

TWC Apprenticeship Program 2007-2008 Exit Cohort

As authorized by Texas Education Code, Chapter 133, the Texas Workforce Commission (TWC) receives funds from the Texas Legislature for registered apprenticeship training programs and administers these funds as set forth in the Commission's Apprenticeship Training Program rules (40 TAC, Chapter 837). However, not all registered apprenticeship training programs apply for these Chapter 133 funds.

The U.S. Department of Labor - Office of Apprenticeship (DOL-OA) continues to encourage the building and strengthening of partnerships between the registered apprenticeship system and the Texas workforce system. Local Workforce Development Boards (Boards) have been encouraged to use their local flexibility to supplement apprenticeship programs with Workforce Investment Act (WIA) funds. Registered apprenticeship training programs have a proven success record.

Chapter 133 funds pay only a small portion of the direct training costs associated with registered apprenticeship training programs, which can leave these programs lacking funds to provide the training needed at other stages of the process. Boards interested in benefiting from the successful completion rates and wage increases proven to result from registered apprenticeship training programs can use WIA funds to supplement them, including those programs funded by Chapter 133.

Seed Records

TWC's Labor Market and Career Information department received 3,889 Apprenticeship program seed records from TWC's Workforce Policy and Service Delivery department in 2009. Those seed records were comprised of Apprenticeship Program participants who completed the 2007-2008 training year. Apprenticeship programs last between 1 and 5 years, depending on the occupation of training. Even though a program may take years on the whole, each year of the program is a separate component that must be completed, and each year has requirements and benchmarks that must be met before a participant can advance to the next year. It is analogous to high school, where each year has unique curriculum which must be completed before advancement to the next grade.

After removing the duplicates, there remained 3,861 usable, unique records. Those records were then linked to the TWC's Unemployment Insurance (UI) wage record database for the 4th quarter of 2008 to determine post-program employment and earnings. If a participant was found employed by more than one employer, the earnings for all employers were summed and the 4-digit North American Industry Classification System (NAICS) code of the employer paying the most wages was retained for analysis. The seed records were also sent to the Texas Higher Education Coordinating Board (THECB) for linkage to the public postsecondary master enrollment records for the fall semester of 2008. Records were then linked to the Federal Employment Data Exchange System (FEDES) to identify those employed by the federal government. The seed records were also linked to the Texas Bureau of Vital Statistics, in order to determine if any former participants were deceased. After removing the deceased, there were 3,850 records retained for analysis.

Results

Employment and median quarterly earnings by completion status can be seen on Table 1 simultaneously. Each side of the table has been sorted independently of the other, with the overall cohort total included in the sort. This allows for the ranked display of two different pieces of information in the same table, and it also allows us to see how the groups compared to the total employment and earnings. As would be expected, participants who successfully completed the year’s training and advanced on to the next had the highest employment (89.9%) and median quarterly earnings (\$8,648). The data do not distinguish those who have completed their entire course of apprenticeship training from those who have completed a particular year of training and are moving on to the next. Since full-time employment is a requirement of the program, and the employment data is from the 4th quarter of 2008, some members of the “Successfully Completed and Advanced” category are participants who have completed their entire course of training, but not all.

Table 1. Employment and Earnings by Completion Status

% Working	N	Completion Status		N	Median Earnings
89.9	2,833	Successfully Completed & Advanced	Successfully Completed & Advanced	2,833	\$8,648
85.9	3,850	Total	Total	3,850	\$8,216
76.9	572	Gained Skills & did not complete	Successfully Completed & did not Advanced	82	\$7,769
73.2	82	Successfully Completed & did not Advanced	Gained Skills & did not complete	572	\$6,671
71.3	363	Did not complete training	Did not complete training	363	\$6,268

Table 2 shows employment by the occupations of training for program participants. The three occupations with the most participants were Electrician, Plumber/Pipefitter, and Sheet Metal Worker. Of occupations with more than 50 apprentices, Electrician had the highest employment during the target quarter with 88.5 percent employed, followed by Pipefitter with 88.2 percent employed. Employment for the entire cohort in the 4th quarter of 2008 was 85.9 percent. Overall median quarterly earnings for the cohort were \$8,216 in the 4th quarter of 2008. Operating Engineers had the highest median earnings of all occupations with \$13,762. Plumber/Pipefitter apprentices had the highest median quarterly earnings between the three largest occupations, earning \$8,661. Electricians, the largest group, had median quarterly earnings of \$8,291.

Table 2. Employment and Earnings by Occupation

% Working	N	Occupation		N	Median Earnings	
100.0	n/a	Cement Mason		Operating Engineer	32	\$13,762
100.0	n/a	Plaster		Millwright	10	\$12,527
100.0	n/a	Telecommunications		Aircraft Manufacturing	9	\$11,632
100.0	6	Electrician Systems Tech		Insulator	18	\$9,068
100.0	7	Engine Maintenance Mechanic		Motor Grader Operator	14	\$8,785
89.6	48	HVAC		Plumber & pipefitters	638	\$8,661
88.5	2,330	Electrician		Telecommunications	n/a	\$8,297
88.2	68	Pipefitter		Electrician	2,330	\$8,291
87.5	32	Operating Engineer		Total	3,850	\$8,216
85.9	3,850	Total		Carpenter	110	\$8,084
83.7	638	Plumber & pipefitters		Iron Worker	214	\$7,980
83.3	18	Insulator		Pipefitter	68	\$7,938
82.7	110	Carpenter		HVAC	48	\$7,698
81.7	290	Sheet Metal Worker		Sheet Metal Worker	290	\$7,599
78.6	14	Motor Grader Operator		Engine Maintenance Mechanic	7	\$7,393
75.2	214	Iron Worker		Drywall Applicator	n/a	\$5,897
75.0	n/a	Automotive Tech		Taper	n/a	\$5,541
75.0	n/a	Drywall Applicator		Painter	20	\$5,488
72.2	18	Masonry		Plaster	n/a	\$5,456
70.0	10	Millwright		Masonry	18	\$4,002
60.0	20	Painter		Electrician Systems Tech	6	\$2,128
55.6	9	Aircraft Manufacturing		Cement Mason	n/a	\$1,908
33.3	n/a	Taper		Automotive Tech	n/a	\$740

Note: Cells with values less than 5 are marked "n/a" to protect the privacy of cohort members.

North East ISD was the training provider whose participants had the highest employment during the study period at 95.1 percent (Table 3). South San Antonio ISD had the second highest employment at 91.9 percent. Northside ISD had the most participants, and their employment was 87.8 percent. Beaumont ISD participants had the highest median quarterly earnings over the study period at \$9,882. Fort Worth ISD had the second-highest median quarterly earnings at \$9,160. Northside ISD exiters earned \$8,652 in the 4th quarter of 2008.

Table 3. Employment and Earnings by Training Provider

% Working	N	Training Provider		N	Median Earnings
100.0	n/a	Hallsville ISD	Beaumont ISD	260	\$9,882
95.1	163	North East ISD	Fort Worth ISD	470	\$9,160
91.9	148	South San Antonio ISD	Leander ISD	264	\$8,826
91.5	82	Corpus Christi ISD	Region 9 ESC	64	\$8,769
90.2	51	College Station ISD	Amarillo College	213	\$8,689
90.0	260	Beaumont ISD	Manor ISD	328	\$8,683
89.1	64	Region 9 ESC	Northside ISD	690	\$8,652
88.7	470	Fort Worth ISD	Dallas ISD	413	\$8,345
87.8	690	Northside ISD	Total	3,850	\$8,216
87.2	328	Manor ISD	Hooks ISD	30	\$7,943
86.4	213	Amarillo College	St Phillip's College	16	\$7,742
86.2	413	Dallas ISD	Waco ISD	67	\$7,738
85.9	3,850	Total	North East ISD	163	\$7,724
84.1	264	Leander ISD	Tyler ISD	17	\$7,654
83.7	43	South Plains College	South San Antonio ISD	148	\$7,585
83.6	67	Waco ISD	College Station ISD	51	\$7,423
76.5	17	Tyler ISD	South Plains College	43	\$7,325
76.5	17	Vernon College	Hallsville ISD	n/a	\$6,909
75.9	174	TSTC Harlingen	Corpus Christi ISD	82	\$6,767
75.0	16	St Phillip's College	El Paso Community College	336	\$5,648
74.7	336	El Paso Community College	Vernon College	17	\$5,495
53.3	30	Hooks ISD	TSTC Harlingen	174	\$5,069

Note: Cells with values less than 5 are marked "n/a" to protect the privacy of cohort members.

As would be expected, Building Equipment Contractors was the industry of employment with the largest number of Apprenticeship program participants found employed in the 4th quarter of 2008 (Table 4). Participants found working in the Other Specialty Trade Contractors industry had the highest median quarterly earnings at \$13,607. Six of the ten industries in the top ten were either contracting or construction.

Table 4. Top 10 Industries of Employment by 4-Digit NAICS Code

Industry of Employment	N Working	Median Earnings	NAICS Code
Building Equipment Contractors	2,241	\$8,519	2382
Employment Services	187	\$5,814	5613
Foundation, Structure, and Building Exterior Contractors	112	\$8,630	2381
Nonresidential Building Construction	87	\$8,863	2362
Architectural and Structural Metals Manufacturing	59	\$8,173	3323
Building Finishing Contractors	53	\$7,530	2383
Other Specialty Trade Contractors	30	\$13,607	2389
Limited-Service Eating Places	24	\$2,207	7222
Utility System Construction	19	\$7,969	2371
Hardware, and Plumbing and Heating Equipment and Supplies Merchant Wholesalers	19	\$12,269	4237

Tables 6 and 7 are the result of seed record linkage to the THECB’s master enrollment file, the CBM001. Seed records were linked to the Fall 2008 semester only. It is important to distinguish the source of data for Tables 6 and 7 from the preceding tables in this report because participants found in the following tables are most likely not enrolled in these programs or institutions as part of their apprenticeship program. The participants found in the CBM001 are found enrolled in courses for semester credit hours that apply toward a degree credential (i.e., certificate, associate’s degree, advanced technical degree). According to the THECB’s Reporting and Procedures Manual for Texas Community, Technical, and State Colleges, the CBM001:

“... includes all students enrolled at the reporting institution in courses (for which semester credit hours are awarded) as of the official census date, which shall be the 12th class day for the fall and spring semesters (16 week sessions) and the 4th class day for each of the summer terms (6 week sessions).”

Table 6 shows the Classification of Instructional Programming (CIP) titles of the top 10 areas of enrollment for program participants who were found enrolled in postsecondary education during the fall semester of 2008. An overwhelming majority of participants who were found in school were receiving instruction in the Electrical and Power Transmission Installation/Installer, General instructional area. Welding Technology/Welder was a distant second.

Table 6. Top 10 Areas of Enrollment, by 6-digit CIP Code, for All Participants Enrolled in Postsecondary Education in the Fall Semester 2008

CIP Title	N
Electrical and Power Transmission Installation/Installer, General	122
Welding Technology/Welder	24
Industrial Electronics Technology/Technician	11
Liberal Arts and Sciences/Liberal Studies	9
Business Administration and Management, General	7
Computer Engineering Technology/ Technician	6
Electrician	6
Undeclared	6
Electrical/Electronic Equipment Installation and Repair, General	5
Occupational Safety and Health Technology/Technician	n/a

Note: Cells with values less than 5 are marked "n/a" to protect the privacy of cohort members.

Table 7 shows the ten postsecondary institutions with the largest number of program participants found enrolled in the fall semester of 2008. Tarrant County Northwest Campus had, by far, the largest number of exiters enrolled, followed by South Plains College.

Table 7. Top 10 Postsecondary Institutions with the Highest Number of Participants Enrolled in the Fall Semester 2008

Institution	N
Tarrant County Northwest Campus	143
South Plains College	20
Vernon College	12
St. Philip's College	10
El Paso Community College District	7
Blinn College	6
Austin Community College	6
DCCCD North Lake College	6
Amarillo College	5
Del Mar College	n/a
Note: Cells with values less than 5 are marked "n/a" to protect the privacy of cohort members.	

References

Apprenticeship Training Program. <http://www.twc.state.tx.us/svcs/apprentice.html>

Texas Workforce Commission Annual Report 2008. <http://www.twc.state.tx.us/news/ar08.pdf>

TRACER. <http://www.tracer2.com>

United States Department of Labor. Employment and Training Administration. Office of Apprenticeship. <http://www.doleta.gov/OA/>