

Community and Technical College Site Visits

To gain an understanding of the challenges facing community and technical colleges, Comptroller staff visited schools throughout the state. Staff conducted interviews with college officials, area businesses, local organizations and others to gain a perspective on work force needs and the education service providers in those communities.

Community college districts chosen for these site visits were selected based on several criteria. To get a cross-section of the state's community and technical colleges, careful consideration was given to include institutions representing various geographic regions in both rural and metro parts of the state, as well as schools with both large and small enrollments.

The following section describes some of these institutions and the unique ways in which they serve their communities and provide Texas employers with workers trained to perform the jobs that are vital to the state's economic future.

Alamo Academies

San Antonio's Alamo Area Academies educate and train high school students for high-skill, well-paid industry jobs. The academies are a partnership of community businesses, the Alamo Community College District (ACCD), 17 school districts in the San Antonio area, the city of San Antonio, Alamo Workforce Development and others.¹

ACCD in partnership with the independent school district (ISDs) in the San Antonio area offers industry-driven dual-credit courses through three individual Alamo Academies: the Alamo Area Aerospace Academy, which started in 2001; the Information Technology and Security Academy, which opened in 2002; and the Manufacturing Technology Academy, which opened in 2004. The two-year Alamo Academy high-tech training and education program is free to high school juniors and seniors. ACCD provides the instruction and facilities at no cost, and the ISDs pay for the student's books and transportation.

Academy students can earn 30 hours of college credit towards higher education and at the same time train for well-paid careers. In addition to the course work, all Academy students must work 40 hours per week in an eight-week paid internship between their junior and senior year. Students are also offered job shadowing and mentoring opportunities. In a recent article a graduate of the Manufacturing Technology Academy was quoted as saying, "I had great teachers that gave us fun and exciting lab projects that allowed me to be more creative and get more hands-on experience."² He was hired while finishing his last year of high school and now earns \$18 an hour in addition to overtime and benefits.³

Of just more than 500 students attending the Alamo Academies through Spring 2008, 375 have graduated. A high percentage of Academy graduates — 96 percent — get a job in their area of study or go on to community colleges or four-year institutions.⁴ At Lockheed Martin, one of the founding partners of the Aerospace Academy, students from the program now account for about 13 percent of their San Antonio work force.⁵

Peggy Walton, at the National Association of Manufacturers, has complimented the Alamo Manufacturing Technology Academy (MTA) saying, "What we need is a whole new system of technical education. I'm really excited about what they're (MTA) doing."⁶ Dr. Zaragoza at the ACCD says of the Academies, "It is a win for students, employers, and the community."⁷ The Academies are teaching students marketable skills while also providing the high-skilled workers needed by today's employers.

Bell Helicopter and Amarillo College

Over the last decade, Amarillo College and Bell Helicopter Textron Inc. have collaborated to train hundreds of workers for Bell's military aircraft assembly center in Amarillo. The company has worked closely with Amarillo College to develop a training program preparing students to work at the assembly center.

Students enroll in the training program through Amarillo College, a community college, and are responsible for paying about \$1,500 in tuition for the program. Upon completing the training, students are guaranteed a preferential hiring interview at Bell. Students who interview but do not receive jobs immediately remain in the applicant pool for future job openings. Candidates often are interviewed by several supervisors before receiving a job offer.⁸

As of June 2008, 424 students had graduated from the program and 218 had been hired by Bell Helicopter.⁹ Starting hourly wages range from \$12.50 to \$22.70, depending on previous experience.¹⁰ Graduates of the program who do not go to work at Bell have learned skills they can use for similar jobs in the areas of composites, machining and assembly. They receive official college transcripts they can use to help land those jobs.

Community support, including the training partnership with Amarillo College, played a key role in Bell Helicopter's decision to locate the assembly center in Amarillo. The facility now employs 731 Amarillo residents, with plans to expand in the near future.¹¹ This partnership has reaped rewards for the company, the community college and the community.

El Paso Community College: Work Force Development and Lifelong Learning

The El Paso Community College (EPCC) Division of Workforce Development and Lifelong Learning provides education and training services through partnerships with industry as well as the Regional Economic Development Corporation, the Greater El Paso Chamber of Commerce, El Paso's Department of Economic Development and Upper Rio Grande Workforce Solutions.

From 2003 through October 2008, the division received more than \$14 million in public and private funding for business and work force development activities. Businesses ranging in size from one employee to more than a thousand have benefited from the division's resources. They include health care providers, manufacturing companies, shipping and distribution operations, retail and wholesale trade and customer contact centers.

Curriculum development that meets the area's work force needs is an ongoing process. The college has, for example developed training programs for two El Paso hospitals and five area plastics manufacturers.

EPCC's Institute for Customer Service Excellence has developed customized training for the retail industry and customer contact centers. Successful program participants receive certification from the National Retail Federation.

EPCC's Workplace Literacy Department has developed a statewide, customized training program for workers with limited English proficiency. The program, created for Texas LEARNS, provides curricula related to sales and service, healthcare and manufacturing.

EPCC's Small Business Development Center is developing a manufacturers' Web site for the El Paso, Dona Ana County, New Mexico and Juarez, Mexico region. The Web site, which will include 500 companies, will enhance the development of supplier relationships and product sourcing.¹²

Howard College

Howard College in Big Spring serves 13 surrounding counties covering 13,000 square miles, and serving almost 13,000 students.

To cover its vast service area, Howard College employs “The Virtual College of Texas” (VCT), a collaborative of Texas public two-year colleges that shares distance-learning courses among its members. During the fall 2008 semester, 149 Howard College students were enrolled in 103 VCT courses.¹³ Additionally, Howard College offered 75 courses online, with 1,154 student enrollments.¹⁴

Howard College’s Southwest Collegiate Institute for the Deaf (SWCID) is the world’s only community college program for the deaf.¹⁵ SWCID began operation in 1980 on the site of the former Webb Air Force Base. Completion of a new work force training center on the SWCID campus to house building trades, welding and automotive training programs is slated for Spring 2009.¹⁶

The campus serves a primarily deaf population, offering programs ranging from graphic arts to dental laboratory technology. All faculty and staff on campus can communicate in sign. Howard College also is working with regional day deaf schools to provide their students with dual-credit courses.¹⁷

Howard College also serves inmates at the Eden Detention Center, Big Spring Federal Correctional Institute (FCI) and the Cornell Correctional Centers. Howard College offers classes in computer, masonry, plumbing, electrical, heating and air conditioning, carpentry, drafting, horticulture, pre-industry, high-tech soldering and executive housekeeping through training offered at the FCI and the Eden Detention Center. College courses also are available at FCI, offering inmate students the opportunity to pursue a certificate or associate degree in business. The four Cornell Correctional Centers and FCI also offer adult basic education, English as a second language and GED classes.¹⁸

Lamar Institute of Technology

The Texas State University System contains three two-year Lamar Colleges. The Lamar Institute of Technology (LIT) offers an Associate in Applied Science.

Programs offered at LIT include welding, emergency medical services, dental hygiene and health care. Work force training is offered as a non-credit course and some foreign companies have asked LIT to train their employees. After LIT receives a request for work force training, it develops a curriculum for the individual company’s needs.

Despite the high interest in courses offered at LIT, the school suffers from a space deficit of around 88,000 square feet. Technical training programs are housed in older facilities that are not suitable for classroom and lab space. Health care classes in particular are limited due to space restrictions. In some instances, LIT has provided companies with customized training off site.¹⁹

The number of students attending LIT has continued to increase, from 2,422 students in 2002 to 2,590 students in 2007 (despite a slight decrease in 2006 due to the effects of hurricane Rita).²⁰ In fiscal year 2007, LIT awarded 394 Associate degrees and 148 Certificates. In addition, LIT job placement rates have exceeded 98 percent 2002 through 2006. In fiscal year 2006, LIT boasted a job placement rate of 99.2 percent.²¹

The Laredo Community College Economic Development Center

The Laredo Community College (LCC) Economic Development Center (EDC) attempts to coordinate work force, economic and community development efforts within the college's district. The EDC focuses on strategies designed with the help of area businesses to meet key industry needs, with particular concentration in the oil and gas, manufacturing, hospitality, international trade and health sectors.

The college EDC plays an active role in Laredo's economic growth by surveying area employers to identify their training needs and integrating them into LCC's curriculum. In this way, LCC can ensure that its students have the tools they need to prosper in the local as well as global economies.

For example, when Conoco-Phillips, one of the state's largest oil producers, asked LCC to consider offering a training program for lease operators, the EDC led the development of the program. With the company's support, the EDC is creating a series of associate degrees in applied science, safety training and industry awareness to prepare individuals for jobs in the oil and gas industry.²²

The EDC also is developing a Workplace Literacy Council, which will address the challenges facing the large share of the South Texas population that lacks the mastery of English needed to perform basic job tasks.²³

Lone Star College

The Lone Star College System, serving the region north of Houston, offers classes to about 50,000 students, compared to the community college average of 5,000.

The system recently created a new administrative department to negotiate contracts that would allow it to access programs offered at other colleges that it does not currently offer. The system also created Lone Star Corporate College, a new office designed to streamline its customized training operations. In a recent press release, the system listed Anadarko, Halliburton, Hughes Christensen, Conroe Regional Medical Center and Houston Airport System as corporate partners.²⁴

In some cases, Lone Star College approaches employers and develops customized training programs for current employees. In addition, employers routinely take advantage of its programs to teach current employees new skills and employers routinely use the community colleges to gain employees with needed skills. For example, Lone Star College has worked with Exxon to develop employee training programs. Exxon bought the equipment needed for the training classes and Lone Star College technicians developed the program.²⁵ According to Richard Carpenter, chancellor of Lone Star College, the Exxon program was designed because "we need more people with tomorrow's skills."²⁶

Lone Star currently offers 67 certificates in diverse fields such as digital publishing and machining across five campuses through its work force program. The system also has issued bonds for the construction of a new healthcare education building.

McLennan Community College and the Heart of Texas Workforce Center

McLennan Community College (MCC) and the Heart of Texas Workforce Center work together to train workers for employers in McLennan and Falls counties. MCC's Corporate and Professional Training Department delivers consulting services and customized corporate training. Trainers listen to each client's challenges and design solutions to meet their goals.

Over the past three years, 23 local employers have received Employee Development Fund grants from the Heart of Texas Workforce Board. Using discretionary training funding, the Heart of Texas Workforce Center and MCC have focused on the immediate needs of local businesses, promptly designing and delivering training initiatives in computer technology, Occupation Safety and Health Administration safety certification, English and Spanish workplace readiness, customer service and supervisory leadership, among others. This partnership between local employers, the Heart of Texas Workforce Board, and MCC has provided training to more than 830 workers over the past three years.

Without the grants, training for these employers may not have been available. The opportunity presented by the Employee Development Fund enhanced the skills of individual employees and improved business productivity. MCC reports that the partnership strengthened its business relationship with each employer and the Heart of Texas Workforce and appreciates the value of the grants to local employers.

Midland College

Midland sits atop the Permian Basin, the heart of the West Texas oil and gas industry. Midland College is working to keep the students of the Permian Basin at the forefront of the energy industry, moving their education beyond oil and gas to include other sources of energy.

The college is developing an Energy Tech Program to meet local employer needs in the fields of wind, petroleum, solar and nuclear power. Midland Independent School District will partner with Midland College to offer dual-credit courses in the program beginning in fall 2009. Deana Savage, Midland College's associate vice-president for Instruction, says local energy employers are very supportive and that the college is working with them to develop the program.²⁷

Midland College will expand its Field Services Technician program to include the Energy Tech Program. The Field Services Technician program provides students with the understanding and skills needed to maintain, repair and upgrade programmable logic controllers and other electronics systems used in the petroleum industry. The course of study is designed to assist students in developing skills, attitudes and competencies for future employment; to upgrade existing skills; or to prepare them for further study at a university.²⁸

The Permian Basin Workforce Development Board reports that jobs for energy technicians increased by 100 from September 2008 to November 2008 and by 600 in the past 12 months.²⁹

According to the American Wind Energy Association, the United States currently has more than 11,000 MW of installed wind energy capacity. Research conducted by Roger Bezdek for the American Solar Energy Society (ASES) concluded that in 2006 the wind industry created 16,000 direct jobs and 36,800 total jobs. A study by the IC² Institute reports that Texas could add 123,000 new high-wage jobs by 2020 to its economy by actively moving toward solar power.³⁰

Two Innovative Programs at Odessa College

Odessa College was established in 1946 with 184 students, offering classes in the old Odessa High School after hours. Today, the school's home is a \$55 million main campus in Odessa covering 80 acres, including 25 buildings with more than 150 classrooms, laboratories and other facilities. The college annually enrolls about 5,000 students in academic and occupational/technical courses.³¹

Welding Training

Odessa College has transformed a former woodworking shop into an award-winning, state-of-the-art welding facility. The American Welding Society gave the Odessa College Welding Training Center its "Image of Welding Award" at its national conference on October 6, 2008. Odessa College was one of five campuses in the nation and the only campus in Texas to receive the award.³²

In January 2008, Odessa College received a \$1.7 million, three-year grant from the U.S. Department of Labor to expand its welding program. The grant allows Odessa College to offer a six-week certificate program tuition-free to students. Students also receive personal welding equipment such as goggles and gloves to take to subsequent employment. In all, the grant is expected to serve 500 students.³³

After completion of the grant, Odessa College will continue the welding training program. For an investment of six weeks of training and an estimated cost (for in-district students) of \$800, which includes tuition, books and equipment, graduates will be able apply for employment as trained welders with an average beginning annual salary of \$40,000 in West Texas.³⁴

Occupational Safety and Health Technology

Odessa College also offers a 100 percent online course in occupational safety and health technology (OSHT). The OSHT degree is designed for people who want to advance in a company safety or environmental department or for those seeking employment in the field. The two-year program produces safety and environmental professionals with the background needed to create a safe and healthy work environment that complies with current regulations.³⁵

The program allows students to pursue their careers without interruption while enrolled in school. The estimated salary for an OSHT officer ranges from \$30,000 to \$50,000 annually.

The Southern Association of Colleges and Schools has approved the OSHT degree program. Odessa College is one of only six Texas community colleges approved to offer a full online degree program.³⁶

Paris Junior College

As part of a \$1 million Skills Development Fund grant, Paris Junior College (PJC) has partnered with L-3 Communications Integrated Systems to train workers for entry-level aircraft maintenance positions. The partnership will create 509 jobs in the region and upgrade an additional 1,226 jobs with average hourly wages of \$20.08.³⁷

L-3 Communications, headquartered in Greenville, Texas, is the nation's sixth-largest defense company. It is a leading defense contractor in intelligence, surveillance and reconnaissance systems, secure communications and aircraft modernization and maintenance. L-3 also develops homeland security products for aviation, port, maritime and cargo security.³⁸

The junior college's program offers a state-of-the-art training facility at Majors Field, including a 6,000 square-foot aircraft hangar. Graduates receive a structural aircraft maintenance certification and gain the skills needed to begin work immediately.³⁹

In September 2008, PJC, Northeast Texas Community College and Texarkana College partnered with the Regional Advanced Manufacturing Academy (RAMA) Consortium to create a new program funded by a \$1.2 million Skills Development Fund grant. The program will train students as machine operators, maintenance technicians and production team leaders and supervisors. It will create or upgrade 709 jobs with an average hourly wage of \$18.24. RAMA is a 14-member consortium, including companies such as Alcoa Mill Products, Campbell Soup and Kimberly-Clark.⁴⁰

The three colleges are sharing program responsibilities. PJC offers training in manufacturing applications, while Texarkana Community College teaches safety and lien concepts and Northeast Texas offers logistical concept training.⁴¹

South Texas College: Fuel for the Valley's Economic Engine

South Texas College (STC), nestled in the heart of the Rio Grande Valley, has five campuses in McAllen, Rio Grande City and Weslaco.⁴² STC has a total enrollment exceeding 20,000 and employs more than 1,600 faculty and staff members.⁴³

The college offers more than 100 degree and certificate options, including associate degrees and a bachelor's degree program. STC's Bachelor of Applied Technology (BAT) is one of only three programs of its kind offered at a Texas community college. STC also has a dual enrollment program currently serving about 6,000 high school students.⁴⁴

South Texas College has developed a Partnership for Business and Industry Training Center that has offered classes throughout Hidalgo and Starr counties. It creates classes in collaboration with client businesses to train either prospective or current employees. In addition, companies relocating to the Rio Grande Valley can take advantage of this partnership to train their transplant employees.⁴⁵ South Texas regional job growth has soared with nearly 50,000 jobs added in the past five years.⁴⁶

STC also participates in the North American Advanced Manufacturing Research and Education Initiative (NAAMREI), a consortium aimed at developing a skilled manufacturing labor force. The University of Texas—Pan American Rapid Response Manufacturing Center provides services, a location for training and technological resources for STC students.⁴⁷

Side by Side: Tarrant and Dallas Counties Community College Districts

The Tarrant County and Dallas County community college districts serve more than a quarter of Texas' entire population in the Dallas/Fort Worth Metroplex. Tarrant County College district (TCC) has four campuses, with a fifth to be added by Fall 2009. Dallas County Community College District (DCCCD) has seven separately accredited colleges within its district. Those colleges, while being responsive to the needs of their own communities, must also collaborate within the DCCCD system, just as the two districts collaborate across their territorial boundaries.

DCCCD is Texas' largest undergraduate institution, with nearly 62,000 students enrolled in fall 2008. As with many community colleges, most of those students do not attend classes full-time; nevertheless, at a 15-credit hour standard, the district has more than 34,400 full-time-equivalent students. TCC is the smaller of the two with 39,000 enrolled students, but both institutions are growing fast, as are most Texas community colleges.⁴⁸

In addition to standard associate of arts and sciences degrees and core academic curriculum courses, TCC and DCCCD provide more than 150 applied science degree and certificate programs as well as numerous continuing education courses for skills enhancement and contract training programs for employers.⁴⁹ The districts work closely with their local work force development boards to address the demand for skilled, educated workers in certain areas of the regional economy.

Because they share a major metropolitan area, TCC and DCCCD have many overlapping areas of emphasis in preparing their students for job opportunities. Both offer multiple programs in the medical and allied health fields, but the individual programs have some differences: TCC focuses on respiratory health, nursing and emergency medical services, while DCCCD offers some more resource-intensive courses in sonography, MRI, echocardiology and radiography. TCC has offerings in energy construction (not surprising, given the area's natural gas production boom); Dallas has several programs in computer technology. Both districts also are seeing increasing demand from the manufacturing sector.⁵⁰

DCCCD's colleges conduct dozens of employer-specific contract training courses over the course of a year. For the last four years, DCCCD reported about \$10 million in revenue from such contracts.⁵¹ In addition to training contracts with employers, individual colleges within the DCCCD system sometimes subcontract with each other to fulfill specific training needs.

Both districts, as well as the work force development boards, are aware of the challenges and opportunities facing the Metroplex: an aging work force ready to take their expertise into retirement; a growing population that must have the job skills to replace those employees; and business and industrial sectors that want trained workers now.⁵² Since 1965, when both TCC and DCCCD were created, these institutions have worked side by side to answer their communities' needs.

Skills Training Center at Tyler Junior College

Tyler Junior College offers several career training programs at its Skills Training Center on the school's West Campus. The facility houses the only certified auto tech program in a Texas community college. The program is technology-intensive, as today's vehicles are increasingly complex and often have more than a dozen onboard computers. Students are expected to have a background in math and physics and an adequate reading level. Tyler Junior College expects to expand the program to cover technologies such as biodiesel and ethanol fuels and fuel-cell vehicles.

The auto tech program is also dual credit, meaning that high school students can earn college credit and receive reimbursements from the school district for classes and certifications. A junior in high school can enroll in the two-year program and receive certification by August after graduation. With this first certification, a worker can perform 90 percent of the work performed at dealerships and repair shops.⁵³

Luminant, the power-generating subsidiary of Energy Future Holding Group, recently opened the Luminant Academy at the Skills Training Center; classes began in March 2008. The academy offers an 18-week Basic Skills Tool Belt Program for instruction simulation equipment, industrial controls, pumps, piping, safety training, hydraulics and rigging systems.⁵⁴ Students train for different periods of time depending on the experience needed. The academy will train 200 to 300 students per year. Students earn an average \$25 per hour, or \$52,000 annually, upon graduation.⁵⁵

Luminant invested \$5.9 million in the 24,000-square-foot facility, including \$1.7 million for construction, \$3.7 million for simulators and \$500,000 for training equipment.⁵⁶

Endnotes

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- ⁵¹ Information provided by Don Perry, “Informative Report No. 54: Receipt of Business and Corporate Contracts,” September 23, 2008, p. 137 of 170.
- ⁵² Interview with Don Perry, director, Dallas County Community College District; interview with Richard Perez, manager, Resource Development and Deployment, Workforce Solutions Greater Dallas, Dallas, Texas, September 23, 2008; interview with Gladys Emerson, director of Workforce Services, Tarrant County College District; and interview with Jann Miles, Strategic Directions Unit director, Workforce Solutions for Tarrant County, Fort Worth, Texas, September 22, 2008.

- ⁵³ Elise Mullinix, "TJC Auto Tech Program Earns NATEF Certification," *News @ Tyler Junior College*, (July 1, 2008), pp. 1-2. http://www.tjc.edu/news/article.asp?message_id=610. (Last visited December 5, 2008.)
- ⁵⁴ "New Luminant Academy Offers Special Skills Training," *Tyler Morning Telegraph* (March 6, 2008), <http://www.tylerpaper.com/article/20080306/NEWS08/803050307>. (Last visited November 18, 2008.)
- ⁵⁵ Interview with Fred Peters, director of Marketing and Public Information, Tyler Junior College, Tyler, Texas, November 20, 2008.
- ⁵⁶ Monica Talmage, "Luminant Academy Launches Program," *Apache Pow Wow: The Tyler Junior College Student Newspaper Since 1927*, (April 4, 2008), p. 1, <http://media.www.tjcnewspaper.com/media/storage/paper1314/news/2008/04/04/Expansion101/Luminant.Academy.Launches.Program-3322583.shtml>. (Last visited December 5, 2008.)