

## CHAPTER 5

# Challenges Facing CTE

Despite the obvious benefits of postsecondary education, both for individuals and the state's economy, far too many Texas high school students fail to pursue it. Students may forego further education for a variety of reasons that tend to fall into three broad categories:

- a lack of knowledge about educational opportunities and how to take advantage of them;
- bureaucratic obstacles that make it more difficult for students to acquire postsecondary education, particularly career and technology education; and
- financial barriers and the inability of financial aid systems to reach those most in need.

All of these challenges are common among the students most likely to benefit from postsecondary career and technology education.

### Inadequate Knowledge

Many students — and their parents — simply are not aware of the full range of postsecondary educational options they have.

Community colleges generally lack the budgets needed for extensive advertising and outreach efforts to spread the word about their programs. And unfortunately, teachers and counselors often tell students little or nothing about technical training.

In a 2003 survey of 13,803 Texas high school seniors, 73 percent said that counselors encouraged them to go to college, while 83 percent said their teachers did. About 71 percent, however, said that counselors “haven’t said anything” about “trade school.” A majority also said that teachers and parents never mentioned the option (66 percent and 56 percent, respectively).<sup>1</sup>

Middle and high school counselors typically face numerous demands on their time, includ-

ing the preparation and administration of state accountability tests, which may prevent them from devoting the time needed to understand the range of technical training available.<sup>2</sup> State policy, moreover, may discourage districts from adding more counselors, even if they have the resources to do so.<sup>3</sup> The Texas public school financial accountability system sets a target of 65 percent of all spending dedicated to instruction, and counselors are not considered an instructional expense.<sup>4</sup>

The 2003 survey also found that many students find it difficult to complete the college application process and do not receive much help with it from high school staff. More than a third (39 percent) of the seniors had never even met with their high school guidance counselors, and 55 percent had never discussed letters of recommendation with them. About 50 percent of the seniors had never discussed financial aid options with counselors.<sup>5</sup>

### College for All Texans Campaign

To boost college attendance rates, the 2001 Texas Legislature directed the Texas Higher Education Coordinating Board to create an awareness and outreach campaign called “College for All Texans.”

THECB launched its College for All Texans marketing campaign in 2002, with the slogan “*Education: Go Get It.*” During the 2002-03 biennium, the campaign included radio and TV ads, movie theater spots, posters, banners and a Web site. The effort became a national model for marketing higher education; Georgia and West Virginia even paid the state to use the Texas slogan.

Due to the high cost of the marketing effort, however, as well as the difficulty involved in measuring its successes, THECB shifted its resources to its GO Centers and Web site.<sup>6</sup>

### Go Centers

GO Centers, a THECB initiative involving partnerships between higher education and public

Many students and their parents simply are not aware of the range of postsecondary education options available to them.

“Some students need to start working and can’t wait to get educated. They’ll take a job in fast food, but they don’t know about opportunities in logistics and warehousing.”

—Linda Berenice Sarabia, Secretaria, Association of Laredo Forwarding Agents, Inc.

More than a third (39 percent) of the seniors had never even met with high school guidance counselors.

"I think counselors should have more time one-on-one with kids to see where they are skilled. If my counselor had known I had taken apart electronics all of my life, she might have recommended Texas State Technical College. Instead she looked at my grades and my SAT and recommended I go to a university."

— Nat Lopez, Manager Core I&M, Special Services, AT&T Texas

schools, are one-stop centers providing assistance to prospective college students.<sup>7</sup>

GO Centers typically are located in high schools, but also can be placed in middle schools, community colleges, public libraries, universities and community centers. They are staffed by faculty members (counselors or teachers) as well as college students from neighboring colleges and universities. The college students mentor high school students and assist them with college selection, college forms, college admission exams, scholarship applications and financial aid information.

The centers contain Internet-linked computers and printers, allowing staff and students to access college and financial aid information and forms. Mobile GO Centers mounted on trailers travel to areas that lack a permanent facility.

GO Centers were first introduced in regions of the state with low college participation rates and significant numbers of low-income, at-risk, first-generation or minority students. THECB's goal is to offer GO Centers to all Texas students. As of January 2008, 44 higher education institutions, 53 elementary and middle schools and 182 high schools in Texas were participating in GO Center activities. The centers had served 106,052 students and 2,131 parents as of January 2008.<sup>8</sup>

The first 40 GO Centers, created in the 2003-04 school year, are credited with increasing application rates to Texas colleges by an average of 21.9 percent in the areas they serve. Rate increases were even higher for low-income and Hispanic students, at 28.9 percent and 30.8 percent respectively. THECB credits the GO Centers with increasing Texas college enrollment rates for two- and four-year schools by 4.6 percent for the state as a whole, and by 9 percent and 9.2 percent, respectively, for Hispanic and low-income students.<sup>9</sup>

#### Web site

The Web site created for the College for All Texans campaign (<http://www.collegefortexans.com/>) remains active, although it has not been significantly updated since 2003. Its focus is on four-year colleges. While it contains some information on career and technical education, it is not displayed prominently on the site.

THECB has hired the University of Texas System to update the site, and at this writing expects it to be rolled out soon.<sup>10</sup>

Other states use integrated Web portals to help students and parents plan for careers and for education at two-year institutions. For example, the College Foundation of North Carolina Web site (<https://www.cfnc.org>) allows students to research careers, compare both two-year and four-year institutions and research financial aid.<sup>11</sup> *Missouri Connections* (<http://www.missouriconnections.org/>) identifies top careers in the state and links to sites that enable students to compare two-year institutions by program, type or geographical location.<sup>12</sup> Kentucky's Web portal, *e3.ky.gov* (<https://e3.ky.gov/Default.aspx>) integrates information for students, job seekers and economic developers.<sup>13</sup>

#### Available Data

Texas' educational data systems contain a wealth of information that should allow for systematic evaluation of the relative success of our public schools, colleges and universities.

The data, however, are not being used for this purpose.

The 2001 Texas Legislature's H.B. 1144 required the state's commissioners of education and higher education to coordinate and exchange individual student record information so that student academic performance can be assessed throughout their educational careers.<sup>14</sup> Texas now has the data systems in place to analyze the value of the state's postsecondary institutions and programs, providing state leaders with information that could help guide them in developing policy.

Data on Texas public school students are gathered and maintained in the Texas Education Agency's (TEA's) Public Education Information Management System (PEIMS), which collects information needed for state and federal reporting requirements. PEIMS includes data regarding student demographic and academic performance, school district personnel, school finances and organizational information.<sup>15</sup> THECB collects student information on demographics and academic attainment through its Coordinating Board Management (CBM) Reports.

The Texas P-16 Public Education Information Resource (TPEIR) is a joint, cross-agency project managed by TEA and THECB that contains education information from both PEIMS and CBM reports. This information can be used to track the progress of Texas public school students through both secondary and postsecondary education.<sup>16</sup>

The Texas Workforce Commission (TWC) has records of worker Social Security numbers (SSNs), earnings attributed to each SSN in a given quarter and corresponding employer information through its Unemployment Insurance (UI) database. This database can also identify the industry (or industries) the employer is engaged in as well as the physical location of the employer's facilities.

THECB's Automated Student and Adult Learner Follow-Up System (ASALFS) tracks Texas public community and technical college students after they leave college.<sup>17</sup> ASALFS gathers information for two-year college graduates, program completers and non-returning students and electronically matches student SSNs with TWC UI wage records, U.S. Department of Defense records, federal databases of civil employees and THECB's public higher education enrollment database.

## Policy Barriers

Texas faces growing shortages of the skilled workers that help attract and retain business. And certain state policies may contribute to these shortages.

As noted above, state education policy has largely been directed at preparing and encouraging high school students to pursue bachelor's degrees after graduation. While this is certainly desirable for many Texas students, it does not acknowledge the needs of thousands of students who, for various reasons, choose to follow a different path into the work force. And the recently implemented "four-by-four" requirements may actually steer students who could benefit from CTE education away from it.

Such policies may be sending the misleading message that career and technology education is not worthwhile. And they may encourage students to pursue degree plans for which they simply are not suited.

Using data from the Sloan Study of Youth and Social Development, for instance, scholar Charles Murray noted that "of those who entered a four-year college in 1995, only 58 percent had gotten their BA five academic years later," and concluded that "about a third of all those who entered college hoping for a BA leave without one."<sup>18</sup> Other scholars conclude that the college dropout number may be as high as 50 percent.<sup>19</sup> A 1995 study found that "there are almost twice as many 4-year college graduates as there are job openings that require this level of education," and that only 10 percent of ninth-graders would ultimately receive a four-year college degree *and* be placed in a job demanding that level of education.<sup>20</sup>

Instead, the state could offer multiple options for students to complete their graduation requirements, including CTE coursework among other disciplines. CTE courses could be incorporated into the state's four-by-four and recommended program requirements.

### Grade-Point Average Standards

H.B. 3851, passed during the 2007 legislative session, directs THECB to develop a standard method for computing high school students' grade-point averages (GPAs).<sup>21</sup>

The legislation was intended to resolve a situation in which colleges and universities usually must recalculate the GPAs of high school students to ensure uniform comparisons. Since the state has no uniform GPA system for high schools, districts calculate them in different ways. For instance, various school districts weigh advanced placement, honors and elective courses differently in calculating GPA. Furthermore, districts currently can decide which courses they will include in or exclude from a high school student's GPA.<sup>22</sup>

Rules recently proposed by THECB would allow only CTE courses that have "a university content connection such as Accounting" to count toward GPA calculation.<sup>23</sup> No other CTE classes would be included. THECB argues that students who take courses such as welding do so with an eye toward preparing for a career, and are usually bound for the work force or community or technical colleges — institutions that have open admissions and do not consider GPAs.<sup>24</sup>

Texas' educational data systems contain a wealth of information that should allow for systematic evaluation of the relative success of our public schools, colleges and universities.

THECB has delayed its final decision on GPA standards, with a final ruling expected as soon as December 2008.<sup>25</sup>

**Boundary Issues**

Residents within each of Texas’ community college districts pay taxes to support their college or college system. The district system, however, may create barriers for some students.

Students who do not reside in a community college district must pay higher tuition rates than area residents. This is true even if the student lives closer to an out-of-district campus than one within his or her own community college district. Such situations can deter students from seeking valuable postsecondary education and training.

Similarly, state policy prohibits a community college from delivering classes within another community college district without that district’s permission. This policy may prevent persons from obtaining training if they reside in a district that lacks the resources to provide it — and, again, if they live close to a district that *does* offer such training, they must pay more to obtain it.

While community colleges should and do make the educational needs of their taxpayers their first priority, the exclusion of out-of-district students — whether by policy or through prohibitively expensive tuition rates — is an issue that merits further study.

**Financial Issues**

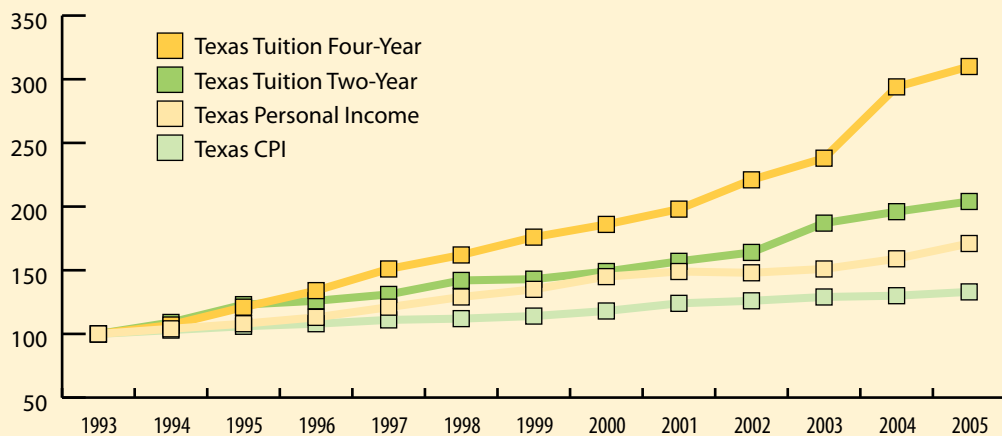
The skyrocketing costs of postsecondary education may represent the most significant obstacle to postsecondary education.

In recent years, college costs have risen at rates surpassing both general inflation and the rise in personal income (Exhibit 5-1). On average, the total costs for a four-year college in the U.S. are now above \$17,000 per year (Exhibit 5-2). And while Texas’ tuition and fees are somewhat lower than average, other expenses make the total cost of Texas higher education roughly even with national averages (Exhibit 5-3).

Many students and their parents feel overwhelmed at the prospect of two, four or even more years of costs for tuition, fees, books and transportation, as well as room and board. Regardless of their per-

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EXHIBIT 5-1  
Texas Consumer Price Index, Personal Income Versus Public Four-Year Institution and Two-Year Institution Tuition Rates, 1993 to 2005



Note: vertical scale is an index for which 1993=100.  
Source: Texas Comptroller of Public Accounts.

EXHIBIT 5-2

## National Average College Costs Estimates for the 2007-08 Academic Year

Sector	Tuition & Fees	Books & Supplies	Room & Board	Transportation	Other Expenses	Total Expenses
Public Four-year – In-State On-Campus	\$6,185	\$988	\$7,404	\$911	\$1,848	\$17,336
Public Four-year – In-State Off-Campus	6,185	988	7,419	1,284	2,138	18,014
Public Four-year – Out-of-State	16,640	988	7,404	911	1,848	27,791
Private Four-year – On-Campus	23,712	988	8,595	768	1,311	35,374
Private Four-year – Off-Campus	23,712	988	7,499	1,138	1,664	35,001
Public Two-year	2,361	921	6,875	1,270	1,699	13,126

Source: The College Board.

sonal ambitions and abilities, some Texas families believe they simply cannot afford college.

### Financial Aid

Options available to assist students and their families include student loans, either through the federal government or private financial institutions; state, federal and institutional grants; education tax credits; work-study programs; and tuition savings plans with favorable tax treatment. All can help high school graduates continue their education.

The two-year community college option can bring excellent returns on a relatively small investment

of money and time, particularly in light of rising tuition costs. And financial assistance and savings programs are available to help. Education grants such as the Pell Grant, 529 college savings plans and government-subsidized student loans such as Stafford loans can be used for both four-year and two-year colleges.

Most Texas financial aid, however, is awarded to four-year students. A study conducted by a University of Texas doctoral candidate found that in 2001-2002, students at four-year institutions in Texas were 1.7 times as likely to receive financial aid as those at two-year institutions. But the study

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EXHIBIT 5-3

## Texas Average College Costs Estimates for the 2007-08 Academic Year

Sector	Tuition & Fees	Books & Supplies	Room & Board	Transportation	Other Expenses	Total Expenses
Public Four-year – In-State	\$5,732	\$1,052	\$7,004	\$1,706	\$2,000	\$17,494
Public Four-year – Out-of-State	13,884	1,052	7,004	1,706	2,000	25,646
Private Four-year	17,392	961	5,846	1,186	1,524	26,909
Public Two-year – In-District	1,638	1,117	5,695	1,799	1,796	12,045
Public Two-year – Out-of-District	3,722	1,117	5,695	1,799	1,796	14,128
Technical Colleges – Resident	2,806	920	5,872	1,525	1,442	12,564
Technical Colleges – Non-Resident	6,426	920	5,872	1,525	1,442	16,183
State Colleges – In-State	3,475	783	3,234	2,546	1,848	11,886
State Colleges – Out-of-State	11,785	783	3,234	2,546	1,848	20,196

Note: Numbers may not total due to rounding.  
Sources: College For Texans and Texas Comptroller of Public Accounts.



also concluded that “students at the two-year institutions were much more likely to receive financial aid awards through grants and scholarships; and students at the four-year institutions were more likely to receive awards through educational loan programs.”<sup>26</sup>

### Aid Applications

Completing the Free Application for Federal Student Aid (FAFSA) is complicated and time-consuming. Yet states and schools determine the distribution of funds within their financial aid programs via the FAFSA; it is the first step in the financial aid process for all students.

A University of Chicago study noted that, “students who reported completing a FAFSA by May and had been accepted into a four-year college were more than 50 percent more likely to enroll than students who had not completed a FAFSA.”<sup>27</sup> The American Council on Education found that 850,000 students in 1999–2000 who were eligible for financial aid did not complete the forms needed to receive a Pell Grant.<sup>28</sup>

The Central Texas Futures Project surveyed 6,616 Texas high school seniors in eight school districts and found that “more than 60 percent of low-income students indicated that they did not know about the financial aid process.”<sup>29</sup> About half of the students in a 2003 survey of 13,803 Texas high school seniors had never discussed financial aid options with their guidance counselors.<sup>30</sup>

### Student Loans

Within the past year, opportunities for federal loans to community college students have decreased. Private lenders have reduced their loans to students, even those with federal guarantees backing them. More than 120 lenders had stopped participating in the federal loan program as of late Summer 2008, and some banks simply do not make *any* loans to students at two-year schools.

Lenders maintain that they are not excluding community colleges *per se*, but instead are avoiding loans that may have a relatively high risk of default or are simply unprofitable due to their relatively small amounts and short terms — unfortunately, conditions that neatly describe most community college student loans.<sup>31</sup>

In Spring 2008, Congress acted to shore up the student loan market by increasing the funding available for subsidized loans and allowing the federal government to buy outstanding loans from lenders unable to sell them in the open market.<sup>32</sup> To the extent that recent financial turmoil makes student loans more difficult to obtain or more expensive, it will exacerbate existing financial aid shortfalls.

### Allocation of State Financial Aid

THECB reports that in 2007, Texas students in public community and technical colleges made up just 38.4 percent of recipients of all types of financial aid (grants, loans and work-study arrangements), while university students accounted for nearly 60 percent.

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#### EXHIBIT 5-4

### 2007 Enrollments and Financial Aid in Public and Private Universities and Public Two-Year Colleges

Type of Institution	Number of Students Enrolled	Percent of All Financial Aid Recipients	Financial Aid to Institutions (in Millions)	Percent of Total Financial Aid Dollars
Public Universities	497,195	47.4%	\$2,976.9	55.6%
Public Two-Year Colleges	587,244	38.4	831.3	22.8
Private Universities	115,627	12.1	1,219.4	15.5
<b>Total</b>	<b>1,200,066</b>	<b>97.9%</b>	<b>\$5,027.6</b>	<b>93.9%</b>

Note: Public and private health-related institutions and private junior colleges included in recipient and aid dollar totals for calculating percentages.  
Sources: Texas Higher Education Coordinating Board and Texas Comptroller of Public Accounts.

And this occurred despite the fact that more students are enrolled in community colleges than in public universities, and that two-year enrollees include a larger share of minority and lower-income students than at four-year schools. Public community and technical college students received only 15.5 percent of all financial aid dollars (**Exhibit 5-4**).

The two state-funded student grant programs for public colleges and universities are the “Toward Excellence, Access and Success” (TEXAS) Grant and the Texas Educational Opportunity Grant (TEOG), both administered by THECB. The TEXAS Grant, the state’s largest state-funded financial aid program, covers tuition and fees at Texas colleges and universities. TEOG is specifically intended for financially needy students attending two-year colleges.

TEXAS Grant amounts are larger for university students because they are intended to cover the costs of tuition and fees. The approximate maximum grant amounts reflect that —\$2,585 per semester for students at public universities; \$865 per semester for community college; and \$1,325 a semester for technical college.<sup>33</sup>

Tuition and fees are much higher at universities, of course, but the *total* average expenses for all types of colleges are much closer (**Exhibit 5-5**). The average percentage of total costs covered by a grant award to a community college student is less than half of that for a university student.

The TEOG, intended for students enrolled at least half-time in a public community or technical college, is funded at \$7 million per year for the 2008-09 biennium, a level THECB calls “woe-

fully inadequate.”<sup>34</sup> In 2007, in fact, the legislative appropriation was even smaller, at less than \$5 million. Slightly more than \$4.7 million in TEOG funds were distributed to 3,707 students that year. THECB has asked for an additional \$193.6 million for the 2010-11 biennium to make TEOG available for an additional 98,425 students.

TEXAS Grant funds provided more than \$175 million to 52,562 students in 2007, but only 11.6 percent of this amount went to community and technical college students.<sup>35</sup>

Both types of grants are intended to assist students who can demonstrate financial need. About half of all those eligible for TEXAS Grants receive them; TEOG recipients constitute only 4 percent of all eligible students.<sup>36</sup>

**Startup Costs**

Texas community and technical colleges must train workers to meet shortages in high-demand technical occupations such as nursing, welding and computer support. Prohibitive startup and financing costs, however, may prevent schools from developing vital new programs.

Community colleges operate on tight financial margins, and find it difficult to raise the capital and financing needed to develop new and innovative programs. Furthermore, they cannot receive state funding tied to an educational program until it is established, creating a “Catch-22” barrier to new programs requiring expensive equipment.

Furthermore, schools must assume a degree of risk in developing new programs; industrial technol-

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EXHIBIT 5-5

**Tuition & Fee Grant Amounts Compared to Total Expenses, 2007-08**

Type of Public Institution	Annual Tuition & Fees Average Cost	Annual Average Total Expenses	Annual Maximum Grant Amount	Annual Average Grant Amount*	Percent of Total Costs Covered by Average Grant
Four-year university	\$5,732	\$17,494	\$5,170	\$4,735	27.1%
Community college	1,638	12,045	1,730	1,508	12.5
Technical college	2,806	12,564	2,650	2,401	19.1

\*Amounts are TEXAS Grant average awards; TEOG community college average grant is 5 percent less. Sources: Texas Higher Education Coordinating Board and Texas Comptroller of Public Accounts.

ogy and work force needs continue to evolve, potentially making even new educational programs obsolete in a relatively short time.

### Incentive Funding

In July 2008, the Task Force on Higher Education Incentive Funding recommended tying a portion of community college funding to indicators based on student performance. These indicators could include the number of certificate and associate degree completions; increases in the number of transfers to four-year colleges; and student performance on standardized exams.

Research by Achieving the Dream, a national initiative intended to promote improved student performance at community colleges, indicates that incentive funding has a substantial impact on college behavior. For example, colleges with remediation measures worked with high schools to prepare students *before* entering college and provided increased counseling during remediation. Other colleges improved their student orientation programs.<sup>37</sup>

Incentive funding must be used carefully, however, since it could lead to lower academic standards. For example, to improve graduation rates, a college might drop courses with low graduation rates, or teachers might stop giving failing grades.

Moreover, employers often hire community and technical college students before they complete a certificate or degree, particularly in programs such as welding. Without performance measures that reward job placement, community and technical colleges could be penalized unfairly while fulfilling area industry needs.

### Endnotes

- <sup>1</sup> Texas Higher Education Opportunity Project, *Texas Higher Education Opportunity Study: Statewide Survey Results – Sophomores and Seniors* (Princeton, New Jersey: Princeton University, June 2003, pp. 43-46, [http://theop.princeton.edu/surveys/baseline/baseline\\_marginals.pdf](http://theop.princeton.edu/surveys/baseline/baseline_marginals.pdf). (Last visited November 29, 2008.)
- <sup>2</sup> Texas Comptroller of Public Accounts, *Guiding our Children Toward Success: How Texas School Counselors Spend Their Time* (Austin, Texas, August 2002), p. 23, <http://www.window.state.tx.us/specialrpt/counselor/96-934.pdf>. (Last visited November 29, 2008.)
- <sup>3</sup> Texas Association of School Boards, “Preparing Students for College and Workforce Readiness,” *TASB*

*Eggs & Issues* (October 17, 2008), pp. 4-5, [http://www.tasb.org/services/gr/documents/readiness\\_1088.pdf](http://www.tasb.org/services/gr/documents/readiness_1088.pdf). (Last visited November 29, 2008.)

- <sup>4</sup> Governor’s Executive Order No RP47, 30 Tex. Reg. 5109 (2005); 19 Texas Admin. Code §109 (2006) (Texas Educ. Agency, Budgeting, Accounting, and Auditing, Subchapter AA, Commissioner’s Rules Concerning Financial Accountability Rating System).
- <sup>5</sup> Texas Higher Education Opportunity Project, *Texas Higher Education Opportunity Study: Statewide Survey Results — Sophomores and Seniors*, pp. 41-42.
- <sup>6</sup> Interview with Don Brown, executive director, College for All Texans Foundation at the Texas Higher Education Coordinating Board, Austin, Texas, August 15, 2008.
- <sup>7</sup> Texas Higher Education Coordinating Board, “Ideal Go Center Model,” pp. 1-2, <http://www.thecb.state.tx.us/CollegeReadiness/IdealGoCenter.pdf>. (Last visited November 29, 2008.)
- <sup>8</sup> Texas Higher Education Coordinating Board, “College for Texans, Go Campaign Activities: Participation Summary Data for All Institutions as of January 2, 2008,” p.1, <http://www.thecb.state.tx.us/reports/PDF/1447.PDF>. (Last visited on November 29, 2008.)
- <sup>9</sup> Texas Higher Education Coordinating Board, *Evaluating a College Information and Awareness Campaign: The Texas GO Center Project, Summary of Methodology and Key Findings*, by Jesse Cunha and Darwin Miller, Stanford University (Austin, Texas, June 3, 2008), pp. 4-5. (Consultant’s report.)
- <sup>10</sup> Interview with Matt Orem, director of College Access Initiatives, University of Texas System Administration, Austin, Texas, November 19, 2008.
- <sup>11</sup> State of North Carolina, “College Foundation of North Carolina: Helping You Plan, Apply, and Pay for College,” <http://www.cfnc.org/>. (Last visited December 12, 2008.)
- <sup>12</sup> Missouri Department of Elementary and Secondary Education, “Missouri Connections.org: Connect to Your Future,” <http://www.missouriconnections.org/>. (Last visited November 29, 2008.)
- <sup>13</sup> Commonwealth of Kentucky, “e3.ky.gov: Education, Employment, Economic Development,” <https://e3.ky.gov/Default.aspx>. (Last visited November 30, 2008.)
- <sup>14</sup> Texas H.B. 1144, 77th Leg., Reg. Sess. (2001).
- <sup>15</sup> Texas Education Agency, “About PEIMS – Public Education Information Management System,” p. 1, <http://www.tea.state.tx.us/peims/about.html>. (Last visited November 30, 2008.); and Texas Education Agency, “2008-2009 PEIMS Data Standards: Appendix A, Data Overview,” pp. A.1-A.2, <http://www.tea.state.tx.us/peims/standards/0809/appa.doc>. (Last visited December 15, 2008.)
- <sup>16</sup> Texas PK-16 Public Education Information Resource, “About Us,” <http://www.texaseducationinfo.org/TPEIR/AboutUs.asp>. (Last visited December 12, 2008.)
- <sup>17</sup> Texas Higher Education Coordinating Board, “Automated Student and Adult Learner Follow-Up System 2-Year Institution Reports,” <http://www.txhighereddata.org/reports/performance/ctcasalf/>. (Last visited December 12, 2008.)



- <sup>18</sup> Charles A. Murray, *Real Education: Four Simple Truths for Bringing America's Schools Back to Reality* (New York: Crown Forum, 2008), p. 104.
- <sup>19</sup> Kenneth C. Grey and Edwin L. Herr, *Other Ways to Win: Creating Alternatives for High School Graduates* (Thousand Oaks, California: Corwin Press, 1995), p. 12.
- <sup>20</sup> Kenneth C. Grey and Edwin L. Herr, *Other Ways to Win: Creating Alternatives for High School Graduates*, pp. 11-12.
- <sup>21</sup> Texas Education Agency, *Briefing Book on Public Education Legislation, 80th Texas Legislative Session* (Austin, Texas, July 2007), p. 45, <http://www.tea.state.tx.us/tea/LegBreBooJul07.pdf>. (Last visited November 30, 2008.)
- <sup>22</sup> H. D. Chambers, "Letter dated September 10, 2008," *Stafford Municipal School District Superintendents' Key Communicators Letters* (September 10, 2008), pp. 1-2, <http://www.stafford.msdc4.net/pdfs/ArchivedKCLetters.pdf>. (Last visited November 30, 2008.)
- <sup>23</sup> Texas Higher Education Coordinating Board, "Commissioner's Preliminary Recommendation on Methodology for Calculating Uniform GPA," Austin, Texas, October 22, 2008, [http://www.tcta.org/politics\\_government/documents/uniformGPA.pdf](http://www.tcta.org/politics_government/documents/uniformGPA.pdf). (Last visited December 12, 2008.)
- <sup>24</sup> Interview with Linda Battles, senior advisor and director at the Commissioner of Higher Education Office, Texas Higher Education Coordinating Board, Austin, Texas, November 13, 2008.
- <sup>25</sup> Interview with Lora H. Weber, senior director of External Relations, Texas Higher Education Coordinating Board, Austin, Texas, November 13, 2008.
- <sup>26</sup> Desiree Kornrum Byrne, "Relationships Between Financial Aid Policies, Practices and Procedures at Texas Public Colleges and Universities," (Ph.D. diss., University of Texas at Austin, 2006), p. 74, <http://www.lib.utexas.edu/etd/d/2006/byrned71907/byrned71907.pdf>. (Last visited December 15, 2008.)
- <sup>27</sup> University of Chicago, Consortium on Chicago School Research, *From High School to the Future: Potholes on the Road to College*, by Melissa Roderick, Jenny Nagaoka, Vanessa Coca and Eliza Moeller with Karen Roddie, Jamiliyah Gilliam and Desmond Patton (Chicago, Illinois, March 2008), p. 5, [http://ccsr.uchicago.edu/publications/CCSR\\_Potholes\\_Report.pdf](http://ccsr.uchicago.edu/publications/CCSR_Potholes_Report.pdf). (Last visited December 1, 2008.)
- <sup>28</sup> American Council on Education, *Missed Opportunities: Students Who Do Not Apply for Financial Aid* (Washington, D.C., October 2004), p. 2, [http://www.cherrycommission.org/docs/Resources/Participation/Student\\_FinancialAidArticle.pdf](http://www.cherrycommission.org/docs/Resources/Participation/Student_FinancialAidArticle.pdf). (Last visited December 2, 2008.)
- <sup>29</sup> Central Texas Student Futures Project, *Findings from the 2007 Senior Surveys*, by Tara Carter Smith, Nicole Beck and Greg Cumpton (Austin, Texas, February 2008), p. xii, 29, [http://www.utexas.edu/research/cshr/pubs/pdf/Final\\_SFP\\_2007\\_Survey\\_Report\\_April\\_15\\_2008.pdf](http://www.utexas.edu/research/cshr/pubs/pdf/Final_SFP_2007_Survey_Report_April_15_2008.pdf). (Last visited December 2, 2008.)
- <sup>30</sup> Texas Higher Education Opportunity Project, *Texas Higher Education Opportunity Study: Statewide Survey Results: Sophomores and Seniors*, p. 42.
- <sup>31</sup> Harvey Meyer, "Cloudy Forecast: Colleges Weathering Uncertainty in Federal Student Loan Program," *Community College Week* (August 11, 2008), pp. 6-7, <http://www.ccweek.com/news/articlefiles/536-CCW081108-Allpgs.pdf>. (Last visited August 15, 2008.)
- <sup>32</sup> Lisa Lerer, "Congress Fast-Tracks Student Loan Bill," *Politico.com* (May 7, 2008), <http://www.politico.com/news/stories/0508/10174.html>. (Last visited August 19, 2008.)
- <sup>33</sup> Texas Higher Education Coordinating Board, *Financial Aid Overview* (Austin, Texas, September 2008), pp. 3-4, <http://www.thecb.state.tx.us/reports/pdf/1552.pdf>. (Last visited September 26, 2008.)
- <sup>34</sup> Texas Higher Education Coordinating Board, *Financial Aid Overview*, pp. 2, 4.
- <sup>35</sup> Texas Higher Education Coordinating Board, "Request for New Funding: 2010-2011 Legislative Appropriation Request," Austin, Texas, November 2008, p. 2, <http://www.thecb.state.tx.us/Reports/PDF/1629.PDF>. (Last visited November 12, 2008.) and Comptroller calculations.
- <sup>36</sup> Texas Higher Education Coordinating Board, *Financial Aid Overview*, pp. 3-4.
- <sup>37</sup> Achieving the Dream and Jobs for the Future, *State Systems of Performance Accountability for Community Colleges: Impacts and Lessons for Policymakers*, by Kevin J. Dougherty and Esther Hong, Teachers College at Columbia University (Boston, Massachusetts, July 2005), p. 5, <http://www.jff.org/Documents/PerfAccountability.pdf>. (Last visited December 15, 2008.) (Consultant's report.)

## Real People, Real Stories

### C’Leste Villarreal-Pargas

C’Leste Villarreal-Pargas attended Del Mar College in Corpus Christi right after high school and received a certificate in combination welding. She now serves as a field welder and assistant field supervisor, which means she sometimes supervises the work of other welders on the job site. A mother of two, C’Leste has been welding for more than 20 years and still loves it.

She was offered a job before she completed her welding program. A company called Del Mar College to see if any students were near certification, and C’Leste was the only one at that point. She applied and got the job right before she earned her diploma and certification. Today, she also serves on an advisory board committee for Coastal Bend College’s welding department.

And now, “I am back in school, currently getting a degree in graphic arts,” C’Leste said. She has always enjoyed drawing and painting, and graphic arts is a field she can pursue on the side.

*Special thanks to C’Leste Villarreal-Pargas for sharing this success story.*