

San Mateo County Times

San Mateo County engineering, finance professionals recruited to teach math, science to disadvantaged

By Neil Gonzales
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Citizen teacher Alan Cleland (left) and Dave Emme (right) help students in an afterschool program...

Alan Cleland of Palo Alto retired three years ago as an independent consultant, having worked with Fortune 500 companies mostly in the high-tech field.

With a background in engineering and finance, he advised them on marketing strategies, pricing ideas and other high-level business matters.

These days, Cleland is still consulting, but perhaps with tougher clients. He teaches mathematics to underprivileged middle school children in an after-school program in Redwood City.

"I wanted to go into education because I was aware of the gap between high-income and low-income students," Cleland said. "I want to give back to the kids who typically are a grade or two behind where they need to be."

Cleland is among a handful of San Mateo County professionals with a background in math and science who have parlayed their skills into a budding career in education with the help of EnCorps, a nonprofit teacher-training organization.

EnCorps recruits those retiring or seeking a career change from the math, science and technology arenas to become teachers in under-resourced communities statewide.

That effort helps tackle a projected teacher shortage over the next several years, particularly in the areas of math and science.

California will need about 100,000 fully credentialed teachers within a decade just to replace those who are retiring, according to Margaret Gaston, president of the Santa Cruz-based nonprofit Center for the Future of Teaching and Learning.

EnCorps, based in San Francisco, estimated that the state will require 33,000 math and science teachers during that period.

"Since 2001-02, we've seen a continuous decline in the number of individuals who go into teacher-preparation programs," Gaston added. "Finding new and creative ways to attract, prepare and support teachers is becoming more and more important."

EnCorps is one such avenue, she said. "To capture the enthusiasm and interest of individuals in those (math and science) fields and turn them into teachers is terrific."

EnCorps started in 2007 as a pilot program developed by the Governor's Committee on Educational Excellence, among others.

It has trained more than 170 people — including several from San Mateo County, according to the organization. It plans to recruit 200 new teachers for next school year.

"We try to identify those who want to transition from math and science into teaching and give them experience in the classroom," said Jennifer Anastasoff, EnCorps chief executive officer.

The program includes workshops on how to manage a classroom, mentoring and full-time job placement, EnCorps said.

EnCorps sends its teachers to low-income neighborhoods because those are the places that disproportionately show a lack of math and science educators, Anastasoff said.

After joining EnCorps last year, Cleland worked as a math tutor at Eastside College Preparatory in East Palo Alto, and he now is a teacher with Citizen Schools, a Boston-based nonprofit that provides after-school programs for underserved junior high school students.

On Wednesday, he helped youngsters on a project that used scale measurements to design a park.

"I'm working with kids on proportion problems and converting feet to yards," he said.

As in his consulting business previously, he's dealing with numbers and trying to sell ideas — this time the benefits of math.

His students are buying.

"I used to have a 'C' in math," said Yohan Saldana, 12. "Now I have a 'B.' (The program has) opened me up to new careers. I could be an airplane engineer."

Yohan enjoys having Cleland as a teacher.

"I think he has a lot of spirit," the boy said. "It takes a lot of courage to ask young kids to study math, because most kids say no."

For more information about EnCorps, go to www.encorpsteachers.org.