

Profiles in Success

Perkins-Funded Workforce Education at the Community College Level



Automotive Technology at Midland College

Midland College District was established in 1972, and the current campus opened its doors for classes in 1975. Conceived on a circular master plan, Midland College’s contemporary architecture and complementary open spaces make it an especially inviting place for study and learning in the 21st Century. Comprising over 700,000 square feet of instructional space, its main campus is situated on 224 acres within the city of Midland.

The College has expanded to include eight other campuses and extensions, including the Advanced Technology Center. Midland College is completing a five-year plan of renovating and improving its facilities, and now has the new F. Marie Hall Academic Building with 36 classrooms and a large lecture hall, the new Fox Science Building and the new Helen L. Greathouse Children’s Center.

Midland College enrolled a record 15,250 students over its 2008-2009 academic year and awarded

399 associate and baccalaureate degrees, along with 147 Certificates. Spring and Summer 2010 enrollments showed an increase of eight percent and nine percent respectively.

Midland College offers Associate’s degrees and Certificate options in over fifty programs of study and is one of three community colleges in Texas that offers a Bachelor’s degree. Midland College’s Bachelor of Applied Technology in Organizational Management is designed to complement the Associate of



Applied Science (AAS) degree. Specifically, this four-year degree is designed to broaden career options for graduates by preparing them for supervisory and management positions.

To support and strengthen the region’s workforce and businesses, Midland College offers continuing education and workforce training programs. With regard to workforce training and education programs, the Carl D. Perkins Vocational and

Technical Education Act is an important source of federal funding for all community colleges, including Midland College. Named for Senator Carl D. Perkins of Kentucky (1912-1984), Perkins Act funding is intended to provide students with both the academic and technical skills that are essential for success in today's knowledge- and skills-based economy. Reauthorized in 2006 (through 2012), the Perkins Act provides approximately \$1.3 billion in federal funding for career and technical education to school districts and community colleges in every state.

Perkins-funded education programs support and promote the skilled technical workforce of not only Midland, but the entire Permian Basin region that benefits from Midland College programs. Approximately half of Perkins Act funding goes to student support services and half to program improvement.

"Strong state leadership advocating for adequate funding of workforce education programs is crucial. Community colleges are the workhorses of the workforce education system in Texas. Perkins funding helps community colleges update and develop new programs, and it keeps community college faculty up-to-date with industry and technology change."

**—Dr. Deana M. Savage
Associate Vice-President of Instruction
Midland College**

Midland College's Career Center assists students enrolled in career and technical programs who have demonstrated financial need. The Center offers an array of services such as its textbook lending library that is an alternative to purchasing textbooks. Transportation assistance and child care services are also available. The Career Center offers academic tutoring for students and seminars on how to improve study skills. It also offers both academic and personal counseling, along with community referrals to social service agencies. The goal for the Center and its staff is to help students in career and technical programs successfully complete their education.

Midland College faculty undergo frequent and rigorous professional training and development to stay abreast of trends and technology in order to teach up-to-date technical skills. Classroom equipment and computers, including software,



are regularly updated to provide state of the art technology so that students can learn using current tools and techniques.

Specific examples of Perkins Act-funded programs can be found in the College's Division of Technical Studies, and many of these classes are taught at the Advanced Technology Center (ATC), pictured above. The ATC is supported by a unique educational partnership involving the college, the Midland Independent School District and various community partners. Occupying 85,000 square feet, the ATC has 700 up-to-date computer terminals with Internet access, a multimedia distance learning classroom equipped with satellite downlink capacity, and a tiered lecture hall.

The ATC also has a rapid response training area that can be adapted and designed for specific training objectives. In addition, the ATC is home to the Midland College Workforce Training Department, which responds to local business and industry requests for short-term customized training courses.

The ATC has a number of specialty laboratories, including introductory health services labs, welding labs and automotive technology labs. One of Midland College's best-known and most active Perkins-funded programs is its Automotive Technology Program.

The Automotive Technology Program is National Automotive Technicians Education Foundation (NATEF)-certified, and its curriculum is carefully designed to prepare students to be Automotive Service Excellence-certified automotive technicians. The NATEF is a non-profit organization that evaluates technician training programs and makes recommendations that qualify programs for certification.

Midland College's Automotive Technology program offers numerous specific training specialties, including the areas of automotive shop

management, electrical systems and electronic controls, brake systems, suspension and steering, heating and air conditioning, engine repair, engine performance, manual drive trains and axles, and automatic transmissions/trans axles.



It takes two years to complete the 64 to 67 semester credit hours necessary for an AAS in Automotive Technology at Midland College. The College also offers four certificate options, each consisting of 19 to 24 semester credit hours, and

requiring approximately one year to complete. Certificate options are: the Basic Automotive Certificate, the Advanced Automotive Certificate, the Automotive Management Certificate, and the Collision and Repair Certificate.



Instructors and students at the Midland College Advanced Technology Center from left to right:

Jay Berry - Instructor; Bryan Riley - student; Ted Sumners - Director; Celeste Pinal - student; Matt Linnenkugel - student; Anthony Cummins - student; and Daniel Garner - Instructor.



Perkins-Funded Workforce Education: Profiles in Success

August 2008 marked the beginning of a year-long project for 18 Midland College Automotive Technology students. These students were at Midland College under its Dual Enrollment High School Program that allows Midland area high school students to take courses on campus for college credit. It was a project that would become all-consuming, but one that would be enriching to each of them, as well as to their instructors, and the project's beneficiary.

Under the leadership of professor and program director Ted Sumners, students participated in the Make-a-Wish Foundation's project for Miss Krystle Hawkes, a young high school student who had been diagnosed with a life-threatening illness. Krystle's wish was to have the 1968 Chevelle Malibu given to her by a family friend refurbished into "the muscle car of my dreams."

Professor Sumner and his students agreed to take on the challenge of restoring the vehicle and began by dividing up into teams: paint and body; interior and upholstery; engine; and brakes and chassis. Each student and team underwent extensive training with their teachers and experts from local businesses specializing in automotive repair. They

worked on the car during class hours and after school daily, as well as on weekends, on Memorial Day and even (to the chagrin of their moms) on Mother's Day.

The students executed a massive overhaul of the car: they detailed the engine, aligned the chassis and the brakes, installed new upholstery and prepped the Malibu's body for a custom paint job. In May of 2009, they presented the car to Krystle at the Advanced Technology Center, in front of a full house—one in which there was not a dry eye to be found.

Anthony Cummins, Celeste Pinal, Bryan Riley and Matt Linnenkugel were four of the students participating in the Make-a-Wish project. A year and a half later, they are enrolled in Midland College and finishing their AAS degrees in Automotive Technology. Between the ages of 18 and 20, all plan to continue higher education, and each one wishes to pursue a career in engineering.

Anthony was student president, which meant he was in charge of motivating and leading his peers in the Malibu restoration project. The experience helped Anthony focus his goals into earning a



From left to right: Bryan, Celeste, Anthony, and Matt

mechanical engineering degree at either Texas Tech University or University of Texas (UT) Permian Basin after he completes his AAS at Midland College. He would like to work for an automotive manufacturer such as Ford, with the aim of working on more fuel efficient cars and specifically, to make cars more functional and cost efficient for the consumer.

Celeste was student vice president and also active in the Malibu project. Celeste learned that what had always been an interest to her, tinkering with cars, was actually a marketable talent. Her penchant for dismantling and reassembling engine components proved a great asset to her team, and has motivated her to want to pursue a mechanical engineering degree after her AAS. Celeste is considering programs at either New Mexico State University at Las Cruces or UT Permian Basin.

Bryan enjoys automotive work so much that he makes a point of characterizing it as more of a passion than a career. From the Make-a-Wish experience, he learned that a project

of this scale requires an incredible amount of patience. Problems must be diagnosed and various approaches tried before settling on the best solution. Bryan says that even though his own father was “a paint and body man,” and that he knew what exacting preparation a first-rate paint job requires, he can now say with certainty that he “would take ‘mechanic-ing’ over paint and body any day!” Bryan plans to earn a degree in mechanical engineering, with a minor in teaching. He would like to see how his engineering skills apply in the oilfield, or perhaps one day, own his own shop. Of one thing he is quite sure: Bryan would like to teach once he retires from his engineering career.

Matt also worked on the Make-a-Wish Malibu restoration project, and says the experience helped him focus and fine-tune his interest in engineering. For Matt, the best part of the process was the team environment. Working alongside other students and teachers equally committed to their work for many months eventually gave Matt the impression of a second family. He is interested in aerospace engineering and participated in the NASA High School Aerospace Scholars summer program. He has been accepted to the University of Texas, and through its Coordinated Admission Program, he will complete core coursework at UT Permian Basin before starting upper division courses at UT Austin in 2011. Matt will earn his AAS at Midland College, and after earning his Bachelor’s in aerospace engineering, he plans to study for his Master’s.



The Texas Workforce Investment Council promotes the development of a well-educated, highly skilled workforce for Texas and advocates a workforce system that provides quality workforce education and training opportunities.

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