



Success with Fractions in an At-Risk District Sunnyside Unified School District & Conceptua® Math

Focus on Mathematics

Sunnyside Unified School District in Tucson, Arizona has struggled for years with student performance in math. Four of the five middle schools and two of the elementary schools are currently labeled as “D” schools according to AZ Learns, Arizona’s accountability system. Low performance in mathematics is a significant factor contributing to this accountability rating. As a result, Sunnyside was looking for a new math curriculum, starting with the topic that students and teachers found most difficult and frustrating—fractions. They found what they were looking for in Conceptua Fractions, a digital fractions curriculum from Conceptua Math.

Optimizing the Value of Digital Devices

Sunnyside is a tech-savvy school district in its third year of a one-to-one computing program designed to transform teaching and learning through technology. Every fourth through ninth grader in the district receives a laptop or netbook for instructional use. The district strategically chooses its curriculum to take advantage of the technology. “It is important that Sunnyside students and teachers have access to a high-quality and common-core-aligned digital curriculum for the core subject areas. Without this capability, both students and teachers struggle to get value from their digital devices,” says Dr. Manuel Isquierdo, Superintendent, Sunnyside Unified School District.

Designed for the Common Core

Sunnyside’s curricular mission, consistent with the Common Core State Standards, is to ensure that elementary students develop deep conceptual understanding in mathematics and have frequent and consistent exposure to the Standards for Mathematical Practice. This philosophy is fully embedded in the Conceptua Math pedagogy because the program was designed from the start around the Common Core. The program utilizes multiple visual and conceptual models to scaffold learning from concrete to representational to abstract.

Dramatic Increase in Student Understanding

In the 2012-2013 school year, 4,200 fourth through sixth grade students at Sunnyside have used Conceptua Fractions. Data analysis has been completed for 2,000 fourth and fifth graders, across 13 schools and 120 classrooms, who used the program daily as a replacement fractions curriculum for two and a half months. The impact on student performance was dramatic. Student understanding of fractions nearly doubled, with an overall increase in comprehension of 36% in both grades. Before studying fractions, only 4.5% of the students were proficient with the subject matter. After the usage of Conceptua Fractions, the proficiency rate increased to 61%.

“The post test results were extremely encouraging. The data show significant growth in a core curricular area where it has historically been very difficult for us to raise student performance,” says Christie McDougall, Math Coordinator, Sunnyside Unified School District.



Manuel L. Isquierdo, Ed.D.
*Sunnyside
Unified School
District
Superintendent*

“Conceptua...is not only a superior instructional approach to learning mathematics, but also a unique business partnership that could help Sunnyside achieve the ambitious goals we have for our technology-rich learning environment.”

District statistics

K-12 district in Tucson, AZ

18,140 students

85% low socioeconomic

95% minority

22% English Language Learners

67% graduation rate

Project RED Signature District



Conceptua Math is the leader in online visually-interactive math curriculum. Conceptua Math was founded by a team of educational publishing and research leaders with a mission to transform the teaching and learning of mathematics.

Conceptua Math, LLC

179 H Street, Petaluma, CA 94952

info@conceptuamath.com

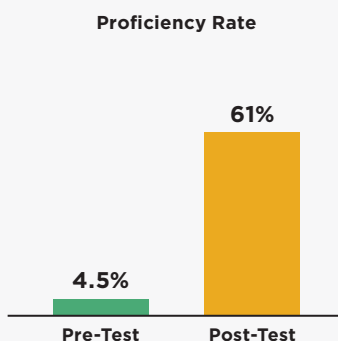
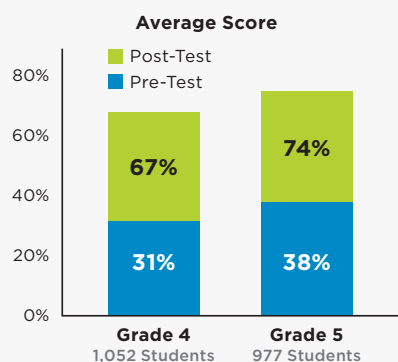
Tel. 707.766.0584

Toll Free. 888.768.MATH (6284)

Fax. 415.223.8555

www.conceptuamath.com

Sunnyside Unified School District 2,029 Fourth and Fifth Grade Students



Improved Self-Confidence

Conceptua Fractions not only builds a strong understanding of fractions but also helps bolster self-confidence for students that have traditionally struggled with mathematical concepts. For example, when a struggling fifth grade English Language Learner had success with his first skills check in the program, he responded, “In my whole life, I never got a 100% before now!” His accomplishment sparked a renewed energy and focus on learning fractions.

Keep the Teacher in the Equation

Conceptua Math creates an environment in which the teacher is integral to the learning process. After students complete the built-in assessments, teachers quickly check with students to determine next steps. Teachers “choose the appropriate level of intervention by selecting individuals or small groups for additional instruction or by moving students forward,” says Pam Betten, Director of School Improvement and Director of One-to-One at Sunnyside Unified School District.



Conceptua Math includes pre-designed lesson openers and closers, technology delivered directly to the teacher for facilitating class discussion. At Sunnyside, over 66 teachers have presented more than 1,700 openers. While Conceptua Math provides the enabling technology, the process embedded in the Conceptua pedagogy “fits well with instructional practices already in place,” says Christie McDougall.

Partnership for Success

One reason the Conceptua Math implementation has been so successful is that the district found both an effective software program as well as a strong and willing partner with a passion for education. “The commitment that Conceptua has for teachers and students is evident in the way they do business,” says Pam Betten. Conceptua Math and CORE, the company’s professional development partner, delivered high-quality professional development that was very responsive to district needs, including workshops, classroom modeling, co-teaching, observations, and feedback.

“When Conceptua first came to our attention, I recognized right away that this is not only a superior instructional approach to learning mathematics, but also a unique business partnership that could help Sunnyside achieve the ambitious goals we have for our technology-rich learning environment,” explains Dr. Isquierdo.