P.V. teachers brush up on algebra

Renowned math guru is highlight of all-day seminar

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An Academy for Algebra is coming to Pajaro Valley High School this summer to help dozens of students who've either taken the subject and failed, or who are on the verge of studying it their freshman year.

On Thursday, UCSC's Educational Partnership Center, the principal organizer of the new academy, held an all-day seminar at Lakeview Middle School, where dozens of teachers from the Pajaro Valley showed up to learn the finer points of teaching algebra.

The seminar's highlight was none other than Robert P. Moses, a renowned math teacher who has a track record of simplifying the highly complicated subject, making it easier not only for teachers to teach but for students to learn.

A Jackson, Miss., resident who grew up in Harlem, N.Y., and who regards the importance of learning math as the "new civil rights movement," Moses wowed dozens of teachers with a variety of philosophies inside the middle school's gym.
"Converse, don't dictate — that's an important principle to remember," said the 71-year-old Moses, who believes that everybody should have the right to a good public school education.

Enter algebra, one of the most defining subjects in the history of middle school and high school academics. So often it was the student's course. It's the keystone of future education in math and science.

If students fail it, they're bound to do badly in math on aptitude tests, including exit exams, a controversial issue in and of itself these days across California.

Fail to pass algebra and you fail to get into a four-year college.

Pass algebra, however, and you can continue on down the road of science and math, a most marketable skill indeed in a computer-dominated society, Moses said.

Unfortunately, nearly 40 percent of all students across the country in low-achieving schools fail the subject, according to Carol Moran, executive director of Santa Cruz's Educational Partnership Center, the pivotal force behind the making of the Academy.

"Algebra is important because it helps students think logically and symbolically," she said. "It gets you into abstract thinking for the first time and that can be very difficult for some students. That's where we come in. We're going to try and make it easier."

The algebra classes will begin in May, June and run for five weeks. They will consist of four classrooms with 20 students a piece.

If the academy is a success, she hopes to keep it going every summer.

As for his part, Moses thinks teachers can't go wrong if they employ the right tactics. And a few of his lessons were insightful: choosing sets of numbers, then attaching colors to them in an attempt to break through the old-fashioned numerical way of thinking.

He also brought out tricks with plastic boxes and rearranged them and added on to them in a scene that resembled Legos. It helps students explore the wide variety of probabilities and statistics involved in algebra.

But what transpired inside the gym went far beyond the hands-on side of teaching.

It was inspirational as well, teachers said.

For more information on the Algebra Project and Moses, log on to www.algebra.org. For more information on the Algebra Academy, visit epc.orac.edu.

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Civil rights activist and renowned math teacher Robert Moses was the highlight of Thursday's seminar.