

TECHtalk

SPRING 2015



INSIDE

FROM THE DIRECTOR:
CERTIFICATIONS &
COLLEGE CREDITS

SPOTLIGHT ON SERVICE:
STUDENTS HELP WITH
HOUSE RENOVATION

FACULTY NEWS

OUT-OF-THIS-WORLD
MACHINING

2

4

6

7



Liyeira Taveras Jimenez enjoys the creative and technical challenge of reproducing her own graphic designs.

What's your impression of a print shop? Do you picture heavy machinery in a noisy room where press operators with blackened hands work with metal plates and cans of ink? While that image accurately captures how some print shops still look today, it does not reflect an entirely different facet of the contemporary printing industry—the digital print shop.

ing. According to market research, the digital print segment is expected to enjoy double-digit growth over the next several years. The trend is clear—digital printing is on the rise.

This shift in the industry is easy to see when you visit RMCTC's Printing & Graphic Communications program. It is true that the shop is equipped with a traditional offset printing press; the Heidelberg Printmaster is an excellent 2-color machine. However, it

Technological advances continue to expand the capabilities and quality of digital printing equipment, and, as a result, the market for digital printing and related services is boom-

2615 Warren Road
Reading PA 19604
610-921-7300 | FAX 610-921-7367
www.rmctc.org

**Reading
Muhlenberg**
CAREER & TECHNOLOGY CENTER



continued on page 3 ➤



We recently concluded our National Occupational Competency Testing Institute (NOCTI) assessments. I'm proud of the efforts of our seniors in preparation for this assessment, which provides our students with an indication of their readiness for the workforce. In the past three years, approximately 90 percent of our students have tested at a level indicating they are indeed ready to transition to the workforce with the knowledge and skills required to be successful. This percent matches the statewide average for all career and technical education students. Our stakeholders and community have much to be proud of as it relates to the efforts of our teachers and students in reaching this level of achievement.

These same students are also working hard to secure industry-based certifications prior to graduation. These certifications are unique to all programs, and they enable students to leverage what they have learned to help them

obtain employment. Students who are able to secure an industry certification by demonstrating the requisite knowledge and skills required to pass such an exam can uniquely market themselves to employers as they seek employment.

Career and technical education programs offer students challenging and meaningful pathways into post-secondary education and work. RMCTC students have the opportunity to earn from 3 to 12 articulated credits through the Pennsylvania Department of Education's SOAR (Students Occupationally and Academically Ready) program. Students enrolled in RMCTC's computer and engineering programs can earn up to 27 credits through the school's Technical Academy partnership with the Reading Area Community College at no cost to the student. When combined with a student's ability to earn academic credit through the high-school-based AP program, a student can significantly shorten their time in college, resulting in considerable savings. Likewise, all of these programs provide transfer pathways into a variety of bachelor degree programs.

There's never been a more exciting time for students to consider a highly flexible career and technical

education pathway, which will provide a student with options leading directly to work, an associate's degree, or a bachelor's degree, depending upon the career goals of an individual student. ■

Gerald P. Witmer Jr.

*Gerald P. Witmer Jr.
Administrative Director*

DID YOU KNOW RMCTC HAS A CSN?



CSN – what is that? At RMCTC we have a Certified School Nurse on staff. **Mrs. Mary Beth Feeg** has been at our school for 15 years, working in the health room as both a school nurse and a mentor to many students and staff. She is available for medical information or advice during the school day, or you may leave a message for her after hours.

Mrs. Feeg's specialized training allows us to offer a high level of care to our students. She would love to hear from you and gladly help coordinate any medical needs you may have. Check out her web page for contact information and downloadable forms.

digital PRINTING

continued from front cover

is the digital technology in the shop that is generating most of the excitement among students, teachers, and local businesses.

Students explore their creative talents, hone their technical skills, and learn pre-press techniques by working with Photoshop, Illustrator, and InDesign software. They master complicated PDF workflows and see the process through to completion on a Xerox 770i digital color press. Not only do they learn the theory behind graphic reproduction, they also learn by completing actual printing projects from design to output to binding.



“Our students have an opportunity to learn exactly what local employers are looking for,” said **Michael Borelli**, Printing & Graphic Communications teacher. “Members of our Occupational Advisory Committee keep us

informed about trends in the industry and ensure that our curriculum is in sync with the needs of the workplace,” said Borelli.

That is why the program recently acquired an HP Designjet L26500 wide-format printer and Graphtec FC8600 cutting plotter. With the capability to print with latex inks on a variety of media, including paper, vinyl, and canvas, up to 60 inches wide, and contour cut the printed material, the new equipment opens up exciting possibilities.

Zamir Dawson uses a heat press to apply vinyl lettering to a sweatshirt.

Zamir Dawson, a 12th-grader at Reading High School, quickly put the new machines to good use. They were exactly what he needed to produce sweatshirts featuring the logo of a line of clothing called Rebel Era.



Highly precise digital printing and cutting open up new possibilities for making signs and promotional materials on vinyl media, as demonstrated by Arsenio Leonardo.

He created vector artwork on the computer using Flexisign software. Then he printed the design onto heat-transfer vinyl and used the cutting plotter to precisely, electronically cut the artwork from the background material. After carefully positioning the logo on the garment, he used a heat press to apply the vinyl lettering to the fabric. The end product looks clean and crisp and ready to please Dawson’s eager customers.

Other Printing & Graphic Communications students are busy with their own interesting projects. Now that digital technology is providing them with innovative and fun ways to practice their craft, the possibilities are endless and bound to impress.



Building a Better Life

If you are a teenager interested in a career in the construction field, a good day involves hands-on activities, such as laying block, running cable, or using power tools. When you do those things for the sake of helping others, your good day turns into a good deed—with benefits and memories that could last a lifetime.

That is exactly what some fortunate RMCTC students experienced early in the fall term. On September 17 and 18, members of the Home Builders Association (HBA) Student Chapter volunteered on a house renovation project coordinated by HBA's Restoring Hope Foundation.

The objective of the project was to make repairs and improvements to the house of the Welgo family of Upper Bern Township, who were

RMCTC students and teachers worked side by side with area contractors to renovate a house during the 2014 Restoring Hope project.

selected to be recipients of the fourth free home makeover undertaken by the foundation.

RMCTC's construction cluster was well represented, with students from the following programs volunteering: Bricklaying, Building and Property Maintenance, Carpentry, Electrical Technology, and Painting and Decorating. At least one student from the Horticulture program also participated. In addition, instructors **Chad Heffner**, **Michael Torres**, and **Amanda Umberger** contributed their time and expertise to the worthwhile project.

"This year's Restoring Hope project represented an excellent opportunity for our students," said Torres. "They had face time



Bricklaying student Devonniece Balbi lays a block for the new patio being built in the backyard.

construction CLUSTER

with local contractors and were able to perform live work on a busy job site, all of which added up to a valuable learning experience for them.”

Dozens of area contractors donated the labor and materials needed to complete the renovation, which had a retail value of approximately \$83,000. While professional tradespeople did carpentry, landscaping, and electrical work, students and other volunteers pitched in wherever their help was needed.

Several students enrolled in the Building and Property Maintenance program were put to work measuring, cutting, and installing vinyl soffit on a new carport. In the back yard, a student from Bricklaying was initiated into the process of laying patio block. Meanwhile, a group of Painting and Decorating students exhibited effective teamwork as they assembled a bookcase out of what seemed to be hundreds of small parts. In a similar way, a crew of Electrical Technology students worked together to reassemble furniture, move a piano, and run coaxial cable.

“I thought it was very helpful and really got me thinking about my future,” said **Savannah Franklin**, a junior in the Painting and Decorating program. “After studying interior design in college, I’d like to work in the real estate field renovating and selling houses, so playing even a small part



in the restoration project was worthwhile for me,” she said.

Whether they employed the skills they learned in their programs or helped out with miscellaneous tasks, the students got to experience first-hand what it is like to work on a busy job site. They mingled with

Painting & Decorating students, from left, Ariadne Rodriguez, Iraice Ramirez, Julianette Maldonado, Leisha Gonzalez, Tylin Molina, and Margaret Baez proudly display the bookcase they assembled.

all, they extended themselves for the sake of others and contributed in a positive way to building a stronger community. ■



professionals who are working in career fields the students are preparing to enter, and they got a taste of both the challenge and satisfaction that accompanies work. Perhaps best of

Work proceeds on the carport with Mr. Torres and Building & Property Maintenance students Martin Vasquez, left, and Luis Valentin using the chop saw, while Benjamin Nelson helps install siding.

faculty NEWS

Welcome New Staff!



AMANDA BRENEISER

Amanda Breneiser has been appointed math paraprofessional. She was previously employed by Groff Marble and Granite as a general manager. Breneiser earned a bachelor's degree in elementary education with a minor in math from Kutztown University.



CRAIG DANKS

Craig Danks has been hired as paraprofessional for the Transportation cluster of programs. He has worked in the automotive industry for more than 30 years. In addition, Danks studied electronics at Lincoln Technical Institute and business administration at Penn State University.



BEN HARMUTH

Ben Harmuth has joined the RMCTC faculty as Engineering & Automation Technology teacher. He recently worked as an engineering technician at Butler Manufacturing Company. Harmuth earned a bachelor of science degree in mechanical engineering technology from Penn State University and an associate of applied science degree in mechanical engineering technology from Thaddeus Stevens College of Technology. He is a certified investment casting specialist and a professional engineer in training.



JOHN JACOBS

John Jacobs has been appointed Machine Shop Technology teacher. He recently was employed by JL Machine & Tool, Inc. Jacobs is a graduate of the machine technology program at Lehigh Career & Technical Institute and attended the toolmaking technology program at Penn College of Technology. He has 25 years of experience in the machine tool and toolmaking industry.



MIKE KROUT

Mike Krout has been hired as paraprofessional for the Electrical Technology, Machine Shop Technology, and Welding and Metal Fabrication programs. He previously served as plant manager of the Allentown Metal Works. Krout completed the Welding and Metal Fabrication program at RMCTC and earned an A.S. degree in industrial management and an A.A. degree in general education from Northampton County Area Community College. He also earned an A.S. degree in toolmaking technology from Williamsport Area Community College.



LISA PISON

Lisa Pison has been named Information Technology-Web Design teacher. She recently served as Programming and Interactive Media teacher for York County School of Technology. Pison earned a bachelor's degree in computer information systems from York College of Pennsylvania and Vocational Education II Teaching Certification from Penn State University. She is a certified Oracle instructor for SQL and PL/SQL, AP Computer Science A teacher, and holds a CIW Web Design Associate certification.

When it comes to quality, NASA sets the bar extremely high. The lives of astronauts depend on the machines and supplies that make their space travel possible. One can't help but be impressed, therefore, by the idea that parts made by RMCTC students may some day be at home in the International Space Station.

Students in the Machine Shop Technology (MST) program have the opportunity to participate in High school students United with NASA to Create Hardware (HUNCH), a partnership that involves students in fabricating products for NASA. As the cooperative venture progresses, students at RMCTC and other schools will manufacture components for a stowage locker used in the space station. Working on the HUNCH project will give some fortunate students

Gadiel Ortega uses a lathe to cut threads into a piece of aluminum.

valuable real-world experience as well as some very interesting bragging rights.

Other exciting opportunities exist for students in the MST program. They have a learning laboratory that is well equipped with state-of-the-art machinery. With funds from a grant awarded by the Pennsylvania Department of Education, the program will soon acquire a Haas VF-1

Erika Malave checks the specifications of a project she has underway on the milling machine.

prepare them for entry into a career field that is expanding," said Jacobs.

Precision machining has been identified as one of Pennsylvania's top occupational growth areas. Findings of the Berks County

Out-of-This-World Machining

CNC (computer numerical control) vertical milling machine and a Haas TL-1 CNC lathe. Students will learn to program, set up, and operate the machines, which are used in industry to produce precision parts.

"These machines are typical examples of equipment used by machine shops today," said John Jacobs, Machine Shop Technology teacher. "Working with these machines will provide our students with a great introduction to CNC machining and will

Workforce Investment Board confirm that local companies are in need of skilled machinists and CNC machine operators and programmers. Machining skills shortages are projected to grow in Berks and surrounding counties through 2020.

Whether they are making parts for NASA or learning to operate CNC machinery, RMCTC's student machinists are preparing for careers that will take them far into the future.



Jesus Colon sharpens his skill in using a lathe to meet the tight tolerances required in the machining of precision parts.

board members

Rebecca Acosta
Abraham Cepeda
Robin Costenbader-Jacobson
Richard E. Hoffmaster
Garrett Hyneman
John W. Love
Cindy L. Mengle
Eddie Moran

MISSION STATEMENT

The Reading Muhlenberg Career and Technology Center, in partnership with our diverse community, sponsoring districts, and business and industry, is committed to providing quality career and technical education, resulting in opportunities for students to gain employment, pursue post-secondary education, and develop an appreciation for lifelong learning.

WE WISH YOU THE BEST!

At the conclusion of the 2014–2015 school year, **Ms. Barbara Geisler**, **Mr. Roy Spinka**, and **Mr. Tom Dietrich** will be retiring from RMCTC, celebrating a collective 96 years in education!

Ms. Geisler concludes her career after 40 years of service as the administrative assistant to the director. **Mr. Spinka** will end a 36-year career, having taught upholstery for 26 of those years and having served as the assistant director for the last 10 years. **Mr. Dietrich** will retire after 20 years as the plumbing and heating teacher.

Through their dedication, they have positively impacted thousands of students, who are now active and contributing members of our community! We extend our gratefulness for their service and wish them a happy and fulfilling retirement.

It is the policy of the Reading Muhlenberg CTC not to discriminate on the basis of gender, disability, race, color, and national origin in its educational and vocational programs, activities, or employment as required by Title IX, Section 504 and Title VI.

DESIGNED BY BERKS COUNTY INTERMEDIATE UNIT

RETURN SERVICE REQUESTED

NONPROFIT ORG
U.S. POSTAGE
PAID
Reading, PA 19604
Permit No. 675



2615 Warren Road
Reading, PA 19604
610-921-7300
Fax: 610-921-7367
www.rmctc.org