



From left, Alex Lafriniere 12th graders and Dayna Culberson take Jennifer Miklasz's blood pressure in the Emergency Unit of St. Joseph's Hospital.

Dakota High School medical careers program

By Emily James

"You have to put on a hair net and a yellow coat," said Dayna Culberson, a 12th-grader at Dakota High School, upon entering the Central Supply Unit at St. Joseph's Mercy Hospital.

Culberson is one of the many students who participate in the Medical Careers program offered at Dakota. Seventy-five percent of the students who took the program and graduated four years ago now work in the medical field.

Renee Licavoli created the program in 1996, and the students started working at the hospital in 1997.

"I had contacted many different hospitals in the area, but St. Joseph's was the only hospital that was receptive to our students coming in and working," Licavoli said.

The program was recognized last year by the state of Michigan as a model career preparation program. It provides science content and patient care skills.

"My favorite thing about the program is when my students come back and share their success. That is what keeps me going," said Licavoli, who has taught at Dakota since 1995, when the school opened. After Licavoli started the program, she enlisted the help of Jennifer Miklasz, who has taught at Dakota since 2000.

"My first career was nursing, and I did that for over 25 years," Miklasz said. She, along with students Culberson and Alex Lafriniere, led a tour of the various stations at which the students work. The students in the Medical Careers II program visit St. Joseph's Monday through Thursday every week, working seven rotations throughout the

year. There are 36 participating departments, including Nursing Units, Emergency Room, Intensive Care Unit, Pharmacy, Central Supply, Radiology, Laboratory, Transport, Outpatient Cancer Care and Human Resources.

The real-life experiences are what make or break students. They interact with patients daily, giving bed baths, getting them water and assisting in other tests.

"I found that students need the real environment of the hospital that I cannot simulate in the classroom. By talking with professionals and working with patients, they can make educated career choices," Licavoli said.

"The most beneficial part of the program is making sure that it's what you want to do now that you're in the environment. We are respected here, and we can use this experience as a reference to get a job in the future," Culberson said. "We come out of this class knowing a lot more than first-year college students."

Some students endured some rough times at the hospital. "There was a patient I had given a bed bath the day before, and I came to the station the next day to find out they had passed away. It didn't hit home until I had to do their post care," Lafriniere said.

When asked what she found most students saying after completing the program, Licavoli replied: "They usually get a lot of personal growth; they say that they are new people. They learn to put others before themselves."

The partnership with St. Joseph's proves that Dakota is committed to helping students make educated career choices, as well as earning community service credit and individual growth.

Learning for the new age

By Emily Mackinder

By combining state-of-the-art technology and a willingness to learn, Chippewa Valley High School has developed one of the few Information Technology programs in the Midwest.

Already in its third year, Information Technology has given students the knowledge and abilities to use computers on a more advanced level. Instructors John McQuestion, who is in his 38th year of teaching, and Angela Barren provide students interested in today's technology with the marketable skills needed to enter high-demand IT careers, such as software development and web design.

Students must complete three mandatory areas to advance in the class. The Computer Architecture unit is an overview of a typical computer, allowing students to configure and maintain computer programs and hardware, and fully resolve a range of common PC problems. The sec-

ond unit, Networking Systems, prepares students for related technical careers by instructing them how to design, operate and maintain network connections with devices and software. The last area, Web Development, introduces students to the World Wide Web and the element of design to make a web page functional and effective.

After students have completed these areas, they are allowed to pursue any of four areas of further study, which give complete knowledge on today's technology and its demands.

"I like doing hands-on activities and being able to learn useful information about something I'm interested in," said Theresa Hortola, a Chippewa Valley senior enrolled in the course.

Two of the four areas offer the opportunity to obtain certification. If a student does well on the required test, she may earn either CompTIA A+ Certification or Certified Internet Webmaster Certification. These certifica-

tions benefit anyone planning to pursue a career in the IT field.

"A lot of people can create a web site," Barren said, "but when applying for a job, a Chippewa student with a certification will be in greater demand than someone without one."

Both McQuestion and Barren are certified to teach the course. Local bond and state funds have supported the Information Technology program, helping to provide the equipment students work with. The Information Technology lab is full of computers that have state-of-the-art software and hardware, giving students a feel for what they will work with once they are hired in to an IT career.

Students from both Chippewa Valley High School and Dakota High School take part in the program. Dakota High School students comprise a large portion of all of the IT students even though they must travel to the program from their high school. The teachers have traveled even

further, to Florida, New Jersey and Georgia, to see new programs and develop teaching techniques.

Chippewa's Information Technology course is a college-level articulated program, which means that some students have the opportunity to earn college credits. Any student CIW certified can earn articulated college credits if they enroll in a specific 3-hour computer-related course at Macomb Community College. In this case, certification can quickly advance students in their college studies, as well as their chosen career.

So, when scheduling time comes around for any high school student, Information Technology should be a serious consideration. Not only will it prepare any student for a career in a rewarding technological field, but it will also provide useful knowledge for anyone willing to take on the challenge. To learn more about the IT program, log onto www.cvs.k12.mi.us/abarren.

Design technology at Dakota high school

By Angela Gossage

It is always a good thing when a student can find a class that leads them along the path to a career. That is exactly what the Design Technology/Engineering Design program at Dakota High School offers.

"This program is about teaching problem solving, basic design concepts, and moves into advanced design concepts. It's a four-year program that starts with having no experience and builds students up to their full potential of designing something themselves and then taking it to the next level of actually building it. The idea

is that, in the end, students can determine whether their design worked," said Allan Kobler, one of three teachers of the Design Technology/Engineering Design program.

The program lets the students apply the skills they learn by building items such as radio-controlled foam hydroplanes, radio-controlled robots that have to be able to pick up tennis balls, and their latest project, pneumatic robots, or "Battle Bots."

Students find the program effective.

"This is what I want to do with my life, and this gives me a good opportunity to learn and advance myself in preparation for my engineering career. It has helped me a lot with the computer aspect of design, and we've been able to do some career searching, which has allowed me to figure out exactly what I want to do," senior Jackie Palmer said.

The program sets Dakota apart from other schools in the Macomb area.

"We have a rapid prototype FDM machine that takes a 3-D solid drawing and builds the design from scratch. This is a \$100,000 machine that very few high

schools have, but we are fortunate enough to have one. It gives our students a great learning opportunity and an advantage. This program also spans four years, al-

lowing it to be taken step by step. Not only do the students design, they get a chance to build their design and see if what works on paper works in reality, which is a great experience that isn't available at every high school. This program also gives students the freedom to not only design and build but also choose what they will be designing and building," Kobler said.

Dakota's Design Technology/Engineering Design program



From "Art to Part." Students at Dakota learn to take a project from concept and design through to prototype and fabrication as part of the Design Technology program.

gives students an edge in today's competitive job market. Students previously in the program have earned several awards, including two first places in the Skills USA national competition, and countless first-place ribbons statewide. Students also obtain unique skills that often make them more appealing to colleges and to employers who take co-op students from schools like Kettering University. The program has also drawn the attention of

several companies, which sponsor students through college or employ them.

Dakota's Design Technology/Engineering Design is enjoyable to students and is beneficial to their careers. How often is that found in a high school situation beyond the basics of reading, writing, math and science? This rare joy is a pride of Chippewa Valley Schools and is a program that will live on for years to come.

Next Week's CTE Page will feature Roseville High School



Mr. Mueller assists student Anthony Garavaglia of Dakota with engine work during class.

Shop students say farewell Mr. Mueller

By Kristin Denryter

Larry Mueller, Chippewa Valley High School's Automotive Technology teacher, has made quite a commitment to the program in his 34 years there. Although he isn't the program's founder, he has been heading it since 1971 and building it into the fantastic program it is today.

Mueller prepares students to pass Automotive Service Excellence tests for certification, which is required on top of state certifications by most automotive mechanic employers. Two days a week involves being in the classroom doing bookwork. The other three days cover hands-on automotive diagnostic and repair work on teachers' and students' cars.

Modern automotive technology fills

the shop from top to bottom, aiding students in completing the work that would be done at a general automotive shop. The lab is equipped with high-tech tools, electronic testing gear and other sophisticated computer equipment.

Students complete repairs on engines, brakes, suspensions and alignments under Mueller's guidance.

Chippewa Valley students Zac Geneja and Bill Wolfgang will be accompanied by Dakota High School students Jay Parker and Anthony Garavaglia as they put a 454 big block engine in a 1974 Chevy Nova. All the students agree that working on your own car is the best part of class, but "dropping" the engine into the Nova will rank high as the best part of their class experience.

Along with Chippewa Valley High

School students, Dakota High School students may also take the 2-hour class.

"My favorite part is working with kids and providing opportunities that may otherwise go unused," Mueller said. There is a segment of the student population that is highly successful in here.

Many of the students who wish to pursue a career in automotive technology will continue on in a 2-year post-high school program, but the high school preparation is a fantastic way to open that door. In fact, the automotive technology class is encouraged by counselors and science teachers to better prepare prospective automotive engineers.

"A lot of our students continue on to Macomb Community College or one of the other technical colleges to become

automotive technicians, and a few even pursue automotive engineering," Mueller said.

Mueller has a great deal of support from his students, all of whom agree that they are sad to see him retire.

"Mueller's the sweetest teacher," said Chippewa Valley senior Bill Wolfgang.

Chippewa Valley junior Carl Radjewski is truly sorry to see Mueller go. "We're all sad to see him go. He's a smart guy and seems to know everything about every car."

Mueller doesn't plan to stray from his love of working with cars, especially classics. He's the proud owner of a restored 1958 MGA Roadster and, as a Christmas present to himself, a 1968 Cadillac convertible, both of which should keep him busy.

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