

**Texas Education Agency
Public Education
2004-2005 Senior Cohort
Longitudinal Study**

Introduction

All Texas children are entitled to a quality public education that enables them to achieve their full potential for college and career success and full participation in the social, educational, and economic opportunities of our state and nation. A strong academic foundation is essential for the welfare of this state. The goal of public education in Texas is to provide students with an engaging, balanced curriculum so students are fully prepared for the world beyond high school. More information on public education in Texas is available at www.tea.state.tx.us.

Career and technical education (CTE) complements and enhances academic preparation by enabling students to develop rigorous academic and technical knowledge and skills so students graduate ready for college and career. More information on CTE programs in Texas is available at www.tea.state.tx.us/cte.

Tech prep is one of the most successful CTE initiatives in Texas. Tech prep links high school and college curriculum to provide students with a seamless transition from secondary to postsecondary education and to a high skill, high-wage, or high demand career. More information on tech prep in Texas is available at www.techpreptexas.org.

Texas has created an Advanced Technical Credit (ATC) statewide system of articulation where enhanced secondary CTE courses have been aligned with postsecondary technical education courses so students have the opportunity to earn college credit while in high school. More information is available at www.atcTexas.org.

A successful public education system is directly related to strong parental involvement and a dedicated, supportive community. In order for students to make informed decisions about their education and future career, they must have access to quality counseling services and reliable career information. Career information products and services from the Texas Workforce Commission's (TWC) Labor Market and Career Information (<http://www.lmci.state.tx.us>) unit provide important tools to help guide students in their career development. Collaborative partnerships with other stakeholders such as the Texas Higher Coordinating Board (THECB), the P-16 Council, the Texas Workforce Investment Council, and the Texas Council for Economic Competitiveness will assure that public education programs are rigorous and relevant in order to effectively prepare Texas students for success in college and career.

Seed Record Analysis

The Automated Student and Adult Learner Follow-Up System provides data to document the post-exit achievements of secondary education participants. Follow-up information is essential for stakeholders who need to assess the effectiveness of education programs based on the achievements of former students. By evaluating student performance after leaving high school, administrators can focus on continuous improvement strategies so students can achieve at higher rates and schools can focus on closing the achievement gaps for our increasingly diverse population.

This report provides statewide information on the achievements of the 2004-2005 public education senior exit cohort, three years after graduation. For this report, TEA provided 227,710 student records (seed records) to THECB. The seed records are comprised of the October 2004 snapshot of public education seniors in the Public Education Information Management System (PEIMS). TEA added graduation data to the seed records in the spring of 2006.

THECB linked the seed records to TWC's unemployment insurance (UI) wage records to determine post-exit employment as of the fourth quarter 2007. THECB also linked the seed records with the public postsecondary master enrollment (ME) records to document whether former students were enrolled in a Texas public college or university in fall 2007. Because of restrictions from the Family Education Rights and Privacy Act (FERPA), this report does not include supplemental linkages with the U.S. Department of Defense, U.S. Office of Personnel Management, U.S. Postal Service, Texas Department of Criminal Justice, or Texas Bureau of Vital Statistics.

Follow-up Results

Table 1 shows the results of electronic linkages for the 2004-2005 senior exit cohorts in both the fall of 2005 and fall of 2007. For the one-year study, THECB located 85.95 percent of the 2004-2005 senior exit cohort through UI and ME linkages. For the three-year follow-up study, THECB located 74.5 percent of that cohort.

Of those not located, a large number most likely left the state to pursue higher education and/or employment or are enrolled in private institutions in Texas.

Certain occupational groups such as migrant workers and self-employed individuals are not captured in the UI wage records. However, more than 90 percent of the employment in Texas is captured in the UI, making it a very good resource for documenting labor market outcomes.

In 2007, a lower number and percentage of students were working only or both working and enrolled in postsecondary education than in 2005. However, more students and a higher percentage of students were enrolled in postsecondary education only in 2007 than in 2005. The number and percentage of all students working and all students enrolled declined between 2005 and 2007.

Table 1. Summary of Linkages on 2004-2005 Senior Exit Cohort Result

Result	2005		2007	
	N	% of Cohort	N	% of Cohort
Working Only	90,015	39.5%	83,994	37.2%
Both Working and Enrolled	81,863	35.9%	53,717	23.8%
Enrolled in Higher Education Only	23,840	10.5%	28,272	12.5%
Graduated College	N/A	N/A	2,043	0.91%
All Working	171,878	75.5%	139,316	61.8%
All Enrolled	105,703	46.4%	82,445	36.6%
Not Located in 2005	31,992	14.1%	N/A	N/A
Retain Employment	N/A	N/A	61,134	27.1%
Not Located during 3 years	N/A	N/A	42,165	18.7%
Not Located in Fall 2007	N/A	N/A	15,371	6.8%
Total	227,710	100.0%	225,562	100.0%

To provide background, Table 2 shows the composition of the 2004-2005 senior exit cohort by graduation status. More than 94 percent of these seniors graduated from high school. THECB reported that 898 of the non-graduates were found enrolled in a Texas public postsecondary institution in the fall of 2005, which indicates that these students completed a General Educational Development (GED) credential prior to enrolling in postsecondary education.

Table 2. 2004-2005 Senior Exit Cohort by Graduation Status

Graduation Status	N	% of Cohort
Graduates	215,151	94.5%
Non-Graduates	12,559	5.5%
Total	227,710	100.0%

To receive a high school diploma, Texas students must complete the curriculum requirements for the Recommended High School Program (RHSP) or the Distinguished Achievement High School Program (DAP), unless they are granted permission to graduate under the Minimum High School Program (MHSP). The RHSP and DAP provide students with a strong academic foundation that prepares students for college and career success. The Texas Administrative Code (TAC), Title 19, Part II, Chapter 74, Curriculum Requirements and www.tea.state.tx.us provide a description of each graduation program.

Table 3 shows a breakdown of the 2004-2005 senior cohort by the type of graduation program completed. The largest group of students completed the RHSP (57.7 percent) followed by the MHSP (19.6 percent). Many students served in special education graduate under the MHSP; however, the group identified as Individualized Education Program (IEP) completers are students who graduate under the MHSP with curriculum content modification through their IEP. Students who did not graduate are included in the “Other” category. The number of students who graduated under either the Recommended or Distinguished Achievement program increased by more than four percent from the previous year.

Table 3. 2004-2005 Senior Exit Cohort by Graduation Program

Type of Program	N	% of Cohort
Distinguished Achievement Program	20,190	8.9%
Recommended HS Program	133,656	58.7%
Minimum HS Program	44,617	19.6%
IEP Completers	6,758	3.0%
Other	22,489	9.8%
Total	227,710	100.0%

High school students have a choice in the type of courses to take during high school. Table 4 shows a breakdown of the senior cohort by course concentration. Primarily academic refers to students who have, for the most part, enrolled in foundation and enrichment courses with either no CTE elective courses or only one CTE elective course. CTE concentrators are those who either completed a coherent sequence of CTE courses during high school or participated in a tech prep program. Career and technical education program participation increased by almost two percent compared to the previous year's exit cohort. Texas Education Agency's PEIMS uses the following codes to determine the course concentration of each student:

- 0 = Academic/no CTE courses
- 1 = Primarily academic with one CTE elective
- 2 = CTE coherent sequence
- 3 = Tech prep program participants

Table 4. 2004-2005 Senior Exit Cohort by Course Concentration

Course Concentration	N	% of Cohort
Academic & Primarily Academic (0, 1)	109,090	47.9%
CTE Concentrators & College Tech-Prep (2, 3)	118,620	52.1%
Total	227,710	100.0%

Figures 1 and 2 show enrollment and employment status for the 2004-2005 senior exit cohort. Figure 1 details the cohort in 2005 while Figure 2 details the

cohort at follow-up in 2007. Figure 1 shows that almost half of all graduates were enrolled in a Texas public postsecondary institution after graduation from high school. The majority of graduates who were found enrolled in higher education were also working while going to school. More than 39 percent of the graduates were working exclusively. Fewer than 15 percent of graduates were not located through UI wage records and ME linkages. Some of these former students not found may have enrolled in a postsecondary institution or found work out of state or may also be working in occupations that may not be covered by the Texas Unemployment Compensation Act (TUCA).

Figure 1. Enrollment and Employment Status of 2004-2005 Public Education Graduates in 2005 (N=215,151)

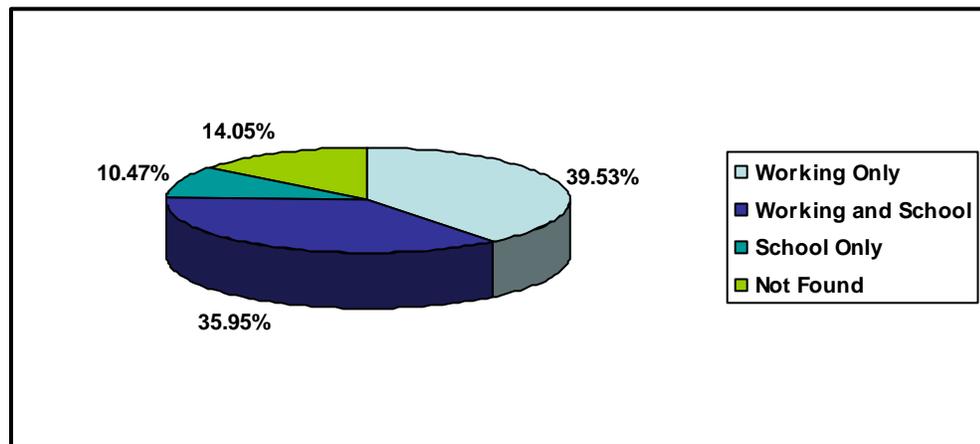
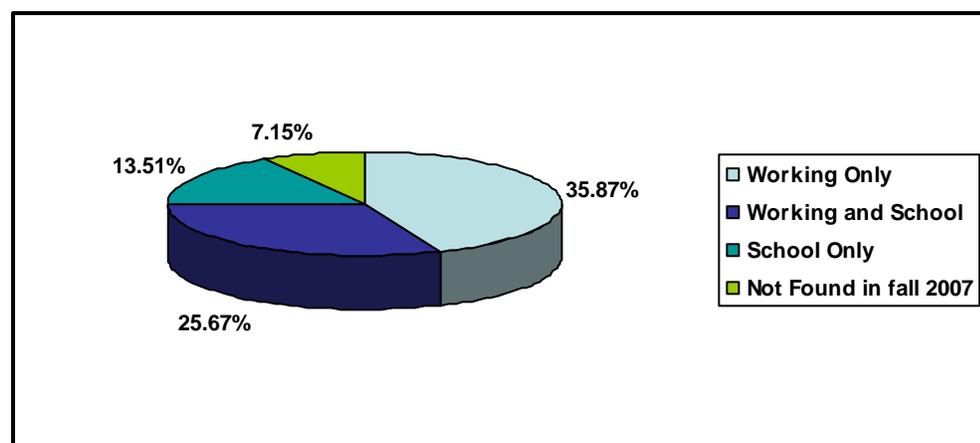


Figure 2 shows that almost 40 percent of 2004-2005 high school graduates found in 2007 were enrolled in a Texas public postsecondary institution three years after graduation from high school. Of the graduates who were found enrolled in higher education almost twice as many were also working while going to school as were enrolled in school only. More than 35 percent of the graduates were working exclusively. Just over 7 percent of graduates were not located after three years through UI wage records and ME linkages.

Figure 2. Enrollment and Employment Status of 2004-2005 Public Education Graduates in 2007 (N=205,130)



More than 58 percent of non-graduates were found to be working exclusively post-exit in 2005 (Figure 3). More than 7 percent of non-graduates were found to be enrolled in a Texas postsecondary institution either exclusively or while working. More than 34 percent of non-graduates could not be located through the resource databases available for record linkages. It is possible that these former students may have found work and/or continued their education out of state. Some of them may also be working in occupations (migrant workers, family farms, etc.) that may not be covered by the Texas Unemployment Compensation Act (TUCA).

Figure 3. Enrollment and Employment Status of 2004-2005 Public Education Non-Graduates (N=12,559)

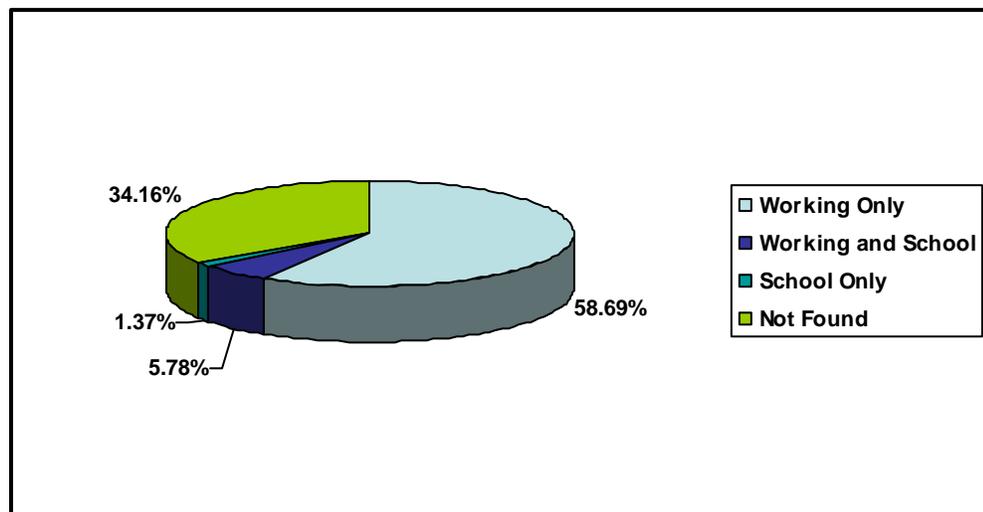


Figure 4 shows that more than half of non-graduates from the 2004-2005 cohort were found to be working exclusively three years post-exit. More than 7 percent of non-graduates were found to be enrolled in a Texas postsecondary institution either exclusively or while working. Only 3.4 percent of non-graduates could not be located through the resource databases available for record linkages.

Figure 4. 2007 Enrollment and Employment Status of 2004-2005 Public Education Non-Graduates (N=20,432)

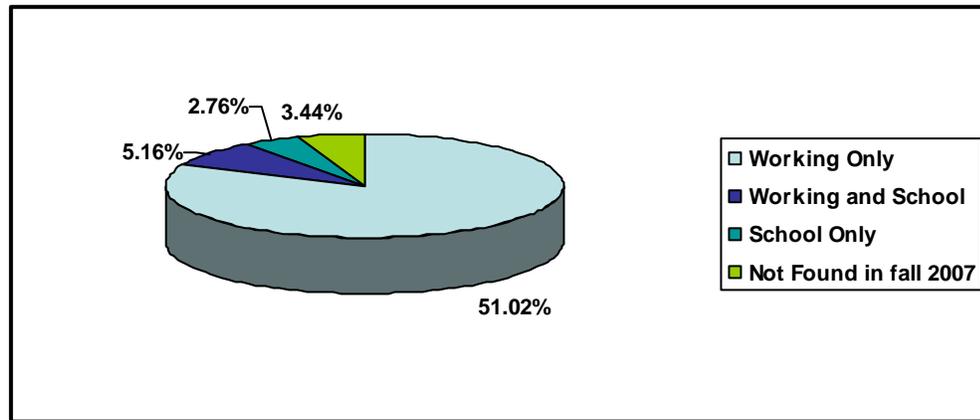


Table 5 shows that students in this senior exit cohort who completed the MHSP had the highest percentage working post-exit, at 79.1 percent, followed by those who completed the RHSP at 77.2 percent. Overall, slightly more than three quarters (75.5 percent) of the senior cohort was working in the fourth quarter of 2005 with median quarterly earnings of \$1,279. The lower median quarterly earnings of students who completed the DAP indicates that more of these students are enrolled in school exclusively and those who are employed are most likely working fewer hours than those from the other program groups.

Table 5. All Employed at 4th Quarter 2005 by Type of Graduation Program

Type of Graduation Program	N	All Employed 4 th Quarter 2005	% of All Employed	Median Quarterly Earnings
Distinguished Achievement Program	20,190	13,661	67.7%	\$995
Recommended HS Program	133,656	103,147	77.2%	\$1,277
Minimum HS Program	44,617	35,297	79.1%	\$1,491
IEP Completers	6,758	4,422	65.4%	\$1,324
Other	22,489	15,351	68.3%	\$1,166
Total	227,710	171,878	75.5%	\$1,279

Table 6 shows that in 2007, students in this senior exit cohort who completed the MHSP still had the highest percentage working at 65.5 percent, still followed by those who completed the RHSP at 63.4 percent. Overall, more than half (61.8 percent) of the senior cohort was working in the fourth quarter 2007 with median quarterly earnings of \$3,129. In the interim between the fall of 2005 and fall of 2007, the number and percentage of graduates employed dropped, but their median quarterly earnings increased.

Table 6. All Employed at 4th Quarter 2007 by Type of Graduation Program

Type of Graduation Program	N	All Employed 4 th Quarter 2007	% of All Employed	Median Quarterly Earnings
Distinguished Achievement Program	20,185	10,263	50.8%	\$1,991
Recommended HS Program	133,587	84,754	63.4%	\$3,088
Minimum HS Program	44,570	29,207	65.5%	\$3,739
IEP Completers	6,743	3,637	53.9%	\$3,253
Other	20,477	11,557	56.4%	\$3,023
Total	225,562	139,418	61.8%	\$3,129

There was some variance in the employment status when the data were disaggregated by course concentration (Tables 7 and 8). Students participating in tech prep programs and CTE coherent sequences exhibited slightly higher employment and earnings than did students who did not take CTE courses. This trend held true over time, in the interim between the fall of 2005 and the fall of 2007; however, a smaller number and percentage of all groups was employed in 2007 than in 2005.

Table 7. All Employed at 4th Quarter 2005 by PEIMS Course Concentration

PEIMS Course Concentration	N	All Employed 4th Qtr. 2005	% of All Employed	Median Quarterly Earnings*
Academic/No CTE	62,070	43,871	70.7%	\$1,131
Primarily Academic	47,020	35,747	76.0%	\$1,251
CTE Coherent Sequence	69,865	54,054	77.4%	\$1,344
Tech Prep Program	48,755	38,206	78.4%	\$1,382
Total	227,710	171,878	75.5%	\$1,279

Table 8. All Employed at 4th Quarter 2007 by PEIMS Course Concentration

PEIMS Course Concentration	N	All Employed 4th Qtr. 2007	% of All Employed	Median Quarterly Earnings*
Academic/No CTE	107,932	63,034	58.4%	\$2,930
CTE Coherent Sequence	69,223	44,265	64.0%	\$3,258
Tech Prep Program	48,407	32,017	66.1%	\$3,288
Total	225,562	139,316	61.8%	\$3,118

Figure 5 illustrates that none of the former students earned enough during the fourth quarter of 2005 to surpass the FY 2006 federal poverty threshold for a family of one (\$2,450). However by the fourth quarter of 2007, all three groups of former students earned significantly more than the 2008 federal poverty threshold for a family of one (\$2,600). The quarterly federal poverty threshold was computed by dividing the poverty guideline for a family of one by four. The low earnings in 2004 are probably the result of many students working part time in entry level jobs. Both the 2004 data and the 2007 data show that CTE students earned slightly more than academic students, and tech prep students earned slightly more than CTE students.

Figure 5. Median Quarterly Earnings by Course Concentration

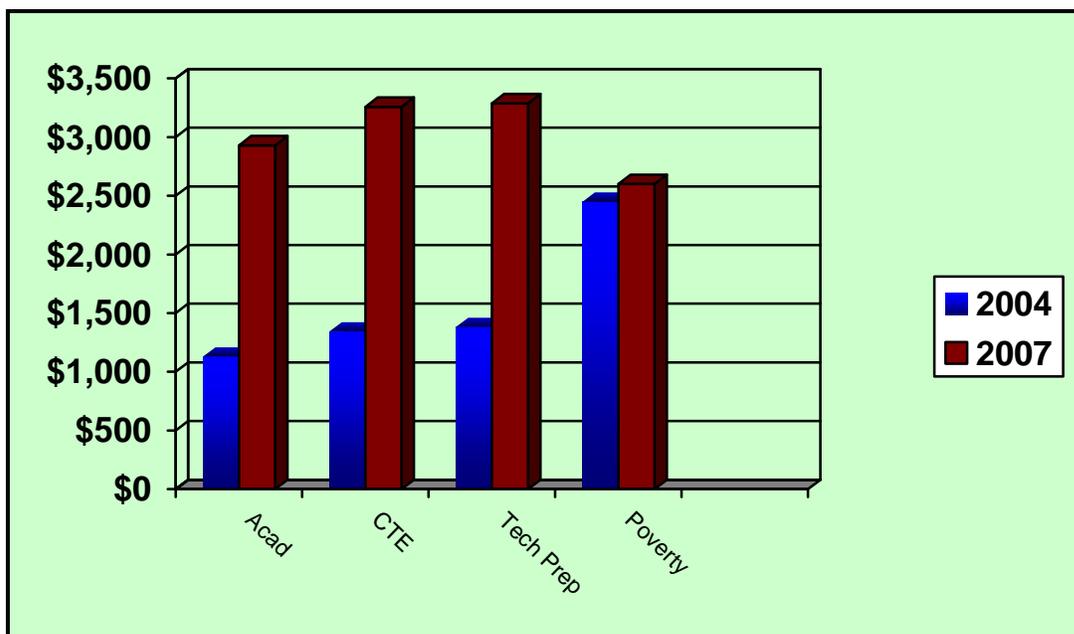


Table 9 shows that a higher percentage of students who completed the DAP (67.2 percent) enrolled in a postsecondary institution after exit than any other type of graduation program. Students completing the RHSP (57.3 percent) were enrolled at the second highest percentage. Fewer than 30 percent of students graduating under the MHSP enrolled in postsecondary education after high school. By the fall of 2007, this was still the trend. While the number and percentage of students from each group dropped between 2004 and 2007, over time, the gap between graduates from the various programs widened, with significantly fewer enrolled students from the IEP (6.8 percent) and MHSP (17.7 percent) than from the RHSP (44.9 percent) and DAP (61.8 percent). Overall, a smaller number and percentage of students were enrolled in 2007 than in 2005.

Table 9. All Enrolled in Postsecondary Education by Type of Graduation Program

Type of Graduation Program	2004			2007		
	N	All Enrolled	% Enrolled	N	All Enrolled	% Enrolled
Distinguished Achievement Program	20,190	13,560	67.2%	20,185	12,479	61.8%
Recommended HS Program	133,656	76,629	57.3%	133,587	59,971	44.9%
Minimum HS Program	44,617	13,076	29.3%	44,570	7,897	17.7%
IEP Completers	6,758	938	13.9%	6,743	458	6.8%
Other	22,489	1,500	6.7%	20,477	1,640	8.0%
Total	227,710	105,703	46.4%	225,562	82,445	36.6%

There was a very small percentage difference in postsecondary enrollment when the data were disaggregated by course concentration (Table 10). The percentage of tech prep participants enrolled (49.2 percent) and the percentage of CTE students enrolled (46.4 percent) was slightly higher than other students in fall 2005. However, in fall 2007, though tech prep students still enrolled at a higher percentage (37.5 percent) than other students, CTE students enrolled at a lower rate (35.6 percent) than either tech prep or academic students (36.8 percent). The total enrollment dropped by more than ten percentage points between fall 2005 and fall 2007. The 2007 data combine the Academic/No CTE and Primarily Academic groups.

Table 10. All Enrolled in Postsecondary Education by PEIMS Course Concentration

PEIMS Course Concentration	2005			2007		
	N	All Enrolled	% Enrolled	N	All Enrolled	% Enrolled
Academic/No CTE	62,070	27,585	44.4%	107,932	39,674	36.8%
Primarily Academic	47,020	21,717	46.2%	N/A	N/A	N/A
CTE coherent sequence	69,865	32,399	46.4%	69,223	24,639	35.6%
Tech Prep participant	48,755	24,002	49.2%	48,407	18,132	37.5%
Total	227,710	105,703	46.4%	225,562	82,445	36.6%

Table 11 shows significant differences in postsecondary enrollment by ethnicity. In 2005, Asian students enrolled in higher education at a higher percentage (65.6 percent) than other ethnic groups followed by White students (51.0 percent). Native American (39.8 percent), Hispanic (40.7 percent), and Black students (40.0 percent) had the lowest percentage of enrollment in 2005 after exit from high school. In fall 2007, Asian students still enrolled at a significantly higher percentage (61.1 percent) than other ethnic groups, still followed by White students (41.1 percent). Native American (31.5 percent), Hispanic (31.4 percent), and Black students (27.7 percent) had the lowest percentage of enrollment in fall 2007. All ethnic groups enrolled at a lower percentage rate in 2007 than in 2005, but some groups exhibited a more significant decrease than others. Asian students showed the smallest decrease, while Hispanic and Black students exhibited the largest decreases. Overall, enrollment across ethnic groups dropped by more than ten percentage points between 2005 and 2007.

Table 11. All Enrolled in Postsecondary Education by Ethnicity

Ethnicity	2005			2007		
	N	All Enrolled	% Enrolled	N	All Enrolled	% Enrolled
White	111,117	56,689	51.0%	110,085	45,292	41.1%
Hispanic	76,444	31,125	40.7%	75,723	23,743	31.4%
Black	32,267	12,906	40.0%	31,948	8,849	27.7%
Asian	7,163	4,697	65.6%	7,099	4,338	61.1%
Native American	719	286	39.8%	707	223	31.5%
Total	227,710	105,703	46.4%	225,562	82,445	36.6%

Table 12 shows the number and percentage of 2004-2005 senior cohort students who graduated from college by fall 2007, and their median quarterly earnings, disaggregated by various groups. High school graduates graduated from college at a higher rate than high school non-graduates, and earned a significantly higher median quarterly income. A higher number of students who graduated from high school under the RHSP graduated from college after three years than students from most of the other high school graduation programs, and earned a significantly higher median quarterly income than most of the other groups. However, students who graduated from high school under the MHSP had graduated from college three years later at a higher percentage than students from other high school graduation programs and earned the second highest median quarterly income. Tech prep students graduated at a higher percentage rate than CTE students, who graduated at a higher percentage rate than academic students. Technical and tech prep students earned a slightly higher median quarterly income than academic students. Hispanic students graduated at a significantly higher percentage rate than other ethnic groups, and earned the highest median quarterly income of the ethnic groups. Females graduated at a higher percentage than males, but earned more than \$1,000 less median quarterly income. Economically disadvantaged students graduated at almost

twice the percentage of single parents, but single parents had significantly higher quarterly median earnings than economically disadvantaged students.

Table 12. Students Who Graduated from College by Fall 2007

Group	N	Graduated from College	% Graduated from College	Median Quarterly Earnings
Graduate/Non-Graduate				
2004-2005 HS Graduate	205,130	1,978	0.96%	\$3,849
2004-2005 HS Non-Graduate	20,432	65	0.32%	\$2,525
Graduation Program				
Distinguished Achievement Program	20,185	165	0.82%	\$2,023
Recommended HS Program	133,587	1,287	0.96%	\$4,027
Minimum HS Program	44,570	483	1.08%	\$3,937
IEP Completers	6,743	43	0.64%	\$3,663
Other	20,477	65	0.32%	\$2,525
Course Concentration				
Academic	107,932	757	0.70%	\$3,736
Technical	69,223	720	1.04%	\$3,904
Tech Prep	48,407	566	1.17%	\$3,901
Ethnicity				
White	110,085	843	0.77%	\$3,795
Hispanic	75,723	941	1.24%	\$3,974
Black	31,948	218	0.68%	\$3,576
Asian	7,099	35	0.49%	\$2,643
Native American	707	6	0.85%	\$2,419
Gender				
Male	112,767	909	0.81%	\$4,466
Female	112,795	1,134	1.01%	\$3,362
Special Populations				
Economically Disadvantaged	6,557	70	26.72	\$4,018
Single Parent	504	8	13.69	\$5,486

Table 13 shows the top ten industries for employment in the fall of 2005 and the fall of 2007, derived from the North American Industry Classification System (NAICS), which is the standard federal statistical agencies use to classify business establishments for the purpose of collecting, analyzing, and publishing statistical data related to the U.S. business economy. In the fourth quarter of 2005, the top 10 industries for employment for the 2004-2005 senior exit cohort were led by limited-service eating places followed by full-service restaurants. Entry-level occupations dominated the remainder of the top 10 industries for employment. In the fourth quarter of 2007, physician offices and other medical

sites dominated the list, followed by restaurants and general retail and clothing stores.

Table 13. Top 10 Industries for Employment for All Employed by 4-Digit NAICS

2005			2007		
Industry of Employment	Employed	% of All Employed	Industry of Employment	Employed	% of All Employed
Limited-Service Eating Places	28,501	16.6%	Physician Offices	144	9.0%
Full-Service Restaurants	18,379	10.7%	Employment Services	95	6.0%
Grocery Stores	11,674	6.8%	Full-Service Restaurants	80	5.0%
Clothing Stores	8,439	4.9%	Limited Service Eating Places	52	3.2%
Employment Services	7,241	4.2%	Health and Personal Care Stores	48	3.0%
Other General Merchandise Stores	6,744	3.9%	General Medical and Surgical Hospitals	46	2.9%
Department Stores	5,875	3.4%	Other General Merchandise Stores	45	2.8%
Other Amusement and Recreation Industries	3,750	2.2%	Clothing Stores	39	2.4%
Elementary and Secondary Schools	2,990	1.7%	Building Equipment Contractors	35	2.2%
Business Support Services	2,521	1.5%	Elementary and Secondary Schools	35	2.2%

Table 14 shows the most common fields of study using the 6-digit Classification for Instructional Programs (CIP) for the 2004-2005 senior exit cohort for primarily academic students; however, similar results are found for students in CTE and tech prep programs in both the fall of 2005 and fall of 2007. The most common fields of study in the fall of 2005 were Undeclared, Liberal Arts and Sciences/Liberal Studies and General Studies. These majors may indicate that many students have not chosen a career focus prior to entering postsecondary education. Additionally, many postsecondary institutions do not allow students to declare a major until they have satisfied certain program prerequisites and been

accepted into a program. The most common fields in 2007 were still Undeclared, Liberal Arts and Sciences/Liberal Studies and General Studies. Of the students who declared a major, the most common fields in 2005 were, for the most part, also the most common fields in 2007.

Table 14. Top 10 Fields of Study for All Enrolled by 6-Digit CIP

2005			2007		
Field of Study for Academic and Primarily Academic Students	Enrolled	% of All Enrolled	Field of Study for Academic and Primarily Academic Students	Enrolled	% of All Enrolled
Undeclared	8,588	17.4%	General Studies	4,159	10.5%
Liberal Arts and Sciences/Liberal Studies	6,199	12.6%	Undeclared	3,255	8.2%
General Studies	5,302	10.8%	Liberal Arts and Sciences/Liberal Studies	2,394	6.0%
Business/Commerce, General	1,654	3.4%	Multi-/Interdisciplinary Studies, Other	1,676	4.2%
Biology/Biological Sciences, General	1,648	3.3%	Biology/Biological Sciences, General	1,455	3.7%
Business Administration and Management	1,629	3.3%	Business Administration and Management, General	1,415	3.6%
Nursing-Registered Nurse Training	1,574	3.2%	Business/Commerce, General	1,383	3.5%
Psychology, General	1,193	2.4%	Nursing - Registered Nurse Training (RN, ASN, BSN, MSN)	1,275	3.2%
Multi-/Interdisciplinary Studies, Other	1,081	2.2%	Psychology, General	1,264	3.2%
Music, General	756	1.5%	Health and Physical Education, General	893	2.3%

The University of Texas at Austin and Texas A&M University were the most popular destinations in the fall of 2005 for the 2004-2005 senior exit cohort, regardless of course concentration (Table 15). Four community colleges were represented in the top ten institutions for both groups of exiters; however, the CTE coherent sequence and tech prep students enrolled in community colleges at a higher rate than primarily academic students. This is to be expected since many community colleges actively participate in tech prep programs. Because of the escalating costs at public and private universities, many students begin their postsecondary education at a community college to complete some academic and technical courses prior to transferring to a four-year institution. Males enrolled in community colleges at a higher percentage than females, while females enrolled in public universities at a higher percentage than males. In 2007, the University of Texas at Austin and Texas A&M University were still the most popular destinations regardless of course concentration. Three community colleges were still listed in the top ten higher education institutions in 2007. Females enrolled in both community colleges and public universities at a higher number and percentage than males; slightly more males enrolled at community colleges than public universities, whereas slightly more females enrolled at public universities than community colleges.

Table 15. Top 10 Texas Higher Education Institutions in for All Enrolled by PEIMS Course Concentration Indicator

2005		2007	
Academic and Primarily Academic (PEIMS Code = 0,1)	CTE Coherent Sequence and Tech-Prep (PEIMS Code = 2, 3)	Academic and Primarily Academic (PEIMS Code = 0,1)	CTE Coherent Sequence and Tech-Prep (PEIMS Code = 2, 3)
University of Texas at Austin	Texas A&M University	University of Texas at Austin	Texas A&M University
Texas A&M University	University of Texas at San Antonio	Texas A&M University	University of Texas at Austin
University of North Texas	University of Texas at Austin	University of North Texas	Texas Tech University
Texas Tech University	Blinn College	Texas State University – San Marcos	Texas State University – San Marcos
University of Texas At San Antonio	University of Texas – Pan American	Texas Tech University	University of North Texas
University of Houston	Texas Tech University	University of Houston	University of Texas at San Antonio
Texas State University – San Marcos	Collin County Community College District	Houston Community College	University of Texas – Pan American

2005		2007	
Academic and Primarily Academic (PEIMS Code = 0,1)	CTE Coherent Sequence and Tech-Prep (PEIMS Code = 2, 3)	Academic and Primarily Academic (PEIMS Code = 0,1)	CTE Coherent Sequence and Tech-Prep (PEIMS Code = 2, 3)
Austin Community College	San Antonio College	Austin Community College	University of Houston
Blinn College	El Paso Community College District	University of Texas At San Antonio	El Paso Community College District
Houston Community College	Austin Community College	Sam Houston State University	Austin Community College

Tables 16 and 17 show students in the exit cohort who were classified as economically disadvantaged or single parent. Those students who were employed in fourth quarter of 2005 did not earn enough to surpass the 2006 federal definition of poverty threshold in a quarter for a family of one (\$2,450). Overall, almost three fourths of the special populations groups were working and more than a third were enrolled in higher education after exit, except single parents at 21 percent. In the fourth quarter of 2007, students in these classifications earned slightly more than the 2008 federal poverty threshold for a family of one (\$2,600). The percentage of students in these classifications dropped for both employment and enrollment in postsecondary education. Almost two thirds of the economically disadvantaged students were working, while fewer than one third were enrolled in postsecondary education. More than two thirds of single parents were working while fewer than 15 percent were enrolled in postsecondary education.

Table 16. General Achievements of Special Populations, Fall 2005

Special Populations	N	All Working	% of All Working	Median Quarterly Earnings	All Enrolled	% of All Enrolled
Economic Disadv.	70,433	51,962	73.8%	\$1,393	25,386	36.0%
Single Parent	960	727	75.7%	\$1,241	201	20.9%
Unduplicated Total	70,789	52,243	73.8%	\$1,391	25,485	36.0%

Table 17. General Achievements of Special Populations, Fall 2007

Special Populations	N	All Working	% of All Working	Median Quarterly Earnings	All Enrolled	% of All Enrolled
Economic Disadv.	6,557	4,128	63.0%	\$3,122	1,752	26.7%
Single Parent	504	354	70.2%	\$3,145	69	13.7%
Unduplicated Total	225,562	139,316	61.8%	\$3,118	82,445	36.6%

Tables 18 and 19 show the enrollment in types of postsecondary institutions by ethnicity. In 2005, White, Hispanic, Black, and Native American students were enrolled in community colleges at a higher rate than at a university. Only Asian students were enrolled at a four-year university at a higher rate than at a two-year community college. More Hispanic students enrolled in a community college (63.7 percent) than any other ethnic group. In 2007, White, Black, and Asian students enrolled more in public universities than in community colleges; Hispanic and Native American students enrolled more in community colleges than in public universities.

Table 18. Type of Institution by Ethnicity, Fall 2005

Ethnicity	Total Enrolled	Community College	% of Enrolled	University	% of Enrolled
White	56,689	29,776	52.5%	26,912	47.5%
Hispanic	31,125	19,839	63.7%	11,285	36.3%
Black	12,906	6,536	50.6%	6,370	49.4%
Asia	4,697	1,761	37.5%	2,936	62.5%
Native American	286	170	59.4%	116	40.6%

Table 19. Type of Institution by Ethnicity, Fall 2007

Ethnicity	Total Enrolled	Community College	% of Enrolled	University	% of Enrolled
White	64,880	13,613	21.0%	15,234	23.5%
Hispanic	50,408	10,754	21.3%	5,899	11.7%
Black	20,324	3,008	14.8%	3,070	15.1%
Asian	3,298	835	25.3%	1,441	43.7%
Native American	406	85	20.9%	56	13.8%

Conclusion

Postsecondary enrollment and earnings are increasingly tied to college and career preparation. Public education participants dedicated to participating in postsecondary education will have more opportunities for increased earnings and career success. Jobs that are being transformed by technological advancements will continue to increase while the shift to an information-driven economy will provide new opportunities for those prepared with marketable academic and technical skills.

Students must be responsible for managing their education and using career resources effectively to plan their career aspirations. The increasing cost of postsecondary education makes a rigorous academic foundation enhanced with relevant career preparation essential components of secondary education.

The *AchieveTexas College and Career Initiative* strives to encourage a college-going culture and effectively prepare students for a lifetime of success. It provides students with opportunities to achieve excellence by preparing them for secondary and postsecondary opportunities, career preparation and advancement, meaningful work, and active citizenship. *AchieveTexas* is based on the belief that curricula of the 21st century should combine rigorous academics with relevant career education. Model programs of study have been developed for each of the sixteen federally defined career clusters. Each model is based on the Recommended High School Program of rigorous 4x4 academic courses enhanced with relevant career preparation. A student's personal graduation plan is developed based on the student's personal education and career goals. More information on *AchieveTexas* is available at www.achievetexas.org.

The TWC's Labor Market and Career Information (LMCI) department continues to provide valid and reliable career information to Texas students, parents, teachers, and counselors. The LMCI's career information toll-free hot line provides a wide variety of resources for counselors, teachers, parents, and students in Texas. The web site, containing information on wages, occupational projections and descriptions, job hunting strategies, resume writing, and interviewing skills helps students and parents make informed career decisions. Texas CARES (Career Alternatives Resource Evaluation System) is an interactive software program providing important career and employment information and resources.

Career and technical education career orientation (CO) courses provide students with the opportunity to develop a college and career educational plan related to personal career goals, the world of work, and lifelong learning. The LMCI *Curriculum Guide* is aligned with the requirements of the Texas Essential Knowledge and Skills (TEKS) for Career Investigation and Career Connections courses. The *Curriculum Guide* provides lesson plans complete with objectives,

career resources, and relevant activities. Students participating in CO take interest and inventory assessments to better guide them in their career exploration, investigate related careers grouped by the 16 career clusters, complete their high school graduation plan focusing on personal career goals, develop a personal portfolio, research the job-hunting process, and learn how to prepare to be successful in college and a career.

Recommendations

- Focus on improving secondary and postsecondary data systems to have more valid and reliable student follow-up data.
- Explore ways to link seed records to the National Student Clearinghouse to document postsecondary enrollment in out-of-state public and private institutions to reduce the number of students not found post-exit.
- Improve and clarify data reporting requirements so data reported are accurate and reliable.
- Encourage school districts to implement a comprehensive academic and career guidance and counseling program so students exit high school ready for college and career.
- Encourage school districts to implement the *AchieveTexas College and Career Initiative* as a way to keep students engaged in school and improve readiness for college and career.

References

U.S. Department of Health and Human Services, "The 2006 HHS Poverty Guidelines." [Online: <http://aspe.hhs.gov/poverty/06poverty.shtml>]

U.S. Department of Health and Human Services, "The 2008 HHS Poverty Guidelines." [Online: <http://aspe.hhs.gov/poverty/08computations.shtml>]

LMCI's Career Information products, [Online: <http://www.cdr.state.tx.us>]