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High quality, high tech for this high school academy

Wheaton computer science teacher gives his students college-level information technology instruction

by Jason Tomassini | Staff Writer

As a child growing up in Cameroon, Gabriel Kengni didn't use a computer until he was 17. Now, as head of Wheaton High School's Academy of Information Technology, he is preparing students for careers near the top of the computer science industry. Kengni is in his first year as head of the academy, where Wheaton students are preparing to pursue a college education in computer science or begin careers in the field.

"What I'm teaching them is what I learned as a junior or senior in college," said Kengni, who came to the United States in 1987 to pursue an education in computer science. "... I want to share my knowledge and have them go beyond what they think is [possible] in their life."

Enrollment in the academy, which is in its fifth year, is up to 109 this year from 80 last year, Kengni said. He said there are three new labs with high-performance computers, equipped with advanced programming software such as C++, Visual Basic, Java, XNA and ALICE. An academy student takes one course per year for three hours and 45 minutes a week. Students must enroll in the academy before beginning the ninth grade and their courses are determined by math prerequisites from middle school. Advance Placement courses for college credit are offered within the program, and students also must complete an eight-week summer internship.

Michael Hunt, academy coordinator at Wheaton, said the academy's focus on work experience is crucial because students can work on their skills in a professional environment.

"Through internships, those students have found, 'I'm doing this in high school, getting college credit, getting paid a lot of money, this is just the beginning,'" Hunt said.

Students who live within the Downcounty Consortium school district may apply.

Kengni said academy students helped design the school's Web site, installed the computers and will help the Montgomery County Chamber of Commerce with its Web development.

Farzad Sanami, a computer science teacher, said students who choose a "Network/Hardware Pathway" focus can earn for free a CompTIA A+ information technology certification, which



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generally costs \$5,000. Upon graduation, students are set up with technician or maintenance jobs at stores like Best Buy, Circuit City and CompUSA.

“For many of these kids, our goal is to get them jobs out of high school or summer internships,” Sanami said.

In Kengni’s fifth-period AP computer science class, students are given assignments that they complete at their own station. Kengni can then bring up any student’s screen on his projector to show the rest of the class how to complete the task.

“I give them an assignment and in less than five minutes, they are done,” Kengni said. “You have to overestimate to keep them busy.”

During short breaks, students often bring up their favorite computer games and discuss the best strategies and the coolest programming effects. Students also will start projects at home, using what they learned in class.

Sophomore Khavy Suong said he built his own computer at home while senior Ezekiel Sitkoff said he “wrote a rather large C++ program” on his own time.

Sitkoff’s mother, Barbara, said the academy has helped her son because he has a comfortable environment to pursue a specific interest.

“I think it’s made all the difference in the world for any of the kids, not just my own,” she said. “He’s had friends over that he’s met in the classes. His social life has been better because he’s met people with shared interest.”

Kengni said he enjoys helping students take on a career of their choice. He left Africa because he had a growing interest in technology and knew he had to come to the United States to pursue it. When he arrived, he had to “start from scratch,” but eventually earned a degree in computer information systems and a master’s and doctorate in the same field. He then worked for nine years in private industry before beginning his teaching career in 2003.

The academy also includes a Web development club and an after-school game club, where students can play computer games and learn about how they are programmed. Suong said the academy is a great break from regular classes where he can cultivate his interests.

“I like being in an environment with people with the same interests as me,” he said. “It’s easy to get along with everyone.”