

Albuquerque's AIMS rated among America's top high schools

By [Kent Walz / Journal Senior Editor](#)

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From left front, Chris Pohl, Dominic Gorena and Daniel Delgado, along with Krish Patel, behind Pohl, and Josh Zheng, behind Delgado, work on a project in Jerry Delmore's class. The class built a computer network at Albuquerque Institute of Math & Science. (Marla Brose/Albuquerque Journal)

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Kathy Sandoval is principal of Albuquerque Institute of Math & Science, a charter school. Sandoval says that 80 percent of her students are fleeing from APS schools that scored D's or F's. (Marla Brose/Albuquerque Journal)

It was barely a year into its existence, and the bold foray into the world of education reform, Albuquerque's High Tech High School, looked like it was already on its last leg.

Housed in the former Rio Grande Yacht Club off Yale near the Sunport, the math and science school's sponsoring organization from San Diego had decided it was moving to a for-profit model for its charter schools around the country. That was a model not allowed by New Mexico law.

With the sponsor on the way out, enrollment in July 2006 was 80 students and falling.

Enter Kathy Sandoval.

Then-Mayor Martin Chávez persuaded the one-time physics teacher and upstate New York native to leave her position running both the Early College Academy and Career Enrichment Center at Albuquerque Public Schools to take over the fledgling math and science school he had pushed so hard to create.

And that move by Sandoval, as they say, changed everything.



David Westphal and the rest of his ninth-grade karate class practice at Albuquerque Institute of Math & Science on Thursday. (Marla Brose/Albuquerque Journal)

Under the direction of the feisty Sandoval – now Sandoval-Snider – the once struggling school now known as the Albuquerque Institute of Math and Science has gone from the verge of extinction to being one of the best in the United States. Actually, one of the best in the world.

An “A” performer on New Mexico’s school grading system, AIMS has been rated among America’s top high schools by the Washington Post, Newsweek and U.S. News and World Report.

Then there is PISA – or the Program for International Student Assessment. In layman’s terms, it’s a test taken by 15-year-olds in dozens of industrialized countries with each school’s scores measured against national averages. The U.S. usually comes in around the middle.

The state chose AIMS to take the test in 2015, and the recently released results are stunning. The AIMS students on average were higher than the U.S. average score in both math and reading literacy.



Jerry Delmore teaches STEM to eighth-graders at Albuquerque Institute of Math & Science. (Marla Brose/Albuquerque Journal)

And higher than the average score for Switzerland.

And Korea.

And Sweden.

And every other country that took the test.

“And we’re a free public school with admission by lottery,” Sandoval says. “Eighty percent of my children are fleeing D and F school corridors in APS.”

Outgoing – and even combative when it comes to defending AIMS – Sandoval is personable and laughs easily. She might technically be a science and math geek, but she doesn’t come across as one.

At various times she has worked as a veterinary technician, for a pharmaceutical company and was a scientist at the Office of the Medical Investigator, where duties included “preliminary autopsy and postmortem collection and analysis of specimens for presences of possible contagion and determination of cause of death.”

But for now, her life revolves around her school. And any interview with her invariably turns to what makes that school a success – and a magnet for criticism.

Addressing claims by critics that the deck is stacked in her favor, Sandoval points out that the first group of sixth-graders who entered AIMS – the class of 2014 – had reading and math proficiency levels at or below 40 percent. By 11th and 12th grade, they were at 100 percent.

“Look around,” she says during a tour of the cramped school marked by piles of backpacks at most every turn. “You see kids from every kind of background.”

As for results like a graduation rate of 93 percent with students also racking up dual credits at the University of New Mexico and Central New Mexico Community College?

“It’s my staff. They didn’t point fingers and say it’s (the kids’) fault. They looked internally and asked ‘what can we do?’ That’s how we came up with what we call the AIMS way.”

The critics, she says, “aren’t speaking from knowledge. They are speaking from excuses.”

While there are plenty of education bureaucrats who don’t much like AIMS, a lot of parents do. The school is maxed out with a grades 6-12 enrollment of 360 at its current location on the UNM south campus. It has a waiting list of 1,800.

That’s roughly 30 applicants for every lottery spot.

The school loses about 20 students a year, with the biggest departure at ninth grade.

“Some kids want the full high school experience with sports and marching band,” she says, “and I totally get that.”

Meanwhile, Sandoval says that “many of our parents are coming here because they understand the value of math and science, and they are frightened their children are not very good in those subjects and they want us to fix that. These kids aren’t proteges. These are kids who very often come to us because the parents are afraid.”

Battle for existence

The dominant photo behind Sandoval in her crowded office provides an insight to her tenacity and perspective.

It’s not a Sandia Sunset, Balloon Fiesta or any other iconic New Mexico image. It’s not a photo of her with a celebrity or getting an award.

Rather she has chosen a stark black and white photo of the Shackleton Expedition to the South Pole.

“They go 84 miles away from their goal when their ship ‘The Endurance’ was trapped in the ice and was crushed,” she says. “Shackleton and his men would have a two-year odyssey before they were rescued, but not a single man was lost. It’s the best ‘failure’ I can think of, and mostly due to his incredible leadership.

“Sometimes when things get rough, I look at that photo behind me and think maybe things aren’t quite so bad after all.”

Sandoval has had to fight for every inch in AIMS' existence, and the school is currently locked in a court battle with Rio Rancho Public Schools, which is trying to block AIMS from setting up a second campus at University of New Mexico West.

"We are the school a lot of Rio Rancho and West Side parents say they want, and Rio Rancho Public Schools says they can't have," Sandoval says.

AIMS is a state-chartered school and limited to UNM campuses – hence the UNM West location.

Historically, the APS Board of Education did its best to block the school from opening, battling efforts by Chávez tooth and nail and citing various concerns, including the fact the city would have control. Then-Secretary of Education Veronica Garcia ultimately overruled the board and ordered it to conditionally approve a charter.

It later became a state charter school at UNM.

Curriculum challenges

Sandoval has some strong views about curriculum. AIMS students must take two years of either Japanese or Chinese to meet their critical language requirement.

"The purpose is twofold," she says. "It gets kids, especially gifted kids, out of their comfort zone, and the languages relate directly to science and math."

There are no official sports. The "Big Blue" state trophy that dominates the trophy case you find in most every school is for a Middle School chess championship a few years back. "I think we beat the Academy," Sandoval says.

PE? These kids do karate under direction of a sensei, but it's not just about the exercise.

"The katas require you to be aware of who is next to you," Sandoval says, "so you are aware of that movement and mimic it. It makes students aware of people around them. That they aren't the only people on planet earth."

Music and art is more free form. On Friday, there is time for teachers to "teach their passion." "I have one teacher who loves music, so the kids bring their instruments. Others do voice, choir and even medical illustration."

Her system of teacher evaluations using student achievement and her compensation model, which are similar to the systems advocated by the state Public Education Department, also ruffles feathers at places like APS.

There are two observations annually by administrators and two by third-party evaluators, typically former APS and UNM employees. There is a Teacher Research Day facilitated by Dr. Deborah Roberts-Harris of the UNM College of Education. Teachers and staff meet to discuss the progress of each student.

She said the kids take tests and the tests mean something.

“We are totally data-driven,” Sandoval says. “Two of the teachers who at one time were my worst are now two of my best. And I can pay teachers for performance.”

Math tests, katas and robots

Sandoval’s vision is definitely a no-frills operation. Students come from around the Metro area, and there is no school bus system. Parents begin lining up outside an hour before school lets out to pick up their kids.

During a recent tour, Jerry Delmore’s sixth-grade math class was immersed in taking an “adaptive” tests, which he explains by saying that when a student enters a wrong answer or gets stuck as he or she moves through the problem, the computer guides them to the correct step. It counts against the final grade, but the student is led through the problem to the solution.

He explains that what appears to be a motorcycle parked among the backpacks is really a “robot” and the kids are building a battery pack for it.

Moving to another classroom, students fill the outside “plaza” going through their karate katas.

The whole place exudes kids and teachers seriously engaged in learning. Sandoval moves easily from one venue to the next, engaging both students and teachers.

Family life

Luckily for Sandoval, her partner is also an educator and former longtime coach – so he understands her hours and passion.

She has an adult daughter and married former teacher and state basketball championship coach Jerold Snider in 2007.

“A friend arranged the introduction and said he was a former teacher. I said, OK. Then she said he was a coach. I said, ‘like with a whistle? No way.’ ”

They were married a few months later at Jemez Pueblo, where he had been a principal at one time.

“I looked around, and all these Jemez people had come out to watch,” she recalls. “The people are lovely and the scenery is beautiful.”

They have four dogs – described as mutts – Rocket J (a three-legged Chihuahua mix), Lucy, Petie and Mr. Jack Dawson.

She and Jerold play golf together, but don’t keep score.

“And that’s a good thing, because we are both so competitive.”