

PHOTO BY MICHAEL COOPER

The Learning Lens

Video production programs grab kids' attention and teach them important lessons.



The students at Westlake High School don't just watch their varsity football team from the stands — they film the athletes in action and create a broadcast that runs in the greater Austin, Texas, area.

During an "away" football game, a group of students from the Technical Entertainment Crew arrived at the opponent's stadium at 3 p.m. to string about 5,000 feet of cable around the field, set up their equipment and prepare their 24-foot trailer that served as a control room.

After conducting interviews with their Sony HDC-1400R video cameras and gathering their equipment, they left at 1:30 a.m. The students inserted graphics, commercials and interviews into the video before it aired on Time Warner Cable. During the season, they repeat the process for as many as 16 games.

In addition to filming football games, the 90 students on the crew produce videos of events at the Westlake Community Performing Arts Center, which is on the high school's campus, said David Poole, the center's managing director.

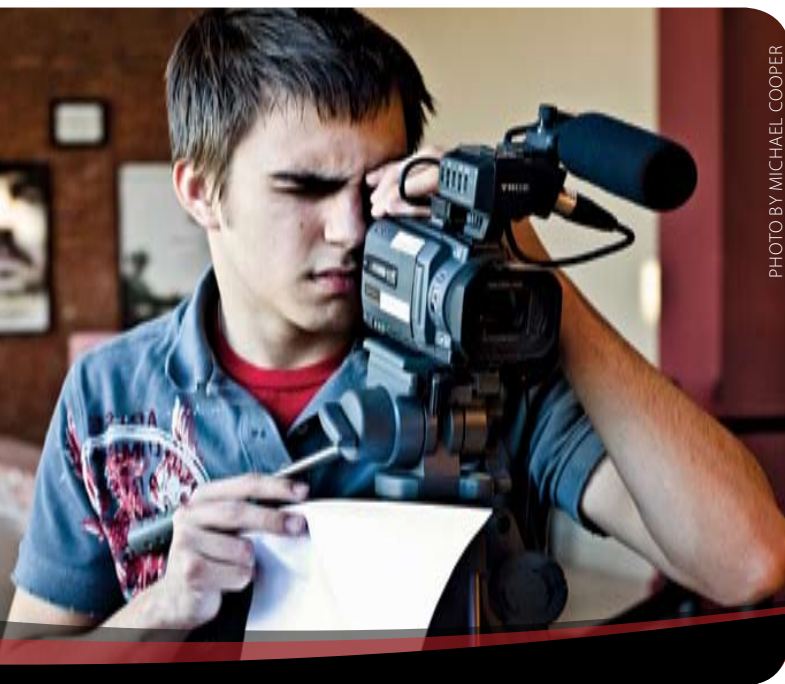


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"A lot of this is about teaching the technology to students," Poole said, "but the greater even impact that this program has is the fact that it really sharpens the students' leadership and problem-solving and team-working skills."

And those skills are essential for students who want to succeed in the workforce. The Partnership for 21st Century Skills identified a number of abilities that children must have to succeed, including creativity, problem solving and media literacy, all of which can be refined through filming.

"We're teaching these kids how to produce videos," Poole said, "and I think that's where the world is going. You're now communi-

ating through video, and if you're not using that in your communication, you're going to be left behind in the professional world."

Personalized education models

In Oklahoma, the storytelling skills that students learn in their film and television class at Jenks High School transfer to just about any job they land after school, said Clifton Raphael, who runs JPS Cinema. Through filming, the students figure out how to hook the audience and structure a story, which helps them write papers in other classes.

"It's very much like writing a short story or an essay: Your tool in that case is your computer or your word processing program," Raphael said. "In this case, you're also writing a story or an essay, but you're writing that story through a visual medium, and your typewriter in this case is both your camera and your computer editing program."

In his classroom, new students start out with a Sony DSR-PDX 10 video camera as their tool. The cameras mix consumer and professional grade features, have good resolution and function well in low light, which means that in most situations, the students do not have to lug around lighting equipment.

"For intro students, it's kind of complicated enough for them to go out and film, so I wanted to keep it as reasonably simple as possible," Raphael said, "and I think the PDX 10s are very user-friendly cameras."

The students check out the cameras about 330 times each year, and have done so over the past five years. As his students become more experienced, they use Sony PMW-EX1 camcorders, which are similar to the equipment an expert might use.

Their videos have become so professional that they earned top honors three years in a row in C-SPAN's StudentCam contest. In 2008, two juniors in the film and television program won the grand prize out of more than 900 entries.

They post numerous projects on JPSCinema.com, but show their best stuff on Oklahoma's statewide TV network. Their program is the only high school-produced show on the network.

In order to attain that expertise, students reach a point in which the cameras and computer editing equipment became almost a part of them.

"To me, it's about telling a story effectively," Raphael said, "and if your equipment is good, then the equipment doesn't get in the way of the story, and it helps you."

At Escondido Charter High School, Joe Darrough teaches his digital photography, video and multimedia students to tell a story concisely and have fun while doing it.

"You don't have anything if you don't have a story," he said.

The students tell their stories with Sony Vegas and Sony HVR video production cameras because they are easy to use and have good price points. By filming videos, the students learn to communicate their messages not only verbally, but also visually.

They have produced four award-winning films that range between 30 seconds and six minutes. The students create commercials and informational pieces for local businesses, build

	What is it?	How much?	Application Technologies	Grant Language
Investing in Innovation	This program recognizes local education agencies, as well as partnerships between nonprofit groups and the agencies, that have made significant gains in closing student achievement gaps. These competitive grants allow districts to expand their work and set good examples for other districts to follow.	\$650 Million	Video cameras, computers, projection televisions, flat panel displays	Highlight how successful the school district's programs and methods have been by citing relevant data and observations. Provide specific examples of how the district is closing student achievement gaps.
Enhancing Education Through Technology	The primary goal of the EETT program is to improve student academic achievement through the use of technology in elementary and secondary schools. The U.S. Department of Education distributes these funds by formula to state education agencies, which then pass most of the money to local education agencies.	\$650 Million	Video cameras, editing software, headphones, wireless microphones	Show how the technology will help students, state the school's goals clearly and present a reasonable plan.

personal Web sites and learn at their own pace throughout the semester.

The school's personalized education model allows each kid to have a computer with dual monitors and headphones, and because the lectures in every class are videotaped and compressed on QuickTime, they can access them when they are ready for the next lesson. They also take field trips to advertising agencies and other places in Los Angeles, as well as choose their final project. At the end of the semester, the classroom becomes a three-ring circus as students scramble to finish their portfolios by deadline.

"Everyone's doing something different," Darrough said, "but it's all preparing them for the business world."

Paying for technology

Over the years, students have learned with pencils, paint brushes, still cameras and video cameras. While the technology

has changed, the concept is the same: New tools give people a chance to learn something in a way that makes sense to them. Any of these technologies can help students tell a story, but particular devices may inspire some more than others.

As technology improves, schools add more of it to their classrooms to prepare their students for the workforce, and additional money is now available through the American Recovery and Reinvestment Act of 2009 to help them stay up to date. Even though many districts have tight budgets, they can still receive the funds they need to help their students learn through technology.

The U.S. Department of Education normally gives state educational agencies about \$250 million in Enhancing Education through Technology grants, but this year, it is passing out a total of \$900 million, which is distributed by formula.

Local education agencies can also qualify for grants from the Investing in Innovation fund, which is a competitive program that would give them extra money to continue using successful courses, methods and techniques. School districts will not be eligible for these grants if they do not meet the requirements and follow the rules, so grant writers should:

1. Do their homework

- Read the most recent Guide to U.S. Department of Education Programs (www.ed.gov/programs/gtep), search for specific programs on ED.gov and read the application notices in the Federal Register.
- Determine what grants they want to apply for and whether the school or district is eligible for them.
- Find the Catalog of Federal Domestic Assistance number and the title of each grant program.
- Make sure that what the school wants to do with the funding matches the program's goals.
- Research what problem the government is trying to solve and determine how the school's plan will help solve that problem.



PHOTO BY MICHAEL COOPER

BIG SCREEN 101

In addition to teaching students how to film with video cameras, schools are scrapping their old projectors for new flat-panel displays and projection televisions, which could qualify for grants from the Enhancing Education through Technology or the Investing in Innovation funds.

Instead of looking at PowerPoint presentations and graphs on a regular projector, the boys at Loyola High School of Los Angeles watch them on Sony high-definition televisions.

"They like it because, first of all, it looks awesome," Systems Administrator Jeff Strauss said. "You've just got a big TV going with stuff flashing on it, and it's cooler than having a regular projector. There's a lot more flexibility, the quality is a lot better, and I think the shelf life is a lot better too."

The projector bulbs burned out faster than a TV, so instead of replacing the bulbs for \$500 a piece, the school bought Sony flat panels that cost more, but last longer.

This kind of technology helps students collaborate on projects, which is a key component of the inquiry-based learning that Loyola emphasizes. In the wireless computer lab, TVs hang on the walls so that students who are working in groups can display their research data on the big screen instead of huddling around a computer.

They also focus on telling stories digitally. When the groups finish a project, they demonstrate what they discovered by creating a movie that displays on the flat panels at school.

"We use the televisions around campus as a really great tool to show those projects off," Strauss said. "After the completion of a huge project like that, the students are happy to show it off; they want to show it off as opposed to being timid about standing up in front of the class with a report that they have to read."

They don't just use them in the classroom either. A geology teacher hooked up a seismograph machine to a computer and two 30-inch Sony TVs, then placed them in a glass case facing the quad. As people walk by and shake the ground with their footsteps, they can see real-time seismic readings in a digital format.

Other TVs throughout the campus run educational presentations. A chemistry teacher displays 3-D chemistry models that take students on tours inside cells, for example, and another presentation shows students various scientific reactions — such as two chemicals combusting — using bright-colored materials that splash across the screen.

"Everything," Strauss said, "ends up being specifically related to education in some way."

2. Check their answers

- Evaluate what areas the school might need to change to become eligible, and address those areas before or during the application process.
- Show how the school meets the priorities of the program.
- Share what the school is doing to meet the program's absolute priorities, which are required.
- Show how the school meets the competitive priorities that the department has emphasized to earn extra points.
- Gain an advantage by meeting invitational priorities that Education Secretary Arne Duncan encourages.
- Promote the school's needs and progress in key areas, and set programs apart from others with as much detail as possible.
- Ask for a reasonable amount of money to implement the program or technology.
- Fill out the grant application completely and follow its instructions carefully.

3. Turn in the applications

- Meet the deadline.

Technology, such as video cameras, gives students a variety of ways to learn and master skills that they need to succeed in the workplace. At these three schools, students practiced leadership, problem solving and storytelling by filming videos of activities around them. Those skills will not only serve them well in cinema classes, but also in any academic subject and at many jobs.

While many schools could not afford to buy new technology this year with their shrinking budgets, they can receive a financial boost from the American Recovery and Reinvestment Act that will allow them to continue providing video cameras and other devices for students.

More money is available to local education agencies through the Enhancing Education through Technology and Investing in Innovation programs, which districts can use to buy tools that will help students learn. If schools want to prepare their kids for careers, they will need to teach them the skills they need, and they can do that through technology.

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