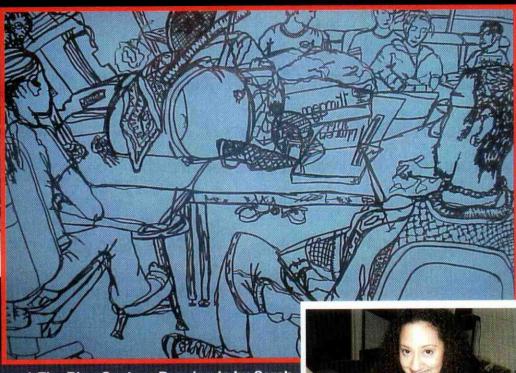
(Below) Amy Longley, a Metro Tech student, displays a brochure printed and designed for a new technical program in an Oklahoma City Public School.





(Above) The Blue Contour Drawing is by Sarah Vlach of Cuyahoga Valley Career Center.

(Right) High school junior Valerie Nichols works on thumbnail sketches at Metro Tech for an upcoming design contest.

Design Careers LOOK GOOG On Paper and On Screens



design is by Darrel Greene and the "Digital Design" logo is by Colin Sipos, both of of Cuyahoga Valley Career

DESIGN PROGRAMS ARE PREPARING THEIR STUDENTS WELL FOR THIS VERY FLUID INDUSTRY.

By Jennifer Shure, Techniques Contributing Editor

"Heart of the City" design is by **Matthew Webber of Cuyahoga** Valley Career Center.

Heart of the

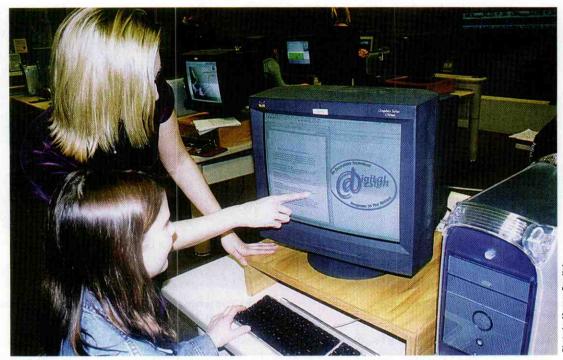
rint media is perhaps one of the oldest forms of communication, but it is not just words that convey the message. The way the page is laid out using different fonts, colors and graphics can add to, or if done incorrectly, can distract from, the words themselves. And today, with the advent of modern technology, the written word and graphic design have gone digital, straight to Web pages and computer programs containing, not only words, but computer animation and high-end graphics.

Many critics say that advancing technology is

making many traditional jobs obsolete. And, while that has been very true for some occupations, technology has, in fact, opened the door to new specialties in the graphic design field and has made many schools and industry professionals look at the field in a whole new light. Those schools and programs that have made the decision to change with the changing times have been rewarded with grant funding, waitlists for enrollment and students well prepared for a challenging career in design, both print and multimedia.

Programs of Exemplary Design

At the Cuyahoga Valley Career Center in Brecksville, Ohio, high school students get a leg up on the communications design field when they enroll in the center's Digital Design Program. This program, which was named an exemplary program by the National Dissemination Center for Career and Technical Education (NDC-CTE) for 2000, is a two-year program that provides real-world experience to high school juniors and seniors. The program is grouped under the interactive media section of the center's information technology cluster, which also includes networking, programming and systems administration. The participants spend three hours a day, five days a week at the



Instructor Melissa Rock and Sarah Vlach at Cuyahoga Valley Career Center

center, working to complete the 1,081 hours necessary to graduate.

It Takes More Than a Computer

Melissa Rock, instructor with the Digital Design Program and a designer herself, notes that this program has been in existence for more than two decades; however, it is only recently that the program changed its name from "commercial arts" to "digital design." And while she attributes this change to the increasing importance of computers in the field, she makes it a point to incorporate all of the basic foundation skills of traditional design, such as fine art, into the new program.

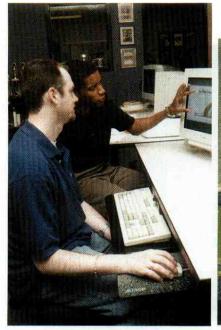
"Just because you have a computer doesn't make you a designer," Rock says. This is why she spends almost one whole semester on fine art, and why her classroom is set up with as many drafting tables as computers. In addition to fine art, students learn computer graphics, Web page design, desktop publishing, image manipulation and electronic presentation, to name only a few. They work with programs such as QuarkXPress, FreeHand, Photoshop, and 3D Studio Max, among others.

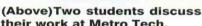
Since Rock started teaching at Cuyahoga Valley Career Center five years ago, the program's popularity has grown by leaps and bounds. She says that for the past four years there has been a waiting list that could fill each of the program's 24 seats three times over. Those who do make it into the program are selected by guidance counselors and recruiters. Since eight high schools from two counties feed into the center, a formula based on the size of each high school determines how many from each school can enter the program. Rock is proud to point out that more than 76 percent of the program's students are placed in jobs or enter college after high school graduation and that there has been a 100 percent retention rate from junior to senior year.

Designed for Success

Upon completion of the Digital Design Program, students leave with not only knowledge in their back pockets, but their own portfolios, which may be interactive and/or include 35 mm slides; college credits that can be applied at Cuyahoga Community College, Kent State University and soon, the University of Akron; and possibly even a job. Graduates of the program have gone on to work for the Cleveland Browns football team, the Cleveland Cavaliers basketball team, marketing firms, sign companies and video production companies.

However, Cuyahoga Valley Career Center is not kicking back and resting on its laurels now—quite the opposite, in





fact. With the grant money they received from the NDC-CTE award, the center's instructors are working toward certification from Adobe, one of the leading manufacturers of digital design software. They plan to apply to be a training facility so that they may train other teachers from across the state on Adobe products.

Combining Secondary and Postsecondary

Another unique program in communications design is found at the Metro Technology Center in Oklahoma City, Oklahoma. This program was named an NDC-CTE exemplary program for 2001. Metro Tech offers a communications design program, which they call Computer Graphic Design, for both secondary and postsecondary students. Like Cuyahoga Valley's, the program at Metro Tech is a two-year program, but unlike any other program in the country, the Metro Tech program includes both high school students and adults in varying stages of their professional lives. Recently, the program was expanded to include an additional year for multimedia instruction.

The program is divided into two emphases—print design and Web design. The high school students are accepted via interview for their junior and senior years and spend half a day, five days a week at the center. Most of the adults spend a full day at the center. The center accepts students from five feeder high schools from Oklahoma City and Crooked Oak School District. While the



(Above) Instructor Melissa Rock leads a class at Cuyahoga Valley Career Center.

high school students do not have to pay tuition for the two-year program, the adult students do and are co-enrolled in Metro Tech and in one of three area colleges' associate's degree programs. Students can choose to be co-enrolled at either Oklahoma City Community College, Oklahoma State University Oklahoma City campus or Rose State University, and in turn, these students have full privileges to college facilities, such as libraries. The high school students are also able to earn college credits-up to 29 credit hours-at one of these colleges. The high school students returning for a third optional year and the adult students can earn scholarship money toward their tuition from Metro Tech if they place first through third in a SkillsUSA-VICA contest at the state level or serve as a district, state or national SkillsUSA-VICA officer.

Creative Collaboration

There are some aspects of Metro Tech that are rather unconventional but are proving to work quite well. The students range in age from 15 to 63, and the program is pretty much self-paced. Of the 25 students currently enrolled in the program, about half are high school students and half are adults. "We encourage a lot of freedom because that is what you need in a creative environment," notes Instructional Assistant Chad McNaughton. "Everyone is really close and helps each other out. We encourage collaboration because that is what it is like in a work environment."

Lead Instructor Anita Parks, herself a successful designer for 22 years, adds, "The young people have to communicate with the adults like in a work environment, and the older students turn to the younger students for fresh ideas. It is really interesting to see."

But don't be fooled into thinking that Metro Tech is just a place for high school students to get out of a regular class or for older adults to pick up a casual hobby. The program closely mirrors the goals of SkillsUSA-VICA, which encourages leadership, teamwork, high ethical standards, superior work skills and pride in the dignity of work. One day a week is set aside for professional development in which students must not only act the part of a professional, but also dress the part as if they were in an office setting. On professional development day, students may listen to guest speakers address such subjects as employability skills or take field trips. However, each and every day, a strict work-like environment is enforced, and students compete with one another in various skills categories on a regular basis. And, yes, that means the 15-year-olds compete with the 63-year-olds.

The students are exposed to the latest in design software, including QuarkXpress, Macromedia Freehand, Photoshop, Illustrator, Freehand, MacroFlash, Fireworks, HTML coding, Dreamweaver, Java Script and Cascading Style Sheets. Parks says that since some of the programs for print design overlap with the programs for Web design, and

vice versa, it is easy for students to complete both programs.

The Art of Winning

An advisory committee—made up of 16 business leaders from the industry in and around Oklahoma City and representatives from higher education—oversees the Computer Graphic Design program at Metro Tech, which was expanded in 2001 to handle the overflow of students interested in the program. The committee and the instructors—two teachers and two assistants—believe their biggest challenge is keeping up with changing technology. To stay on top of the latest design programs, Metro Tech spends about \$25,000 each year on software packages. As for trends in the industry, McNaughton says that he has definitely seen an increase in Web design enrollment but is quick to point out that employment in print versus Web design has pretty much stayed equal because Web designers are not really in as high demand in Oklahoma City as they may be in some of the other big cities across the country.

The Metro Tech program has turned out some award-winning students. A team of three Metro Tech students recently won a gold ADDY award, the advertising industry's highest honor, for a Web site they created for the Jim Thorpe Foundation. For this award, they competed against ad agencies in Oklahoma City, not other students. In addition to being named an exemplary program by NDC-CTE, Metro Tech itself has received numerous awards, including third in the nation in advertising design and community service presentation in a SkillsUSA-VICA contest in 2000 and first in promotional bulletin board and third in advertising design in a SkillsUSA-VICA contest in 2001.

In selecting their students, the educators at Metro Tech firmly believe that everyone—artistic or not—can excel in their program. "If they come in and work and learn a program, we can get them a job somewhere in the field," states McNaughton.

Parks says that the students do real projects, not class assignments, so employers are able to see real portfolios. This has helped place students in internships—many of which are paid, and all of which earn them college and program credits and valuable experience. Employers such

as the University of Oklahoma Printing Services, iBeam Broadcasting, Fleming Ad Central and the City of Oklahoma City have all hired Metro Tech interns and, in some cases, hired these students as fulltime employees upon graduation.

Visual and Verbal Communications

Carnegie-Mellon University in Pittsburgh, Pa., is home to one of the best art and design programs in the country, offering both undergraduate and graduate degrees in design. Dan Boyarski, a professor and director of graduate studies in the school of design, credits the unique partnership between the design department and the English department as one of the driving forces behind the success of Carnegie-Mellon's design programs.

Why the partnership between these two departments? Boyarski points out that the goal of each of the departments is essentially the same—communication. He adds that readers don't consciously distinguish between visual and verbal communication, so why should design programs? This partnership between the departments is rare, and Carnegie-Mellon is perhaps the only school in the country that offers a program equally strong in English and design.

Undergraduates at Carnegie-Mellon take on a rigorous four-year program that begins with learning the basics in their first year. Boyarski calls this the foundation year in that students learn about drawing skills and 2D and 3D art. He says that students are challenged in this first year to see and think in ways they never have before. Second- and third-year students delve into the use of typography, color, photography, image making and drawing to build communications design. In these years, Boyarski hopes that students learn that they are designing for people other than their teachers and fellow designers or for awards committees. In general, second- and thirdyear students learn about the relationship between type and images.

In their fourth year, students take on real projects for real clients. Students are allowed to choose the specific area of design—communications design, industrial design, interactive design or environmental design—in which they want to complete a project, but it is always for a real client. "The experience of working

within real constraints is incredibly valuable," remarks Boyarski.

Many Carnegie-Mellon students take on noncredit internships during the summer months, working for such companies as Microsoft in Seattle, Razorfish in New York City and Meta Design in San Francisco. To help them land full-time jobs after graduation, Carnegie-Mellon offers workshops on interviewing and portfolio presentation for the students.

Boyarski has noticed many trends in the industry in recent years, the most obvious being the evolution of printed design to design on computer screens and even exhibit design. But one surprising trend has occurred post September 11. Boyarski says he has noticed that many design students are starting to look for jobs in arenas other than the traditional design studios, multimedia companies or publishing houses. He says students have been checking out careers with nonprofits, museums, and the like—jobs that are a little more low-key.

Thinking Creatively

With 20 years in the design industry under his belt, Boyarski knows what it takes to make a successful designer. He says that his students are smart, curious and intrigued with learning new information. He also has some suggestions for high schools and secondary technical education centers in preparing their students for a continuing education program in design and eventually a career in the field. He suggests teaching the students about the link between verbal and visual communication. Boyarski also believes that there shouldn't be too much emphasis placed on computer graphics and software programs; teachers should focus on the content itself. "We want students who can think, not just push buttons. We can teach them to push buttons," he says. Finally, Boyarski encourages schools to invite designers from area design firms to speak to students and maybe even offer them a project to work on.

The design field is an ever-evolving industry, and the design programs that will stand the test of time will clearly be those that change with the changing times. No matter which approach to change a program takes, it is clear that both students and employers are reaping the benefits. Most experts agree that the door to the design industry is open wider now than perhaps ever before.