

Screen Printing

Program develops skills and generates revenue



By Tom Farmer, Editor • tfarmer@pitsco.com
Photos by Scott Sims, Communications Assistant • ssims@pitsco.com

Programs leave lasting mark

Students learn screen printing skills; schools generate revenue

On the surface, screen printing and other technical education offerings such as culinary arts, auto mechanics, and welding are often viewed as options for students to learn a few skills they *might* use as adults.

Only when you walk through the doors and observe students working with professional equipment under the watchful eye and dedicated tutelage of a certified instructor is it apparent that the benefits of technical education extend much more deeply.

"We put them in trades programs, and they see math and communications are important if they're going to be successful in a career," said Jim Lynch, graphic communications instructor at the Eudora-DeSoto (Kansas) Technical Education Center. "Then what happens is we start seeing the academic grades going up. That happens all the time. Students see the subjects applied and they know they're important. If they want to get to the top of the game in their area, they start working for it."

Purposeful programs

Seeing the relevance of math and English are only part of the benefit in having a screen printing program in a high school. Students learn technical skills, provide a service that every school needs (printing on T-shirts, hats, and other items), and help the school generate revenue that can pay for the program and sustain it over the long haul.

Amy Cassell, who teaches two sections of screen printing at Wabaunsee (Alma, Kansas) High School, said her principal was eager to implement the program two years ago.

"He wanted to keep the money in the community," noted Cassell, who said organizations and teams would trek to nearby Topeka or Manhattan for their screen printing needs. "All the kids buy shirts for every club and every sport. He wanted to keep some of that money with the school and have the students take pride in what they're doing."

“ We think we’re supplying the kids with some good foundational skills that can be developed post-secondary or within the workforce so they can be employed. ”

~ Ron Abel, Principal,
Eudora-DeSoto (Kansas)
Technical Education Center

Lynch's screen printing program is set up as part of a comprehensive Graphic Communications course in which he teaches web-offset and flexography printing, as well as design using the latest software programs. However, it's clear which process is the main attraction.

"Screen printing gets kids in here because it's fun," Lynch said. "Learning digital press and variable data are good skills, but that won't get kids in the door. Screen printing will."



Graphic Communications
Instructor Jim Lynch



2010 Kansas
SkillsUSA
Administrator of
the Year recipient
Ron Abel



Foundational skills

At both schools, students use Hearlihy screen printing curriculum to learn the basics of design (creating images to be applied to the various materials) and process (using the screen printing equipment, also provided by Hearlihy).

Ron Abel is the principal at Eudora-DeSoto Technical Education Center. "We think we're supplying the kids with some good foundational skills that can be developed post-secondary or within the workforce so they can be employed," Abel said. "Kids take pride in what they do. Whether it's design or production, it's a very rewarding experience for the kids."

Cassell's students screen print for many groups within the school (FFA, SkillsUSA, FCCLA, FCA, sports teams, drama department), and they also do work for community groups (see related story). They had the opportunity last year to show off their operation during the Mid-East League Art Fair when students from six area schools toured the two-room shop to learn about screen printing.

"Some were just amazed at the process," Cassell said. "It was really good for our kids to show other kids how to do things."

Money-making venture

Alma and Eudora-DeSoto are contrasting communities. Alma has a population of less than 1,000 and is nestled in the Flint Hills of northeast

Kansas. Eudora-DeSoto is a fast-growing community that borders the western suburbs of the Kansas City metropolitan area.

Several screen printing retailers serve the Eudora-DeSoto area, and school officials don't want to cut in too much on their business; however, there is a part of the market the school's screen printing program can service.

"We don't want to interfere with the companies out here that are supplying shirts, but at the same time we want to provide an option, especially within our school setting, to take care of some smaller silk screen printing needs," Abel said.

For example, Agriculture Instructor Jacob Lang said some retailers require a minimum order of 50 shirts. "We had only 18 kids, so this was a better way to go," Lang said. "They did a nice job with them and they were quick. They were cheaper than anyplace we looked."

Cassell's program, on the other hand, is the only screen printing option in Alma, so business was booming during the 2009-2010 school year, the first full year for the program. Students printed more than 1,500 items and generated about \$4,200 in revenue.

"My goal is not to make a big profit," Cassell said. "The money goes into a self-sustaining budget, and we buy supplies



and equipment we need." For example, a heat transfer machine was added at the end of last school year to expand the available product line.

Because the screen printing program is operated as an elective course and students gain experience instead of an income, overhead costs are low, meaning product cost is low. Cassell tries to keep the price to \$6 or \$7 per shirt or hat.

Wabaunsee Cross Country and Track Coach Roger Alderman appreciates the cost savings. "As soon as I heard they could produce the shirts, I started asking

about the costs and all. I found out it was less than other places, so I said, 'OK, anything to save our parents money.' All the kids on the team will order one, and then sometimes mom and dad and brother and sister might want one. That can add up to a lot of money."

More than students expected

Second-year screen printing students at both schools have gotten more out of the program than they expected.

"People said it was fun and a good experience, so I tried it and really

(continued page 22)

The screen printing press at Wabaunsee High School in Alma, Kansas, rarely rests idly, left, because students, right, are usually busy filling orders for school and community projects.



Competition brings out the best

Students strive to perfect wide array of skills in state and national SkillsUSA events

The event is called “Screen Printing Technology,” but the skills that students must develop and use in the SkillsUSA competition extend well beyond tensioning a screen, creating a design, registering a screen, and printing.

It’s the soft skills – teamwork, communication, responsibility, and so forth – that students develop that can be carried over to any career they might eventually pursue.

The 2010 Kansas SkillsUSA Administrator of the Year, Ron Abel, principal at Eudora-DeSoto Technical Education Center, is an ardent supporter of SkillsUSA, which facilitates state and national championships in 96 different events, including screen printing.

“I think it’s important to let kids get the opportunity to build their soft skills, their leadership skills, communication with other people, interaction as a team, and other twenty-first-century skills,” Abel said. “SkillsUSA provides the opportunity to not only gain but to practice skills in an environment that’s not threatening.”

The environment in the screen printing room at the school district’s new \$3 million technical education center is the furthest thing from threatening. Teacher Jim Lynch has cultivated a positive, yet competitive, environment that yielded the top two finishers at the 2010 Kansas SkillsUSA screen printing championships and the sixth-place finisher at nationals (see related sidebar).

Jennifer Bergman, who finished second in the state, was already thinking about the 2011 competition when she took a break during her 7:30 a.m. class. “To make it again, I need to do a better job of evaluating T-shirts. There were some little things that went wrong this year.”

Another of Lynch’s students, McKaela Kelsey, is hopeful of challenging for the state title as well. She placed second in the state two years ago but then moved out of the school district before returning this fall.

“I just need to dust off my memory and practice the procedures,” Kelsey said. “Mr. Lynch has been talking to



Jennifer Bergman, a senior in the Eudora-DeSoto Graphic Communications program, finished second in the 2010 Kansas SkillsUSA screen printing championships. Here, she builds a retensioning frame, one of the skills required during competition.



 SkillsUSA®

(continued page 32)

A highly skilled student leader

Champion screen printer makes most of success in SkillsUSA, eyes leadership post

A lot can change in one year of high school. At the beginning of her junior year, Amanda Hadl had no experience as a leader at Eudora (Kansas) High School. She was a typical student who didn't know what she might want to do in college or a career.

Then she entered the Kansas SkillsUSA screen printing competition with hopes of placing after falling short her sophomore year. Not only did she place, but she also captured the state title, thereby earning a berth in the national championships, where she went on to finish in sixth place.

"The first time, I was super nervous," Hadl said of her sophomore experience. "Once I got more comfortable doing it more and more, I just had fun with it. I really enjoyed it last year and ended up placing at nationals."

Amanda Hadl, senior at Eudora-DeSoto Technical Education Center, wears one of the shirts she printed at the 2010 SkillsUSA screen printing national championships, where she placed sixth overall. Hadl collected pins, right, from students across the United States and abroad during her time at the national event in Kansas City, Missouri.



The experience of competing at SkillsUSA national championships in Kansas City, Missouri, last summer did more than sharpen her T-shirt screen printing skills. She befriended a few of the nearly 6,000 student participants.

“She’s phenomenal. She’s going to be so successful.”

~ Teacher Jason Gray

"I enjoy meeting other people and seeing what they've learned," Hadl said. "I met a lot of new people from other states, from Guam, the Virgin Islands. It's not just about screen printing."

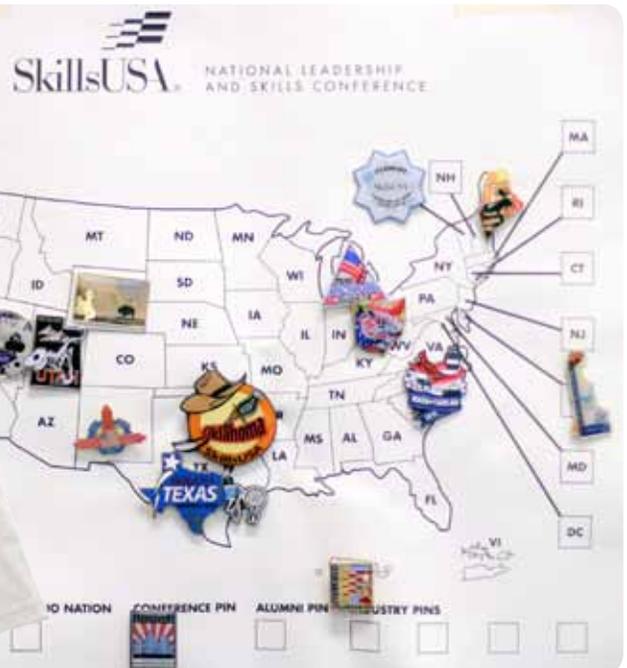
SkillsUSA is also fertile ground for cultivating career skills, learning the value of determination, and taking on leadership roles. Hadl has begun a personal campaign to recruit other Eudora students into Instructor Jim Lynch's Graphic Communications course, where she learned the subtle nuances that made her the top high school screen printer in the state of Kansas.

Beyond that, she wants to share her experiences in SkillsUSA with other students across the state. "I took the opportunity to make a PowerPoint of all the events at state and nationals. We have a meeting for SkillsUSA, and I'm going to share the PowerPoint with all my experiences," she said. "I'm running for secretary in the state in SkillsUSA. Since I have experience, I want to share that with people and get more people involved."

Lynch says Hadl has the technical abilities and the intangibles to be a leader within the organization. And even other teachers at the Eudora-DeSoto Technical Education Center see her potential.

"Just to watch Amanda work, you can see what she's doing with those T-shirts," said Culinary Arts Instructor Jason Gray. "She's phenomenal. She's going to be so successful."

Hadl is already entertaining thoughts about life after high school. "Pittsburg State [University] offers a lot of options for me, and I actually want to try to get a job in screen printing because I know how to do it." 



Is it a classroom or a business?

High school screen printing setup offers the best of both worlds

On the outside it looks like a typical rural high school. On the inside, the students, teachers, office, library, cafeteria, and classrooms give it away as a school too. But doubt arises when you weave your way into a two-room setup tucked away behind an elevator on the second floor of Wabaunsee (Alma, Kansas) High School. The equipment, the products on display, and the buzz of activity orchestrated by the supervisor (Teacher Amy Cassell) to her crew (10 students) are more commonly found on a production room floor in an industrial park than in a school.

Make no mistake, Cassell's first priority is to teach her students – and they are eager learners – but there's also a business to run. It's the town's only screen printing shop.

Tom Watkins, water quality coordinator for the Wabaunsee County Conservation District, was the program's top customer last year, ordering nearly 500 shirts and hats for use in his educational programs.

"When I saw they were starting the screen printing curriculum here in the class, I thought, 'Boy, that's great for many reasons,'" said Watkins, who previously had purchased shirts and hats in nearby Manhattan. "Number one, it's right here at home. Being able

to give them the business is much better than taking the business to someone else. If I can assist the school, I'm also reaching the students involved in the class. It's a win-win deal."

Not only did Cassell and her crew make Watkins' T-shirts and hats at a 50 percent cost savings (\$5 per item instead of \$10), but they also produced high-quality products that were appealing to the target audience.

"I allow them to do the design and pick the colors. Let's face it, at their age they know better what colors kids like than I do," a smiling Watkins said. "I was really excited about what they did and how they did it and the quality and the thought process they put into it. We need to give these kids a lot of credit. They do a nice job."

Cassell trains her students using Hearlihy screen printing curriculum and equipment. After nine weeks of working through



Wabaunsee High School Screen Printing Teacher Amy Cassell, center, helps two students prepare a screen for printing onto a T-shirt.

the curriculum, students are ready for production, and the orders come in from all angles – community groups, athletic teams, and student organizations.

"It's all about filling the orders and learning at the same time, from creating a design to producing the shirts and other items," Cassell says. "After they learn the curriculum I don't give many tests or homework, but they have to be accountable and do their work. They don't have a lot of down time."

Students put in many extra hours to fill orders and meet deadlines, coming in during their study periods and during down time in other classes.

"We have a couple pizza parties each year to give them something for the work they do," Cassell said. "A lot of it is their choice. They want to come in and work on their designs."

Wabaunsee Teacher and SkillsUSA Sponsor Brian Boucher says the screen printing program has taken off even better than he expected it would. "When they first started, I was a little skeptical," he said. "Then when I started seeing what they were doing and what was coming out for the other clubs and organizations, it was pretty good. The quality of the work from high school students just learning was very good."

Either way it's classified – as a classroom or as a business – Cassell's screen printing setup has achieved what all educators seek: success for their students! 



Water quality coordinator for Wabaunsee County Conservation District Tom Watkins



Teacher Amy Cassell

Wabaunsee High School students sport the T-shirts designed and made for a special community service event.



Programs leave lasting mark (continued from page 18)



Eudora-DeSoto Senior
McKaela Kelsey

enjoyed it," said Wabaunsee Junior Sarah Healey. It didn't hurt that a few of her designs were well received by the student body. "We made one design and a lot of people bought it."

Eudora-DeSoto Senior McKaela Kelsey also experienced the thrill of seeing her design (peace sign with angel's wings) attract attention. "I wore it one day and everyone was like, 'Wow, that's cool.' Everybody

thought it was really cool. I sold 20 to 25 of them here at the school."

Wabaunsee Junior Hanna Falk said the biggest surprise to her was the amount of responsibility and the stressful deadlines, but she believes that experience will help prepare her for the rigors of college and eventually a career.

Her classmate Nathan Settle was looking for a challenge when he signed on. "I was looking for

something different, and the people who took the class before me really liked it. They printed all these cool shirts and license plates, so I figured I'd try it out."

Settle has experienced a strong sense of satisfaction along the way. "I like seeing when the shirt's done. You look up and say, 'I made this.' It feels pretty good when you see other people wearing your shirts." 

Learning it the right way

Hearlihy screen printing curriculum gives students a solid knowledge base

Learning by doing. On-the-job training. Winging it. Following your instincts.

There are many ways to learn something, but when it comes to screen printing, the best way is a little more formal than the aforementioned approaches. That's because of potential for significant waste of materials if a step is skipped or details are overlooked.

A student reviews information in the Hearlihy Screen Printing curriculum before working on a project in the work area at Eudora-DeSoto Technical Education Center.



To avoid unnecessary waste, screen printing teachers Jim Lynch and Amy Cassell require their students to spend at least nine weeks working in the Hearlihy Screen Printing Curriculum before allowing students to create designs, burn screens, set them up on the press, mount shirts, squeegee ink, dry the shirts, and reclaim screens.

"It takes a quarter to get through the curriculum for their first activity and experience," says Lynch, who teaches in the Technical Education Center at Eudora (Kansas) High School. "There's enough curriculum for a full year, but it's up to the teacher how much they use it."

Cassell is relying on the Hearlihy curriculum to prepare her novice students for the realities they might experience. She also showed them physical examples of what went



wrong last year when not enough training was completed before screen printing production began in the Wabaunsee (Alma, Kansas) High School class.

"Last year I had the newbies come in and make shirts, and we had a lot of waste," explained Cassell, who capitalized on the teachable moment and drove home the lesson that completing the curriculum is the surest way to adequately prepare for screen printing production.

"It teaches them how to put emulsion on the screen, expose a screen, print, and reclaim a screen. They learn it through the curriculum," she said.

Lynch doesn't have to work hard either to convince his students that the curriculum is effective. He can simply turn to senior Amanda Hadl for a testimonial. Hadl is the reigning SkillsUSA Kansas state champion in screen printing and the sixth-place finisher at the national SkillsUSA event.

"The book tells you each step, and that helped me a lot," Hadl said. 

Competition brings out the best

(continued from page 19)

Amanda (classmate and reigning state champion) and me individually. He says we need to step up and lead the way.”

Jason Gray, the culinary arts instructor at Eudora-DeSoto, enters his top students into SkillsUSA competition every year, saying the knowledge gained in any of the career and technical education classes will benefit students later in life when they are full-fledged consumers and members of the workforce.

Then there’s the obvious benefit of learning career-specific skills. “You learn something and you have an appreciation for an art or a craft,” Gray said. “If you go into college or a career, you’re that much further along.”

SkillsUSA is a fast-growing organization dedicated to developing students’ career and technical skills via real-world challenges and competitions. It helps students clearly understand why core courses such as math, science, and English are so important.

“Career and technical education provides an opportunity for kids to see the application of the coursework that they’ve learned,” Abel said. “They’ve developed skill and technique in the classroom that have real-world applications. They start to learn, ‘This is why I need to know this math,’ or ‘This is why I need to know this science theory.’ They apply those things and start to make connections.” 

Students in screen printing programs have the opportunity to create designs, learn a marketable skill, and help their schools generate revenue for career and technical education programs.



Upcoming Events

Pitsco's family of companies will be represented at education shows and conferences across the country in the coming months. If you attend any of these events, stop by the Pitsco booth. Our representatives look forward to meeting you!

October

- 20-22 National Career Prep Network (NCPN), Dallas, Texas
- 24-26 Texas ASCD, Houston, Texas
- 28-30 National Science Teachers Association (NSTA), Kansas City, Missouri
- 28-29 Indiana Non-Public Education Association (INPEA), Indianapolis, Indiana

November

- 4-6 National Middle School Association (NMSA), Baltimore, Maryland
- 10-13 Conference for the Advancement of Science Teachers (CAST), Houston, Texas
- 11-13 National Science Teachers Association (NSTA), Baltimore, Maryland
- 11-13 National Association for Gifted Children (NAGC), Atlanta, Georgia
- 19-21 Illinois Association of School Boards (IASB), Chicago, Illinois

December

- 1-3 Association for Career and Technological Education (ACTE), Las Vegas, Nevada
- 2-4 National Science Teachers Association (NSTA), Nashville, Tennessee

February

- 1-3 FETC, Orlando, Florida
- 7-11 Texas Computer Education Association (TCEA), Austin, Texas