



MAKING THE Connection

TO
Career Technical Education

Thursday, December 1, 2016

MAKING THE CONNECTION

Center Line High School Launches Career Academies

Center Line High School has reimagined learning with the launch of career academies for all students in grades 10-12. Ninth-grade students develop their strengths and interests in the Freshman Academy before choosing a career academy prior to their sophomore year. At that time, students enter the Academy of Health and Human Services (HHS) or the Academy of Industry, Technology, and Innovation (ITI).

The HHS Academy features classes in Law Enforcement, Firefighting, Emergency Medical Response, and JROTC. The ITI Academy includes FANUC Robotics, Computer Numerical Control (CNC), Graphic Design, as well as art and business classes. In each academy, students have the opportunity to earn certifications that can lead to employment in their given field.

Each academy is located in a separate hallway of the school, and students take all of their classes in that area. This helps develop a team atmosphere within the academy, where teachers and students can develop strong working relationships.

In addition to the career specific courses, the academy model places students in small learning communities where they take core classes in math, science, social studies, and English. The core teachers make connections between their content and the academy course work. "Students begin to appreciate and understand how the subjects are all related, and what they learn can be applied in their other classes," CNC teacher Mike Quinn said.

"The change has made instruction in the core classes more relevant. Students no longer feel the need to ask 'Why are we learning this?' because the content and example problems I present are related to careers within the ITI or HHS Academies," math teacher Jeff Sharrow said. "The change has made instruction in the core classes more relevant. Students no longer feel the need to ask 'Why are we learning this?' because the content and example problems I present are related to careers within the ITI or HHS Academies," math teacher Jeff Sharrow said.

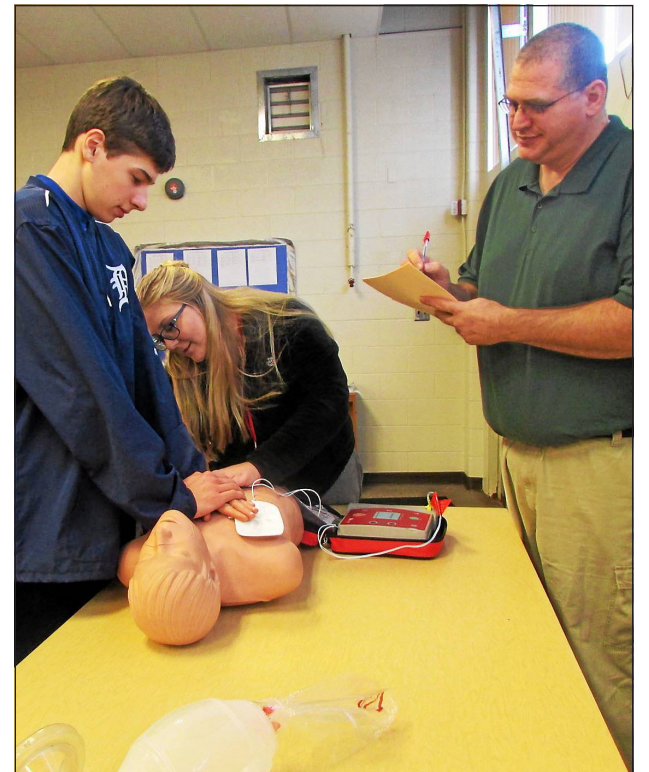
Center Line teachers have also implemented Project Based Learning where students work collaboratively to solve problems and develop ideas related to the content of the academy. The classroom projects are designed to give students experiences similar to what they will face when they enter the work force.

Another key component of the academy model is cultivating partnerships with local businesses and organizations to provide students with career based learning experiences and opportunities. CLHS has already formed partnerships with Ford Next Generation Learning, Crest Ford, Binson's Health Care Supplies, and several other organizations.

The goal is to have professionals come into the school to work with and inspire students, and to have students go into the field to see what they are learning about looks like in the real world.



Nick Labudie and Zachary Bozaan operate the CNC machine.



EMS instructor Wayne Lobeck guides Breeanne Sporer and Brendan Baber as they work to resuscitate a patient.



Mr. Plotzke drives the CLHS fire truck as Asia Lee and Noah Tanski-Jett ride along in full gear.



Kyler Wilbeck runs the controls of the FANUC robot with the help of Aynn Thornburg.



Law Enforcement teacher Robert Plotzke shows Zyshone Cheateum and Queisha Smith-Hale the techniques officers use when making a traffic stop.

The academies have made school more engaging for students, and given them preparation for college and career choices that will come after graduation.

The Academy of Industry, Technology, and Innovation

■ CNC

Computer Numerical Control, also known as CNC, is a machining process used in the manufacturing industry that involves the use of computers to control tools. Mills, routers, and grinders are all tools that can be controlled in this manner.

Students at Center Line High School can acquire the skills of CNC robotics thanks to a course instructed by Mr. Michael Quinn. In this class, students learn how to read blue-prints, and program and set up machine processes. These are skills needed to meet the demands of the manufacturing industry.

"The class is for students who want to pursue a technical career, as well as those who might be interested in engineering," Quinn said. "The students are driven, and ready to focus and learn."

"Overall, I believe that we learn best from hands-on experiences, so I try to lean more toward those types of activities," Quinn said. "However, students need to take in a lot of information before they are able to work on the CNC machine."

"Students no longer feel the need to ask 'Why are we learning this?' because the content and example problems I present are related to careers within the ITI or HHS Academies"

Jeff Sharrow, math teacher

■ Graphic design

The Graphic Design class at Center Line High School focuses on the design and production of electronic and print media. Electronic media include digital video and photography, while print media are things like t-shirts and business cards.

Visual Imaging is a tangible class in which students get to choose to design what they like. Projects include making posters for the auto show, designing advertisements for businesses, and designing and printing t-shirts.

■ FANUC Robotics

Center Line High School offers a FANUC Robotics program in which students participate in learning motion programs. One of the main focuses is creating robot work cells.

Course instructor Donna Giacona became certified to teach this class after some on-line and on-site learning. She has been teaching this course for four years now and is thrilled with the opportunities that it creates for her students.

"FANUC is the industry meter in robotics," Giacona said. "These robots do jobs

that are repetitive or dangerous. A misconception of robots is that they take jobs away from humans, but these robots have created interesting and exciting new careers for humans."

The Academy of Health and Human Services

■ Firefighting

Center Line High School's Firefighting course is a great educational opportunity open to all students who seek it. The course teaches the students everything they need to know about firefighting and basic emergency medicine. They learn how to extinguish many types of fires, and learn fire prevention safety. The students receive a mix of lecture and hands-on learning about ropes, ladders, fire hoses, and other equipment used in the field. The class also completed a project outside of school in which they helped local residents install smoke detectors.

■ Law Enforcement

The Law Enforcement class teaches students the skills needed to become a police officer. In this course,

Anchor Bay Schools
Armada Area Schools
Center Line Public Schools
Chippewa Valley Schools
Clintondale Community Schools
East Detroit Public Schools
Fitzgerald Public Schools
Fraser Public Schools
Lake Shore Public Schools
Lakeview Public Schools
L'Anse Creuse Public Schools

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For more information about the MISD and the 21 school districts, go to www.misd.net

Mount Clemens Community Schools
New Haven Community Schools
Richmond Community Schools
Romeo Community Schools
Roseville Community Schools
South Lake Schools
Utica Community Schools
Van Dyke Public Schools
Warren Consolidated Schools
Warren Woods Public Schools

■ Emergency Medical Services

Emergency Medical Services (EMS) is one of the career training classes offered at Center Line High School. The class is taught by Mr. Wayne Lobeck. In EMS, students learn "Pre-Hospital Care" which is the care provided to a sick or injured person during the first ten minutes of an emergency.

The course uses the same curriculum that is taught in college and medical training courses. Some skills taught throughout the class are CPR, bleeding control, splinting broken bones, and treating heart attacks and strokes. Students also learn how to take care of people with diabetes or severe allergic reactions.