

Career Technical Education, or CTE as we call it, is an important part of preparing students to be both college and career ready. But don't just take my word for it. Our CTE alumni tell the story best. Here are just two examples I'm honored to share with you this year.

—Claire Brisson, Director of Career Technical Education, Chippewa Valley Schools



The next CTE page will feature Fraser High School

Designed for success: Real world perspectives

It is the built-in paradox of teaching that an instructor may never know the positive impact that something they did or said may have had on their students. Yet many of us have had teachers in our lives that did just that—made a pivotal difference at just the right time. Such is the case for Florin Blebea, a 2008 graduate of Dakota High School.

Florin discovered his passion for automotive design while in Scott Mitchell's advanced Engineering Design course, which is part of the larger Design Technology program in Chippewa Valley Schools. As Florin describes it, "Mr. Mitchell brought in a guest speaker who had completed the same engineering program I was in. He was attending the College for Creative Studies in Detroit majoring in Automotive Design. After seeing him sketch out some cars I knew immediately that I too wanted to pursue a career in automotive design."

Florin set out in pursuit of his goal and in just four short years he has accomplished more than most his age. He attended the College for Creative Studies, where he says, "The skills I learned in the Engineering program at Dakota helped me tremendously. They allowed me to visualize objects in orthographic views and develop technical drawings to use to build the models. I definitely had an advantage over my



Dakota High School graduate Florin Blebea, shown here as he skillfully contributes to creating a full size, clay model of the Superlite Apex vehicle being manufactured by Superlite Cars LLC in Clinton Township.

classmates as they were struggling to draw the same vehicle in different views..." Florin also credits his high school program with helping him to understand real world situations and the impact that engineering has on people, especially as it relates to safety. "The program made me realize that designers had to be responsible to take into consideration aspects that could affect people's safety."

While attending the College for Creative Studies, Florin won—not just once, but twice—in 2008 and again

in 2010, the prestigious, international Avanti Summa Cum Laude Award, becoming the first two-time winner of a major Avanti Award! Clearly his dedication, talent, and passion were already beginning to pay off and be recognized in a big way.

For more than a dozen years, the Design Technology program at Dakota has incorporated much more than just teaching drafting and computer aided design (CAD) skills. The teachers—Scott Mitchell, Allan

Kobler, Ken Thael (previous), and Kellie Balsamo (most recent addition)—all having had industry experience, were/are committed to developing a very hands-on program based on the premise of Design/Build/Test. Utilizing the resources of a well-equipped fabrication lab and a 3-D prototype printer, students work in teams to build and test project designs. The real challenge lies not in building their own designs, but in building and testing someone else's. That is, after all, what



happens in industry. For Florin, this experience in the design fabrication lab taught him more than just teamwork, shop etiquette, safety, and how to use power tools. He says, "This gave me a confidence to later build things that I didn't know I could."

Florin really demonstrated that ability while working for Race Car Replicas in Clinton Township, a company that manufactures a variety of replica car component kits. Within the sister company called Superlite Cars—which specializes in original designs, not replicas—Florin served as an associate designer and clay model sculptor on a mid-engine sports car called the Superlite Apex which is in the second stage of manufacture now. According to owner Fran Hall, "Flo worked hard and did a great job for me." Florin's success hasn't stopped there though. He just recently accepted a position with General Motors where he is currently working in the Performance Division. He describes himself

as a "digital sculptor" using CAD software to model designs for future vehicles and utilizing skills he learned in Dakota's Design Technology program every day. "A typical day for me is working mostly on the computer, visualizing new designs that are being developed by the designers into digital three dimensional objects."

What advice does Florin have for middle or high school students who may have similar interests? "Dakota has one of the best high school engineering design programs in the county. Take as many engineering and art-related classes as you can if you want to pursue a career in design or engineering. These classes will teach you the fundamentals that are essential to being successful in what you pursue as a career."

I think we can all look forward with anticipation to seeing what great product designs will result from Florin's contributions to the GM team. After all, Florin's legacy is designed for success.

A Passion for Pediatrics: Hands on helping and learning

Just like Florin Blebea, Julie (MacPherson) Gleesing found a pivotal moment in her high school experience that set the direction and course for what came next. Julie is a 2003 graduate of Chippewa Valley High School and a completer of the two-year Medical Careers program taught by Katie Carolan and Wendy Laramee. What makes this program so special is that

after a year of learning many critical skills in the school setting, students in the second year embark on a several month clinical rotation at McLaren Macomb (formerly Mt. Clemens General Hospital) where they apply those skills.

Julie reflects that without a doubt, the hospital experience in particular, made a significant contribution to her

career development: "I was on Family Birthing Center and my job for the rotation was to take vital signs on the moms and the new infants. Interacting with the newborns was a very pivotal moment that helped me to decide that a career in pediatrics was what I wanted to do with my life." While she always knew she wanted to be a physician, the opportunity to become involved in patient care while still in high school solidified her decision.

After graduating from Chippewa Valley High School, Julie attended Lee Honors College at Western Michigan University from 2003-2007 majoring in Biomedical Science. Undergraduate studies were then followed by four more years at Michigan State University College of Osteopathic Medicine. What is a typical day like for her now? "Busy! I am a first year resident at both Children's Hospital of Michigan and Henry Ford Macomb Hospital. I typically work 70-80 hours a week taking care of patients while trying to learn the fundamentals of pediatrics and how to be a good physician. Most work days are 10-16 hours long and can be as long as 24 hours, but we keep busy so it goes by quickly. I know the schedule sounds daunting, but I honestly love my job and couldn't imagine doing anything else."

Julie says that she learned important skills in high school that she used and built upon



Chippewa Valley High School alumnus, Dr. Julie (MacPherson) Gleesing, found her passion working with children as a pediatrician resident at Children's Hospital of Michigan.

later. "One of the most important things I learned throughout Medical Careers was how to talk to patients. Building a foundation of open communication can help in any career, but it is particularly important in a physician/patient relationship. Because I did not have a lot of patient interaction during my college years, it was invaluable to have my high school experiences when I began medical school."

Julie also says that her Medical Careers experience helped her to make better sense of how her core academic classes (math, science, English, social studies) apply in the real world. "Spending time in the hospital reiterated how important it is to excel academically, especially in middle and high school, when you learn the foundation upon

which the rest of your educational builds." Julie particularly noticed the correlation between math and science to health care. During her high school hospital rotations she frequently saw doctors and nurses calculating medication doses. "A strong foundation in math is incredibly important to prevent medication dosing errors" she says. "Science is obviously important in medicine because understanding anatomy, physiology and pathology is the basis for how we treat and prevent disease. All of these specialized science courses build upon knowledge learned in basic biology and chemistry courses," she adds. Julie also emphasizes that strong written and verbal communication skills are very important in a hospital setting since it's vital to communicate

effectively with other members of the health care team.

For Julie, the best part of her work is interacting with kids on a daily basis, "They are so resilient and I truly enjoy watching them bounce back from illness to become healthy again. With children, what you see is what they feel. They don't hide the pain, but they don't hide the smiles and giggles either. I love being involved in helping them to recuperate and return to being playful and happy kids again."

If she had to pick a least favorite part she would tell you that sometimes it is tough to live the lifestyle of a resident. "Your schedule changes all the time and there is not a lot of time to spend with family and friends or for hobbies. I just try to remind myself that residency is temporary, and my career as a pediatrician will last for the rest of my life. It does help that my husband and a majority of our friends are residents too, so we completely understand what each other are going through."

Her advice to students? "Gain as much experience as you can. Find something you are passionate about, and then dedicate yourself to making it your career. If you work hard and take it one step at a time, you can achieve any goal you set for yourself." Julie Gleesing is certainly proud of that as she lives out her passion for pediatrics.

Chippewa Valley Schools Career Technical Education

Chippewa Valley Schools offers Career Technical Education (CTE) programs at Chippewa Valley High School and Dakota High School. These programs are designed to prepare students for a broad range of employment opportunities and continuing education. Follow-up studies continue to find that the most successful high school graduates were those who took a college-prep program and a Career Technical Education program of study. CTE programs are staffed by teachers with related business and industry experience that enhances the learning process with real-world relevance. CTE programs are offered in these areas:

CTE PROGRAMS	PREREQUISITES
Automotive Technology Business (3 pathways) Business Management Accounting & Finance Information Technology Construction Trades Design Technology (2 pathways) Engineering Architecture Family & Consumer Science Graphic Design Hospitality & Culinary Arts Marketing Medical Academy Teacher Cadet Woodworking/Cabinetmaking	Some CTE programs are taught at one high school only, but programs are available to students at both high schools. A complete program of study in a CTE area usually involves a sequence (or multiple) courses. Advanced courses often have the preceding course as a prerequisite. For these reasons, students should plan early to include CTE as part of their high school experience.

All CTE programs adhere to the District's policies of nondiscrimination on the basis of race, color, religion, national origin or ancestry, gender, age, disability, height, weight or marital status in all programs, activities, and employment. In addition, arrangements can be made to ensure that the lack of English language skills is not a barrier to admission or participation. Support services are available through Carl D. Perkins Education Act for students with special needs. Inquiries related to nondiscrimination policies should be directed to: Civil Rights Coordinator, Assistant Superintendent of Human Resources Chippewa Valley Schools, 19120 Cass Avenue, Clinton Township, MI 48038 Phone: (586) 723-2090 Nondiscrimination inquiries related to disability should be directed to: Section 504 Coordinator, Director of Special Services (same address) Phone: (586) 723-2180

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MAKING THE Connection to Career Technical Education

For more information about CTE at the high school level contact the Macomb Intermediate School District.

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MCTEAA Macomb Career and Technical Education Administrators Association

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