal of DCP El Camino Middle School, notes that her school’s location in Silicon Valley sometimes feels like “the center of the universe” because of its proximity to so many universities. But while the vibrant area provides vast opportunity,

San José students were not always “making it to and through” college, Andrist-Pope says.

However, DCP is seeing growth—the class of 2023 reported an 85 percent college application rate and yielded a 98 percent acceptance rate.

Students can’t get to college without first having a solid foundation in core subjects, including math. In 2018, DCP adopted the Illustrative Mathematics (IM) curriculum. Since then, DCP teachers, students, and families have had enough time to see the benefits of using IM’s curriculum along with guiding principles that parallel the IM Classroom pillars of curriculum, professional learning, leaders, and community.

Community

DCP faculty and staff are dedicated to cultivating relationships between

students, teachers, and families. Alum Rock Middle School principal José Zavala describes strong family ties as a key piece to what keeps the district thriving.

“I think family involvement, engagement, input, and our open-door policy is what attracts families to our school culture,” he says.

This community focus is what makes DCP schools unique. It also makes the IM curriculum a natural fit for the district since it can be used with students throughout their entire 6–12 experience.

DCP capitalizes on its unique community, which begins in middle school and strengthens all the way through college. Zavala highlights his team’s ability to meet students where they are as a source of pride for the school. Knowing where a student has been and where they’re going in their mathematics

education can have a significant influence on their mathematical identity and capacity—and when ardent communities are engaged in students' learning, they are boundlessly supported in their pursuit of academic success.

Leaders

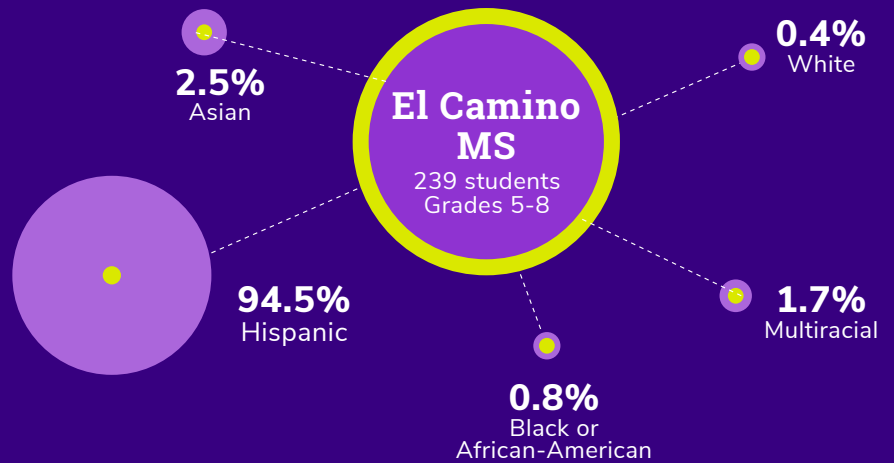
This tight-knit community allows DCP educators and leaders to understand where students are coming from academically and personally.

“A lot of our families are first generation . . . There’s a lot of social inequality that occurs,” says Daisy Alicante, who grew up in the community and is now assistant principal at DCP Alum Rock Middle School. “A lot of our students are English language learners, so there’s a language barrier there that we have to help our families overcome. There [are] students who come from families that are low income. . . A portion of our families experience homelessness.” The community experiences many obstacles, “and I always want to help break down those barriers,” she says.

IM’s focus on access for all learners plays an integral role in breaking down those barriers. Namely, embedded math language routines use a multi-modal approach to allow all learners to engage in mathematical discourse. They provide various entry points for students of all abilities to participate in classroom learning.

Because many DCP pupils become first-generation college students, the combination of community and college prep assistance provides an invaluable advantage as they transition to their postsecondary experience. It has such a tremendous impact that DCP alumni often return to their high schools to assist budding college students and give back to the school community that supported them.

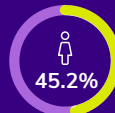
Downtown College Prep Demographics



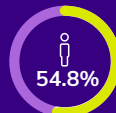
STUDENT/
TEACHER
RATIO **35:1**



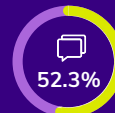
Graduation Rate



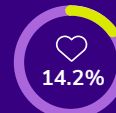
Female



Male



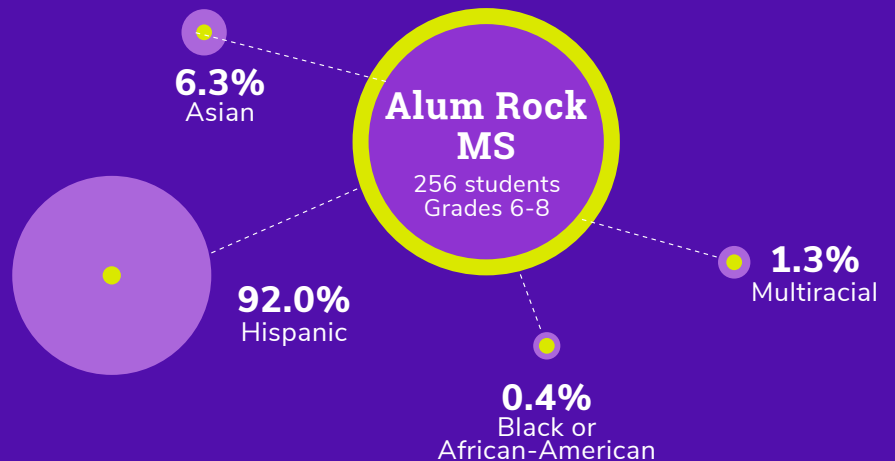
Multilingual Learners



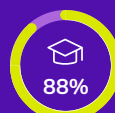
Students with Disabilities



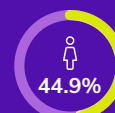
Socio-economically Disadvantaged



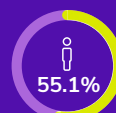
STUDENT/
TEACHER
RATIO **36:1**



Graduation Rate



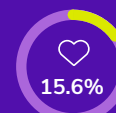
Female



Male



Multilingual Learners



Students with Disabilities



Socio-economically Disadvantaged



Curriculum

Carolina Rodriguez is an instructional coach at El Camino. She's also a DCP alum, so she has a keen sense of what students and teachers need for success. Rodriguez appreciates that the IM curriculum is intuitive for teachers.

"I also value the map of the standards and the building blocks across the grades," Rodriguez says, because they provide a reference point for coaching teachers to reach a spectrum of learners. These features help ensure they're teaching at grade level while being aware of and providing support for the building blocks that students may be missing.

Students also see a coherent progression of skills throughout grade levels, allowing them to grasp concepts more profoundly, think more critically, and make more authentic connections between

mathematics and their world. Alicante praises IM's instructional model as it "removes that cognitive load of trying to figure out what's going to happen today," so students can solely focus on math concepts during the 70-minute class periods.

Learning

DCP has diligently drawn upon the strengths of their leaders and the professional learning opportunities provided by Illustrative Mathematics. Specifically, Alicante appreciates the external support their schools' educators get from other IM users. "There is a wide online community that . . . we can use as resources for our staff," Alicante says. Instructional leaders prioritized coaching teachers in implementing the curriculum, as problem-based learning can be a considerable pedagogical shift. Teachers were given access and encourage to read through all IM materials carefully to ensure successful implementation.

Andrist-Pope attributes student success to implementing the IM curriculum with integrity. Case studies conducted at DCP El Camino Middle School in 2024 prove it with students' MAP and NWEA test scores, she says.

"The teachers who were not using the curriculum as intended, their students' math scores . . . stayed stagnant or went down. The teachers who used the curriculum as intended, their students showed growth."

And the schools have even more to celebrate. DCP school officials say they are proud to have graduated more than 1600 students, despite any personal or academic challenges they may have faced. Their holistic approach to teaching mirrors the spirit of the IM Classroom, which recognizes the importance of curriculum, professional learning, leaders, and community.

DCP Adoption Process, 2017-2018

Nov 2017

Pathway selection process
Formation of Math Curriculum Committee
Develop Materials Evaluation Tool

Nov-Dec

Develop materials list and contact publishers

Jan-Feb

Evaluate materials and make recommendations

March

Administrative team makes recommendations

April 2018

Final adoption decision/piloting
Order materials

José Zavala

Alum Rock Middle School Principal

At Illustrative Mathematics, we know that successful curriculum implementation is possible when school leaders understand that mathematical learning is more than just the curriculum. It takes leaders who believe that all of their students can succeed, trust that their teachers are professionals capable of shifting to new teaching methods, and respect the role that the community plays in supporting student learning.

José Zavala understands that too. The Alum Rock Middle School principal has been a part of the DCP community for more than 12 years, with his roles evolving from PE teacher to school leader. In that time, Zavala has experienced the driving factors that draw staff members, families, and alumni to the school—community engagement and a strong support system for students and teachers.

“I think one of the strongest programs has been our math program. Everything’s laid out for you,” Zavala says. When new teachers look at the IM curriculum, “they’re like, ‘Wow, this is awesome.’”

With effort, engagement, and experience, teachers gain confidence and creativity—and that growth mindset is exactly what DCP schools want to encourage.

“As years go by, they have a little bit more autonomy or put their own little twist on it,” he says. This growth-mindset focus is also apparent in the way DCP school leaders and teachers interact with diverse students at every level.

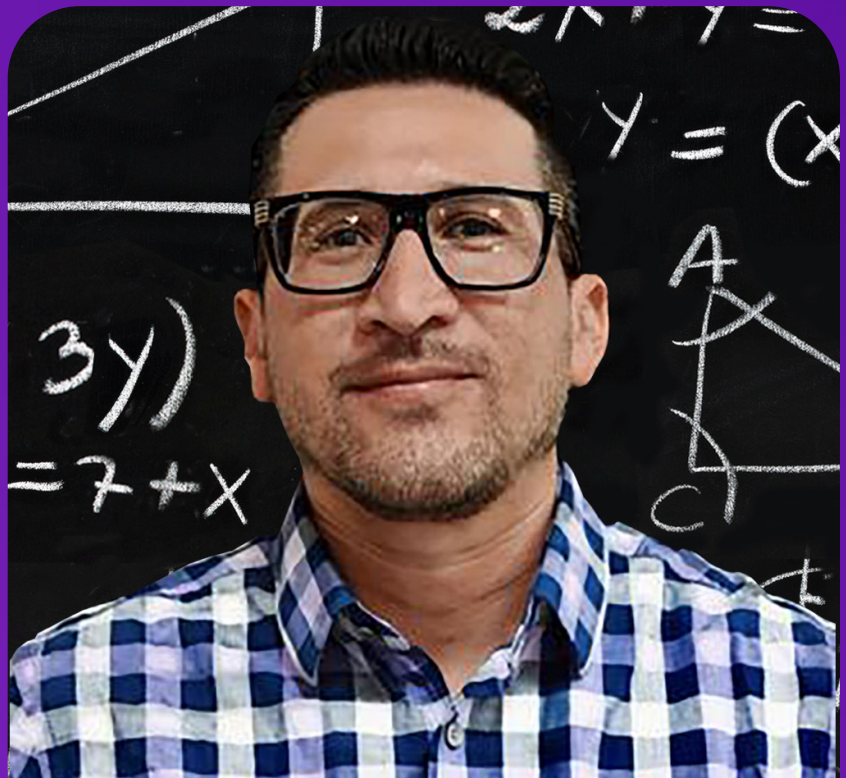
“We try to meet them where they’re at. We always say it’s an individual goal,” Zavala says. “Any time we do any big assessments or anything, we look at their previous scores and say, ‘Hey, did you improve? How are you doing?’ So that’s the culture we try to create.”

Zavala appreciates the real-world connections showcased in IM’s problem-based curriculum, and emphasizes the importance of using authentic examples to increase relevance and encourage genuine connection. Those connections are vital, Zavala says.

“Every time I walk into a class, I ask students, ‘What are they working on and why are they working on it?’” Zavala says. If they aren’t engaged and can’t explain the reason for the work, then the connections aren’t being made. “We try to tell our teachers, whether it’s in the curriculum or not, try to give them an example of real-life, real-world scenario skills that they can use.”

After adopting the IM curriculum, Zavala noticed a higher level of student participation in math classes. “There’s definitely more dialogue,” he says. “Students are definitely more vocal, definitely more engaged in the work.”

Zavala has led Alum Rock Middle School in developing strong communities, delivering meaningful instruction, and providing effective leadership to support teachers and students. But it’s the strength of his school’s math program that stands out. “That’s one thing that I’m kind of proud of,” he says.







What is the IM Curriculum?

IM K–12 Math is a problem-based core curriculum dedicated to the principle that all students can learn grade-level mathematics.

During each class period, teachers orchestrate productive discussions among students, drawing on their prior knowledge and lived experiences. Through a carefully designed sequence of activities, students learn key concepts and build procedural fluency. At the same time, they work collaboratively with their peers to apply their learning to real-world and mathematical problems.

How Does the IM Curriculum Support Students?

The IM curriculum is thoughtfully designed to promote student success, providing multiple entry points to invite students into the math and provide access to all learners. Culturally responsive images and scenarios are carefully incorporated to reflect a diverse society, so students can see themselves and their experiences

represented in the problems they're solving. As a result, students make more meaningful connections with new concepts. Each lesson includes a warm-up activity that encourages all students to join the mathematical conversation. Teachers say these warm-ups are instrumental in engaging reluctant students and getting them excited about math.

The curriculum also includes differentiation resources to enhance access and scaffold instruction for multilingual learners and students with disabilities. It also provides opportunities to extend learning and extensions for students who are ready to dive deeper into the mathematics.

Supporting students also means supporting families. Each unit includes a Family Support Materials section, which uses plain language to provide an overview of what students are learning and questions that promote conversations about the mathematics.

As we grow, so too does our impact. In 2023, over

2.1 MILLION STUDENTS

have used our curriculum and more than

25,000 TEACHERS

have participated in our professional learning.

IM K–12 Math™
Top Rated
by EdReports

EdReport Scores

IM K–5 Math

- 14/14** FOCUS & COHERENCE
- 18/18** RIGOR & MATHEMATICAL PRACTICES
- 25/27** USABILITY

IM 6–8 Math

- 14/14** FOCUS & COHERENCE
- 18/18** RIGOR & MATHEMATICAL PRACTICES
- 38/38** USABILITY

IM 9–12 Math

- 18/18** FOCUS & COHERENCE
- 16/16** RIGOR & MATHEMATICAL PRACTICES
- 27/27** USABILITY

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All photos are courtesy of DCP.

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