

Special
Supplement

Jamie McKenzie: Creating
Slam-Dunk Lesson Plans p.26

Alan November: Five Hurdles
Educators Must Overcome p.60

EDTECH™

FOCUS ON K-12

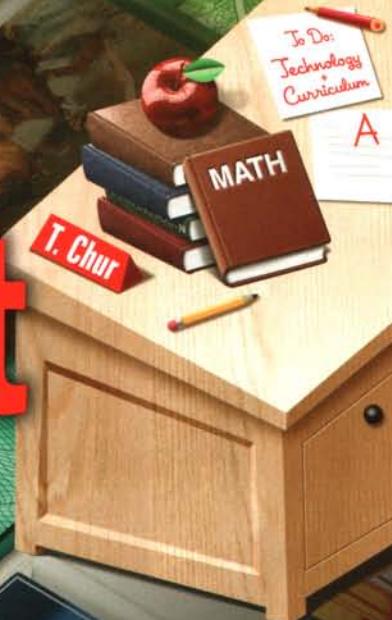
Technology Insights for Leaders in Education | March/April 2006

Think You Can't
Measure the Value
of Your Technology
Investments?
Think Again.
Rich Kaestner
(Page 40) and
Len Scrogan
(Page 44) Talk
Tech Measurement.



A Perfect Fit

EDUCATORS SHARE THEIR INSIGHTS FOR INTEGRATING
TECHNOLOGY INTO THE CURRICULUM



Giving Youth a Second Chance

Youth offenders are learning technology skills in correctional facilities with the hope that they'll find jobs when they get out.

By Wylie Wong

WHERE DO SOME tech companies, home improvement stores and even golf courses turn to for their IT and graphic arts needs? Youth correctional facilities.

A small but growing number of detention centers and correctional facilities are offering technology training to youth offenders. They are learning marketable skills ranging from word processing to more complex tasks, such as computer repair, network cabling and multimedia design.

"If we don't prepare them for the real world, chances are they [will be] back in the correctional system as a juvenile or adult," warns Ray Wommack, the Texas Youth Commission's administrator of vocational/transitional workforce development programs. "We want to do everything we can to rehabilitate them and make them successful when they get out."

Nowadays, youth correctional facilities and detention centers have begun to



Teacher Kenneth McCoy and Principal Connie Dewbre of the San Saba State School in Texas say computer training helps young offenders find jobs and stay out of jail.

recognize the need for teaching academic and life skills and providing job training to these young men and women, says Sarup Mathur, an associate director of the National Center on Education, Disability and Juvenile Justice and a clinical associate professor of special education at Arizona State University.

About 2.2 million youths are arrested each year, according to the Office of Juvenile Justice and Delinquency Prevention. Studies on youth offenders show they have a better chance at succeeding and avoiding a life of crime if correctional facilities develop their skills. In a 2002 University of Nevada survey of 197 youth detainees, 85.5 percent said job training was helpful, and 71.7 percent believed that computer training would help them succeed.

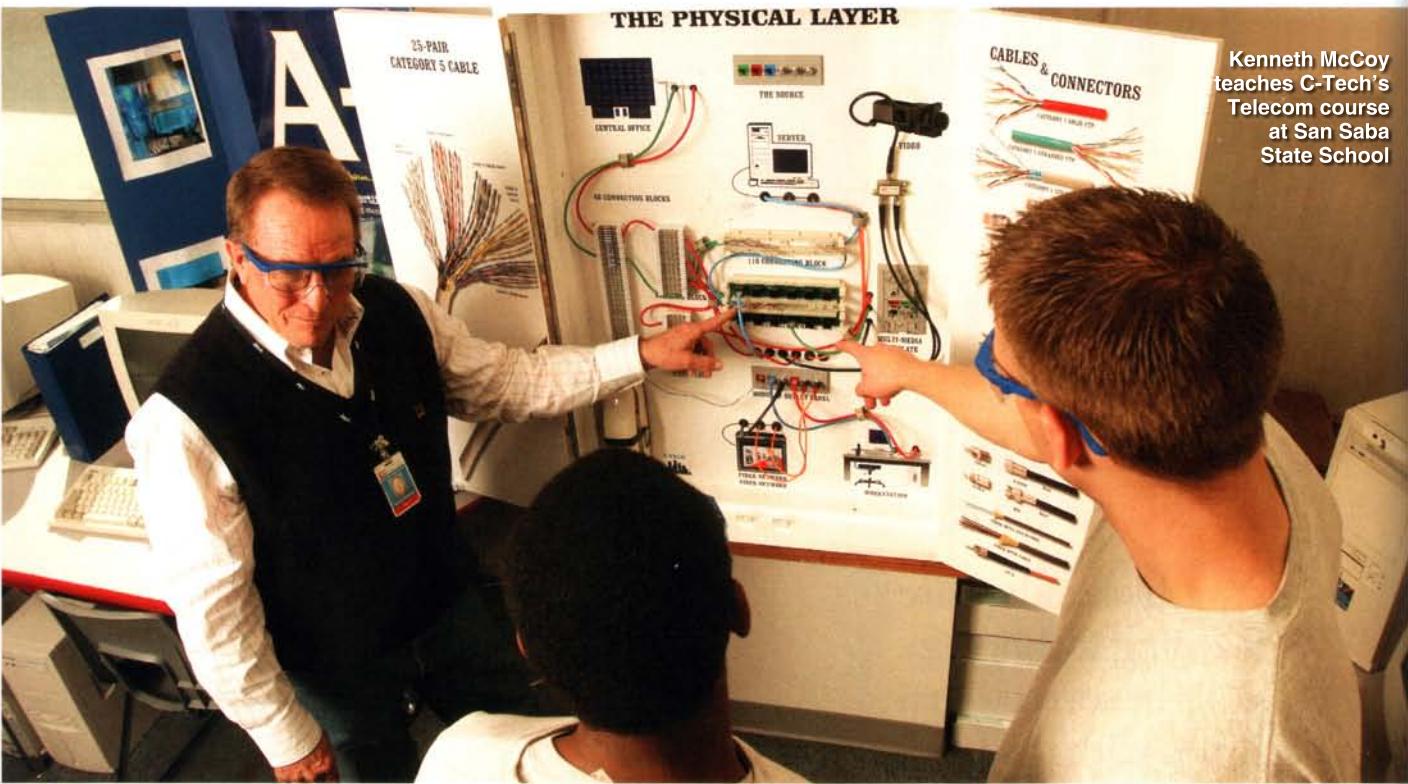
A large percentage of kids who are locked up start to think about what it will take to not go back there, and they

really see job preparation as the key," says William Evans, a human development and family studies associate professor at the University of Nevada, Reno.

Facility administrators say the tech courses are popular, and in recent years, they've increased the number of tech classes. Some youth offenders are getting computer certifications or going beyond the tech training programs their facilities offer and learning computer programming and Web design on their own. Some land tech jobs immediately upon their release, while others continue learning in college.

But merely taking computer classes doesn't guarantee success because the classes are not for everyone. While today's teens are computer-savvy, incarcerated youth tend to have large gaps in their education and a significant percentage are special education students, so it's more difficult for them to read technical

(Applying Technology)



Kenneth McCoy teaches C-Tech's Telecom course at San Saba State School

textbooks, teachers say. Some students stay at correctional facilities for only a few months, which isn't enough time to complete the classes.

MIXED SUCCESS

The classes are equally popular among both genders, and the girls perform as well as the boys, educators say. But overall, results are mixed. About 75 percent of those who take a network cabling course at San Saba State School, in San Saba, Texas, become certified, while only about 5 percent of those who take a computer repair class receive their CompTIA A+ certification for help desk support jobs. However, former students who have become certified have been hired by local tech companies, as well as by computer retail and home improvement stores.

With or without certification, significant learning takes place, so it provides a major boost to the students' self-esteem, says Patricia Moreno, administrator for federal programs and vocational/workforce development at the Arizona Department of Juvenile Corrections. Many youth

FIVE TIPS ON TEACHING TECH TO YOUTH OFFENDERS

1. You can't reach every student. Work with the ones you can.
2. Enroll students with good reading skills.
3. Instill legal rules and morality in the classroom.
4. Limit or ban Internet access.
5. When students have questions, help them do research to find the answers. To work in help desk support, they need to learn to ask the right questions and troubleshoot.

SOURCES: Judy Burke, Florida's Indian River Correctional Facility; Kenneth McCoy, Texas' San Saba State School

offenders come from broken homes or are raised in disadvantaged environments, so they often have low self-esteem, she says.

Even so, students in Arizona's computer refurbishing classes are becoming proficient in taking apart and rebuilding computers as they prepare for the A+ certification test. "They are feeling success for the first time and really take off with it," Moreno says.

TEACHING STYLE

Because some tech courses require college-level skills, students who have strong backgrounds in reading and science and are mature are better equipped to handle the coursework, educators say.

At the Indian River Correctional Facility, in Vero Beach, Fla., teacher Judy Burke adjusts her computer help desk class to meet the needs of students with lower reading skills. While more adept students read college-level textbooks, the more casual or special education students are given fewer technical books, so they can learn the concepts.

Most of her students start the class simply to meet requirements to reduce their sentences or receive perks, such as increased visitations, she says. But in the past year, nine of her 60 students

have completed the course and earned a certification. Of those, a handful are seriously interested in an IT career.

Burke typically teaches 15 to 18 students at a time. Her class requires students to complete 900 hours of study and pass multiple tests to show they have expertise in help desk support. Students learn at their own pace, reading textbooks, watching videos, running CD-ROM simulations and doing hands-on work, installing drivers and graphics cards, and troubleshooting machines.

To further motivate students, Burke lets them pursue other computer interests if they finish their coursework ahead of time. For example, some students have learned Web design and computer programming in addition to their coursework.

At the high school inside the MacLaren Youth Correctional Facility, in Woodburn, Ore., teacher Cathie Mink allows her desktop publishing and multimedia students to focus on their interests, whether that is video production, graphic arts or photography.

Mink, who learned the technology by taking classes, says her class has become its own small business. Her students make business cards for Oregon Youth Authority employees, design and print brochures for local golf courses and others, and dub driver training videos from VHS to DVD for the school district.

MacLaren's students — males between 14 and 25 years old — learn real-life skills when the class is hired for work. "They learn to deal with customers," says Mink, whose students keep about 25 percent of the profits, while the rest goes back to the program and is used to pay for materials.

The tech classes are more standard at San Saba State School, a boy's facility where students who pass the C-Tech network cabling certification class are allowed to pursue the more difficult A+ certification, teacher Kenneth McCoy says. Network cabling students learn to become technicians who wire homes and office buildings with fiber optics. When students are released from the correctional facility, a Texas Youth Commission program helps them find jobs

or additional educational opportunities.

McCoy says former students have been hired as C-Tech technicians at cable companies and home improvement stores. And students who have earned CompTIA A+ certifications have found jobs at tech companies and PC retail stores.

The success stories inspire San Saba's youth population. "They know the boys who have left with certifications have gone on to get high-paying jobs, so it's a motivating factor for them," says Principal Connie Dewbre.

GOING THE EXTRA MILE

While teachers can administer some certification tests, other certifications require testing to be done in off-campus testing centers.

At Giddings State School, a co-ed facility in Giddings, Texas, Patricia Palmer drives students off-campus to take a Microsoft Office Specialist certification test. However, to do that, Palmer needs approval from the superintendent and two facility committees that assess students' criminal history, their current behavior, and their progress in academic and therapy programs.

"You have to persevere and help these students discover they can be successful, that it is attainable," Palmer says.

Many cutting-edge youth correctional facilities now offer technology courses, but more are needed throughout the country.

Funding is a major issue. Texas has increased its tech courses in youth correctional facilities during the past five years, and it would like to offer more, but additional funding is needed. That would require state lawmakers — and the general population — to make such programs a priority, says the Texas Youth Commission's Wommack.

Tech training programs are effective at turning around the lives of young people, educators say. "We've had many students tell us we have made a difference," Giddings' Palmer says. ☐

Wylie Wong is a technology writer based in Phoenix.

LEARNING WITH LEGO

Students at the Long Creek Youth Development Center's Arthur R. Gould School don't take classes to learn technology skills. Instead, they use technology to learn core subjects.

At the South Portland, Maine, correctional facility, students use Lego pieces to build programmable robots and vehicles. They attach motors, wires and processors to the devices and then type simple computer commands to make them move. It's part of an action technology class in which students use technology to learn other subjects.

Students research, write papers and give oral reports on technology topics such as ground transportation, says teacher Peter Johansson. In the process, they learn history, social studies and English skills. When they build motorized vehicles, they learn science.

The class is based on the teachings of MIT's Seymour Papert, who in 1999 began a two-year teaching project in which he equipped a Long Creek classroom with technology and allowed students to build anything they wanted, including guitars, recalls teacher Susan Finch.

After the project ended, Long Creek overhauled its teaching style by combining Papert's approach with Maine's curriculum requirements. Long Creek teachers drive the direction of the classes. In addition to action technology, the 140-student school offers culinary arts, graphic arts and carpentry classes.

Students have embraced the hands-on learning style. Long Creek's recidivism rate has dropped to a low of 15 percent, says Assistant Principal Tom Perron.

"They learn to read, write, use math, do research and all kinds of things they would not have done in a more traditional classroom," Finch adds.