

Ready to Work Program Performance Report July 2007-December 2008



Florida Department of Education
Division of Career and Adult Education
Lucy D. Hadi, Chancellor

October 2009

Florida Ready to Work Program Performance Report,
July 1, 2007 – December 31, 2008

Summary of Findings

- From July 1, 2007, through December 31, 2008, there were 53,216 active participants in the program.
- A majority of active participants (53.2%) were under the age of 19.
- Of the 707 total assessment centers, 303 (42.9%) had been established in public high schools.
- 23,586 students/jobseekers took all three assessments required to earn the credential (44.3% of active participants) and 19,708 earned the credential for a pass rate of 83.6%.
- Only about one-quarter of students/jobseekers who scored under three on an assessment retook the exam. Of those who did, however, the re-take pass rate (i.e. scoring three or better) ranged between 74% and 82%.
- Among credential earners, 8,835 (16.6%) did not take a placement test or use the Florida Ready to Work courseware.
- Among active participants, 64.7% used the applied mathematics courseware; 51.0% used the reading for information courseware; and 53.8% used the locating information courseware.
- On average, participants spent the most time on the applied mathematics courseware (mean = 1 hour 13 minutes) followed in order by reading for information (mean = 43 minutes) and locating information (mean = 34 minutes).
- The pattern of courseware use by placement level follows a roughly U-shaped curve with cumulative time spent in courseware higher at the lowest and highest placement levels.
- Participants tended to spend the most time in the level immediately following their placement level.
- An analysis of learning gains by active participants using the courseware shows that a higher percentage of participants at placement levels of two or less were making learning gains than those placed at level three or above.
- Employment and estimated wage data indicate that credential earners have outperformed their peers, but given the small size of the early cohorts and limitations on data for comparative purposes, this finding should be considered preliminary.

Background

Florida Ready to Work (RTW) was initiated in 2006 and is authorized in Section 1004.99, Florida Statutes, to help educators prepare students with the core skills common to most jobs today, give employers an evaluative tool to assess the fundamental job skills of potential employees/incumbent workers, and provide jobseekers the skills training and a standard credential to make themselves more competitive in the job market.

The key components of the program include:

Credential – A career readiness certificate signed by Governor Charlie Crist, verifying that a student/jobseeker/incumbent worker has the foundational skills required for most jobs today from entry-level to professional. Florida is one of 30 states with similar programs, making the Florida Ready to Work credential portable nationwide.

Courseware – Online training in nine skill areas valued by employers. The courseware measures current skills, identifies skill gaps and helps students/jobseekers/incumbent workers build the skills they need for post-secondary education, workforce training and ultimately employment or promotion.

Assessments – To earn the credential, a student/jobseeker/incumbent worker must take three assessments measuring workplace communication, reasoning and problem-solving skills.

Job Profiling – Process to identify the skills and skill levels necessary for a specific job, providing employers quantitative benchmarks for hiring, training and promotion.

More than 400 employers statewide have endorsed the program as a tool to identify qualified new hires, reduce hiring/training costs, build the skills of their incumbent workforce and grow their businesses. Florida Ready to Work is supported by the Florida Chamber of Commerce, Associated Industries of Florida, the HR Florida State Council and other business/industry organizations statewide.

The program is funded by the Florida Legislature, and there is no cost to program participants. Any Florida student or resident is eligible to earn the RTW credential. RTW is administered by the Florida Department of Education, Division of Career and Adult Education, in cooperation with Worldwide Interactive Network (WIN). WIN provides the courseware, including the online placement and post tests, and all related implementation services for the program. Through a subcontract with ACT WorkKeys® WIN also provides the final assessments required to earn the credential.

Students/jobseekers sign up at a participating assessment center, complete an on-line placement exam to determine initial mastery level, enroll in self-paced tutorial courseware as needed, and then complete the proctored final assessments. Mastery of three skill areas must be demonstrated: Applied Mathematics, Locating Information, and Reading for Information.

Applied Mathematics measures workplace mathematical reasoning and problem-solving skills from basic addition, subtraction, multiplication, and division to multiple functions like calculating percentage discounts and markups.

Locating Information measures comprehension and application of workplace graphics such as charts, graphs, tables, forms, flowcharts, diagrams, floor plans, maps, and instrument gauges.

Reading for Information measures reading comprehension and reasoning skills when using written text on the job including memoranda, letters, directions, signs, notices, bulletins, policies, and regulations.

These particular assessments were chosen because research indicates that they are necessary for 85% of all jobs and they are the basis for most other career readiness programs around the country (thus providing portability). WIN, in cooperation with ACT/WorkKeys®, provides access to a database of nearly 2,000 occupations linked to assessment skill level requirements that students/jobseekers may use for career exploration and identification. Before being discontinued due to budget constraints effective August 2009, Work Habits, a supplementary soft skills assessment could be taken, and students/jobseekers who successfully completed it received a “Work Habits Certified” seal on their RTW credential.

Each assessment can be completed in less than one hour and is scored on a six- or seven-point scale. Assessments are offered online but must be proctored and taken at a certified RTW testing center. The credential is awarded based on the three assessments and comprises three levels: Gold (minimum score of five on all assessments), Silver (minimum score of four on all assessments), and Bronze (minimum score of three on all assessments). Credential earners receive a personalized certificate signed by the Governor.

The RTW program is offered at the following sites: Adult education centers, career centers, Florida colleges, correctional institutions, employers, One-Stop Career Centers (Regional Workforce Boards), private high schools, public high schools, and universities.

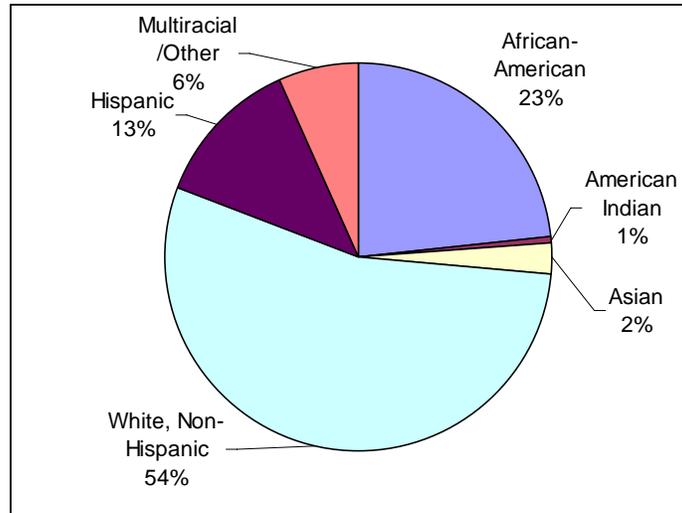
Participant Profile

From the program’s inception through December 31, 2008, 191,017 student/jobseekers registered for the program, and of that number, 28 percent (n=53,216) went on to take at least one placement test, use the courseware, or

take a final assessment. This report will focus on the performance of these “active participants.”

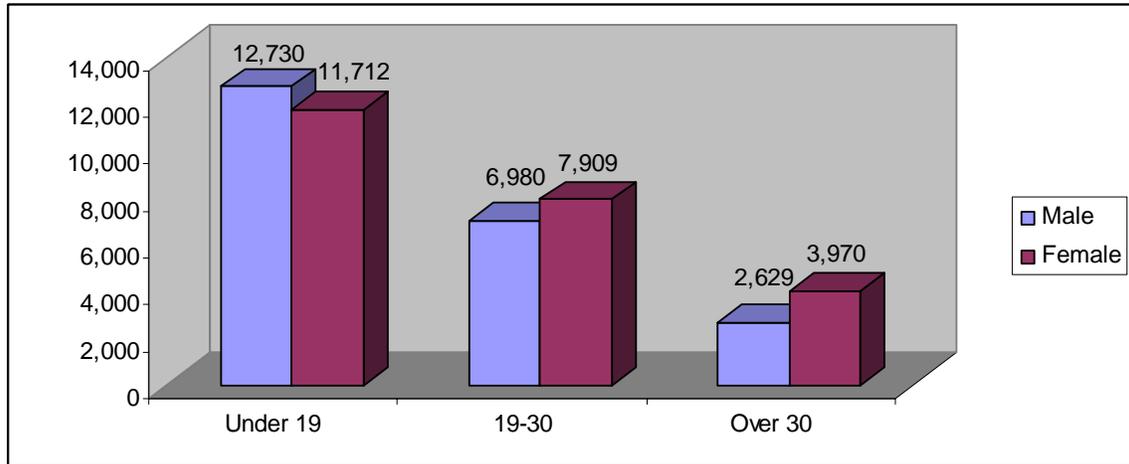
The program served a diverse population (see Exhibit 1). Note, however, that the race of 16% of active participants is unaccounted for because the data were not volunteered upon registration.

Exhibit 1
Race Distribution of Active Participants, (44,514 of 53,216)



A majority of active participants (53.2%) were under the age of 19. The gender distribution shifts, however, as one moves from the under-19 cohort to the over-30 cohort (see Exhibit 2). While high-school-age male participants outnumber their female counterparts, the opposite is true among participants age 19-30 and over-30.

Exhibit 2
Age and Gender Distribution of Active Participants (45,930 of 53,216 reporting)



Enrollments, Assessments, and Credentials

The demographic profile of program participants is driven by the distribution of assessment centers. Table 1 reveals that as of December 31, 2008, 303 of the 707 total assessment centers had been established in public high schools, 90 in juvenile justice facilities, and 39 in private and charter high schools. These categories represented 58.8% of all assessment centers in the state. The ensuing enrollment distribution can be seen in the third column of Table 1. The end result was an enrollment distribution heavily weighted toward participants under the age of 19. The number of credentials awarded through assessment centers in high schools (11,362), is over three times higher than the next assessment center category (Regional Workforce Boards with 3,447 credentials awarded). Table 1 also reveals that the percentage of active participants earning a credential varies by assessment center type. The highest percentage was correctional institutions (85.9%), and the lowest was adult education centers (16.3%).

Table 1
Number of Centers, Active Participants, Assessments Taken, and Credentials
Awarded by Assessment Center Type, July 1, 2007 – December 31, 2008

Assessment Center Type	Centers	Active Participants	Assessments Taken	Credentials Awarded	Percent Earning Credential
High School	303	31,690	54,111	11,362	35.9%
Regional Workforce Board	34	9,182	13,536	3,447	37.5%
Technical Center	37	5,961	9,705	2,617	43.9%
Community Based Org	37	1,255	1,297	526	41.9%
Community College	35	1,023	1,892	427	41.7%
Juvenile Justice Inst.	90	1,086	1,338	256	23.6%
Other	23	497	168	244	49.1%
Private/Charter	39	770	33	237	30.8%
Adult Education	52	1,066	815	174	16.3%
Employer	34	346	632	168	48.6%
University	4	212	709	140	66.0%
Correctional Institution	19	128	1,737	110	85.9%
Total	707	53,216	85,973	19,708	37.0%

Table 2 shows that 23,586 student/jobseekers took all three assessments required to earn the credential (44.3% of active participants) and 19,708 earned the credential for a pass rate of 83.6%. In other words, those who took all three credential assessments had a relatively high rate of success in earning a credential. Low percentages of credential earning in Table 1 may be explained in part by a low percentage of participants taking the entire three-assessment battery. For example, adult education centers had the lowest credential percentage in Table 1 in large part because they had the lowest percentage taking the entire battery (20.1%) in Table 2. Among their student/jobseekers who took the battery, adult education centers had a pass rate of 81.3%.

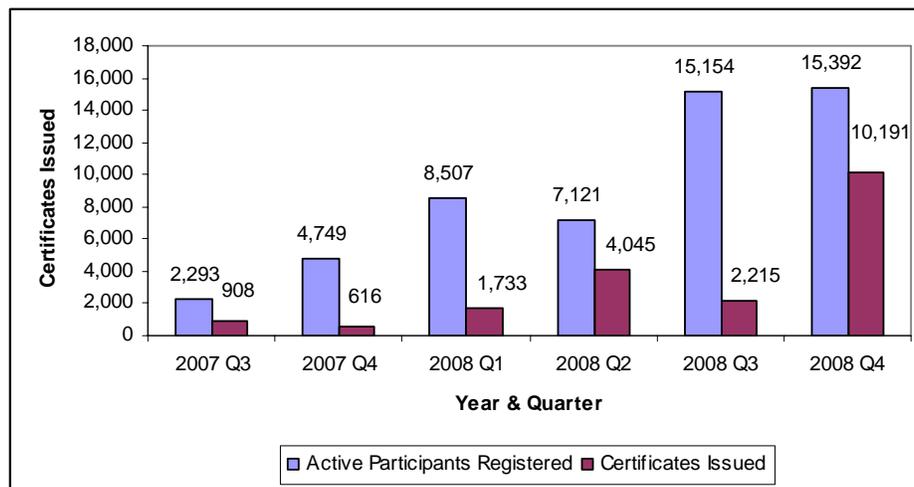
Conversely, community based organizations had the lowest pass rate among their battery takers in Table 2 but were well above average in percentage of participants taking the battery (62.5%). This resulted in above average results in Table 1 (41.9%). Ultimately there are two drivers that determine the percentage of participants earning a credential: the percent that take the three-assessment battery and the success rate of those battery takers. Because there is much less room for improvement in the pass rate, efforts to boost credential productivity should focus on getting more participants to take all three assessments.

Table 2
Assessment Batteries Taken, Credentials Earned, and Success Percentage by
Assessment Center Type, July 1, 2007 – December 31, 2008

Assessment Center Type	Active Participants [A]	Participants Taking All Three Assessments [B]	Percent Taking Battery [B]/[A]	Credentials [C]	Pass Rate for Active Participants Taking all three assessments [C]/[B]
Employer	346	174	50.3%	168	96.6%
Other	497	257	51.7%	244	94.9%
Corrections	128	116	90.6%	110	94.8%
Technical Center	5,961	2,938	49.3%	2,617	89.1%
Juvenile Justice	1,086	291	26.8%	256	88.0%
Regional Workforce Board	9,182	3,987	43.4%	3,447	86.5%
Private/Charter Schools	770	278	36.1%	237	85.3%
High School	31,690	13,792	43.5%	11,362	82.4%
Adult Education	1,066	214	20.1%	174	81.3%
Community College	1,023	556	54.3%	427	76.8%
University	212	199	93.9%	140	70.4%
Community Based Orgs	1,255	784	62.5%	526	67.1%
Total	53,216	23,586	44.3%	19,708	83.6%

As shown in Exhibit 3, the program experienced steady expansion in the enrollment of active participants from the third quarter of 2007¹ to the first quarter of 2008, doubling in number each quarter. After a dip in registrations in the following quarter, registrations doubled again in the third quarter of 2008 and maintained that pace in the final quarter of the year. The number of certifications issued grew unevenly from program inception through the third quarter of 2008, then boomed in the final quarter of 2008 with a total of 10,191 credentials compared to 2,215 the previous quarter, a 360% increase.

Exhibit 3
Registration of Active Participants and Credentials Issued by Quarter



Participants may take the final assessment multiple times. Only about one-quarter of students/jobseekers who scored under three on an assessment took advantage of this opportunity (see Table 3). Of those who did, however, the re-take pass rate (i.e. scoring three or better) ranged between 74% and 82%.

Table 3
Assessment Re-Takes by Subject Area

Subject Area	1st Assessment	Score < 3	One or More Retakes	Percent Retake	Retake Score 3 or Better	Percent Retakes Successful
Applied Math	29,040	3,061	785	25.6%	642	81.8%
Reading for Information	26,478	2,294	553	24.1%	442	79.9%
Location Information	27,401	4,023	965	24.0%	717	74.3%

¹ Due to a new enrollment process implemented in fall 2007, in the Florida Ready to Work database, there are 583 records with credentials earned from April – June 2007, but with enrollment dates after August 31, 2007. For this report, the enrollment quarter for these records is based on the reported enrollment, and they are included in Exhibit 3 with third quarter 2007 credential earners.

Courseware Activity and Learning Gains

Among credential earners, 8,835, or 16.6%, did not take a placement test or use the Florida Ready to Work courseware. Instead, they went directly to the assessments and passed each of the subject areas with a three or better score. Another 10,873 participants earned a credential after taking at least one placement test for a total of 19,708 credentials earned. Among active participants, 70.0% took at least one placement test, and 44.3% took all three placement tests.

Use of courseware varied by subject area. Among active participants, 64.7% used the Applied Mathematics courseware; 51.0% used the Reading for Information courseware; and 53.8% used the Locating Information courseware.

Use of courseware varied greatly by placement level and subject area. As shown in Table 4, on average, participants spent the most time in the Applied Mathematics courseware (mean = 1 hour 13 minutes) followed in order by Reading for Information (mean = 43 minutes) and Locating Information (mean = 34 minutes). The median figures for each of the subject areas were approximately half of the mean because there were a few participants with extremely high totals, which skewed the mean toward the high end.²

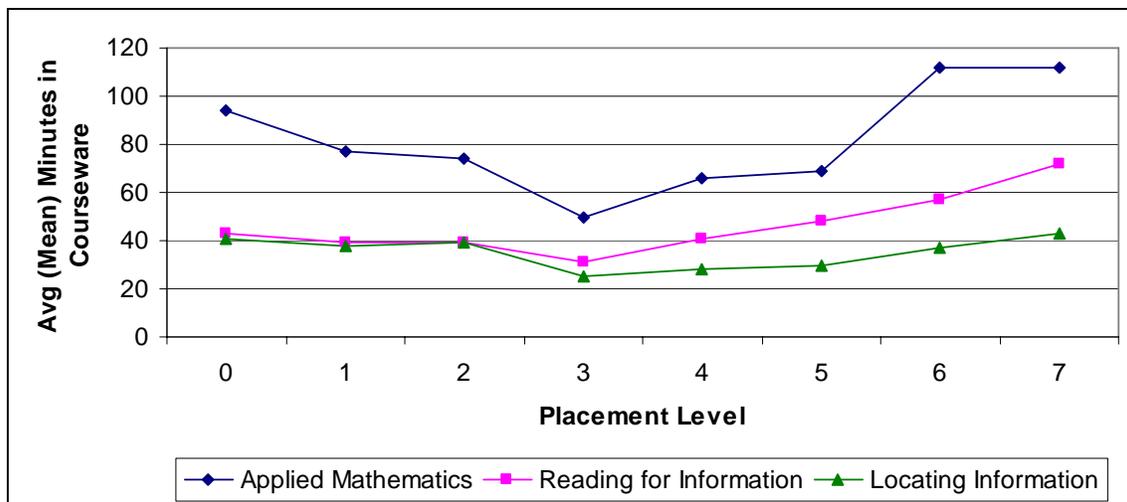
Table 4
Average Cumulative Courseware Time by Subject Area

Subject Area	Mean Cumulative Time	Median Cumulative Time	Maximum
Applied Mathematics	1 hour 13 minutes	29 minutes	147 hours 20 minutes
Reading for Information	43 minutes	20 minutes	84 hours 40 minutes
Locating Information	34 minutes	14 minutes	75 hours 57 minutes

² Mean is commonly referred to as “average” and is calculated by dividing the sum of all the values by the number of cases in the data set. Median is the value of the case that is in the exact middle of a sorted list of cases so that the number of cases with larger values is equal to the number of cases with smaller values. If the number of cases is even, the median is the average (mean) of the two values in the middle of the sorted list.

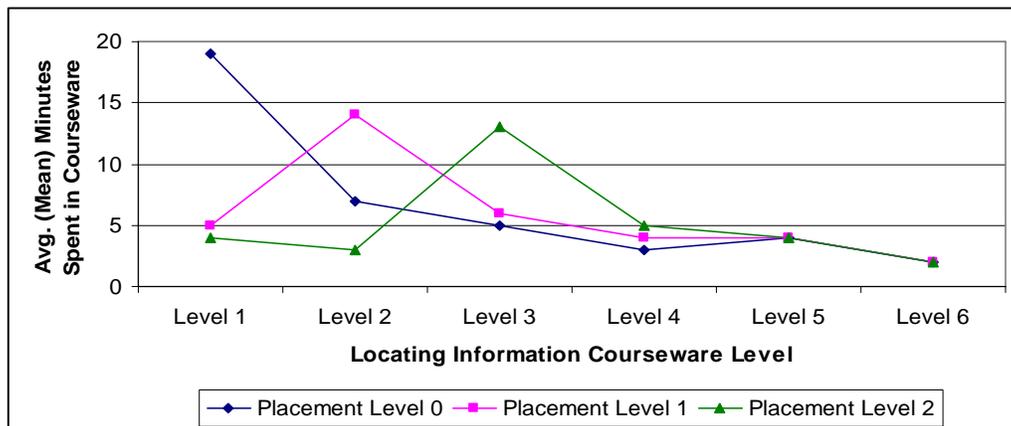
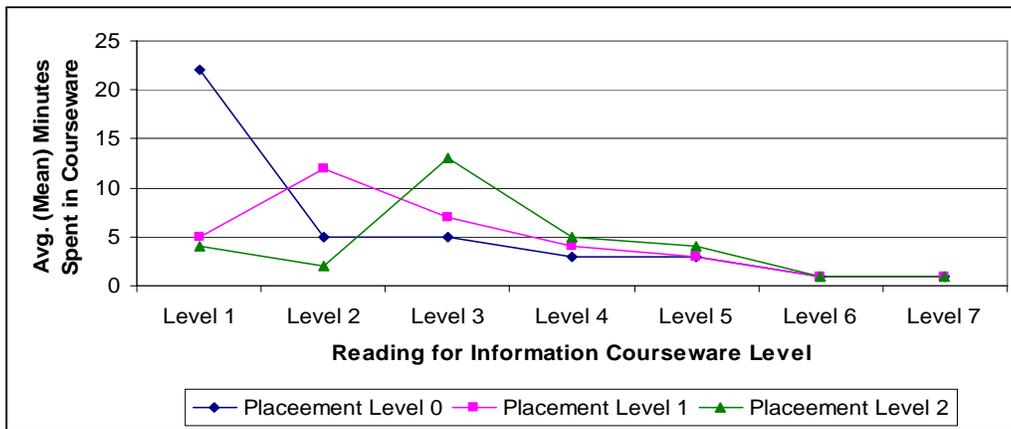
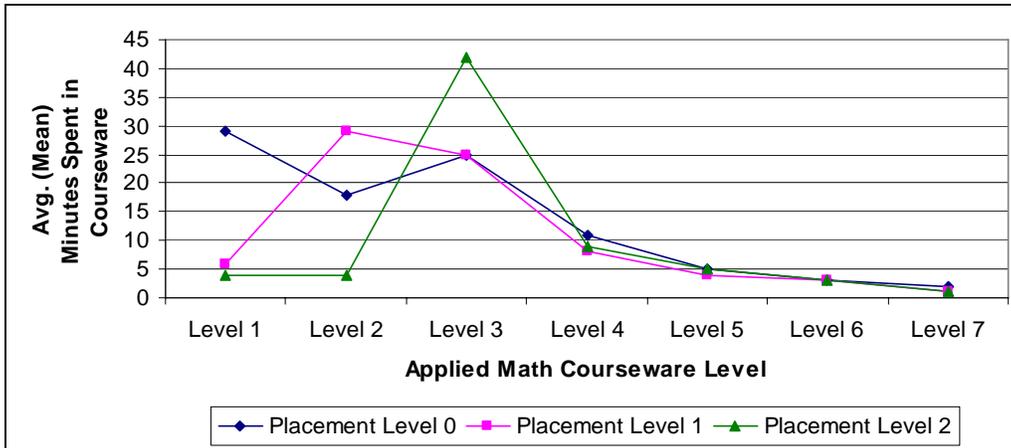
The pattern of courseware use by placement level follows a roughly U-shaped curve with cumulative time spent in courseware higher at the lowest and highest placement levels (see Exhibit 4). There is a drop in courseware use to its lowest level among level-three placements in all three subject areas. A possible explanation for this is that participants who place at the minimum level for a bronze certificate may be more willing to stop out of the courseware sooner than their peers-- satisfied that they will, at the very least, earn a credential. The increased courseware use at the high end of the placement levels might be partly explained by access. Each courseware level is available only to those who place or post-test into them. Therefore, a participant who places in level seven has access to courseware levels one through seven. In contrast, a participant who places at level three must work through the level-four courseware and successfully post-test to get to level five and so on.

Exhibit 4
Average Time in Courseware by Placement Level and Subject Area



A closer look at courseware use by participants placing at lower levels reveals that these participants tended to spend the most time in the level immediately following their placement level (see Exhibit 5). After level three there is a sharp drop in courseware use. This further supports the hypothesis that participants placed in lower levels stop out once they reach the minimum required score for a bronze-level credential.

Exhibit 5
Average Time in Courseware by Courseware Level and Subject Area



An analysis of learning gains by active participants using the courseware shows that a higher percentage of participants at placement levels of two or less were making learning gains than those placed at level three or above (see Table 5). A learning gain is defined as scoring on a post-test at a higher level than initial highest placement level. The pattern is different than the U-shaped courseware-use curve in that learning gains did not go up at the higher placement levels. This suggests that highly placed participants were making extensive use of the courseware for review more than as a way to learn new material.

Table 5
Learning Gains by Subject Area and Placement Level

Applied Math Placement Level	Active Participants	Used Courseware		Made Learning Gain (Of Those Using Courseware)	
0	2,171	2,059	94.8%	1,058	51.4%
1	1,533	1,350	88.1%	449	33.3%
2	9,587	9,135	95.3%	2,279	24.9%
3	5,106	4,820	94.4%	420	8.7%
4	6,924	6,662	96.2%	603	9.1%
5	4,790	4,614	96.3%	336	7.3%
6	1,190	1,140	95.8%	61	5.4%
7	4,427	4,367	98.6%	N/A	N/A
Reading for Information Placement Level	Active Participants	Used Courseware		Made Learning Gain (Of Those Using Courseware)	
0	5,910	5,569	94.2%	1,598	28.7%
1	2,406	2,192	91.1%	558	25.5%
2	2,330	2,211	94.9%	484	21.9%
3	3,538	3,385	95.7%	210	6.2%
4	6,458	6,215	96.2%	501	8.1%
5	2,553	2,474	96.9%	172	7.0%
6	1,454	1,411	97.0%	78	5.5%
7	2,743	2,715	99.0%	N/A	N/A
Locating Information Placement Level	Active Participants	Used Courseware		Made Learning Gain (Of Those Using Courseware)	
0	3,999	3793	94.8%	1,253	33.0%
1	3,963	3720	93.9%	1,027	27.6%
2	3,115	2988	95.9%	832	27.8%
3	3,903	3754	96.2%	391	10.4%
4	3,268	3146	96.3%	312	9.9%
5	3,301	3127	94.7%	252	8.1%
6	7,170	7049	98.3%	N/A	N/A

Labor Market Outcomes

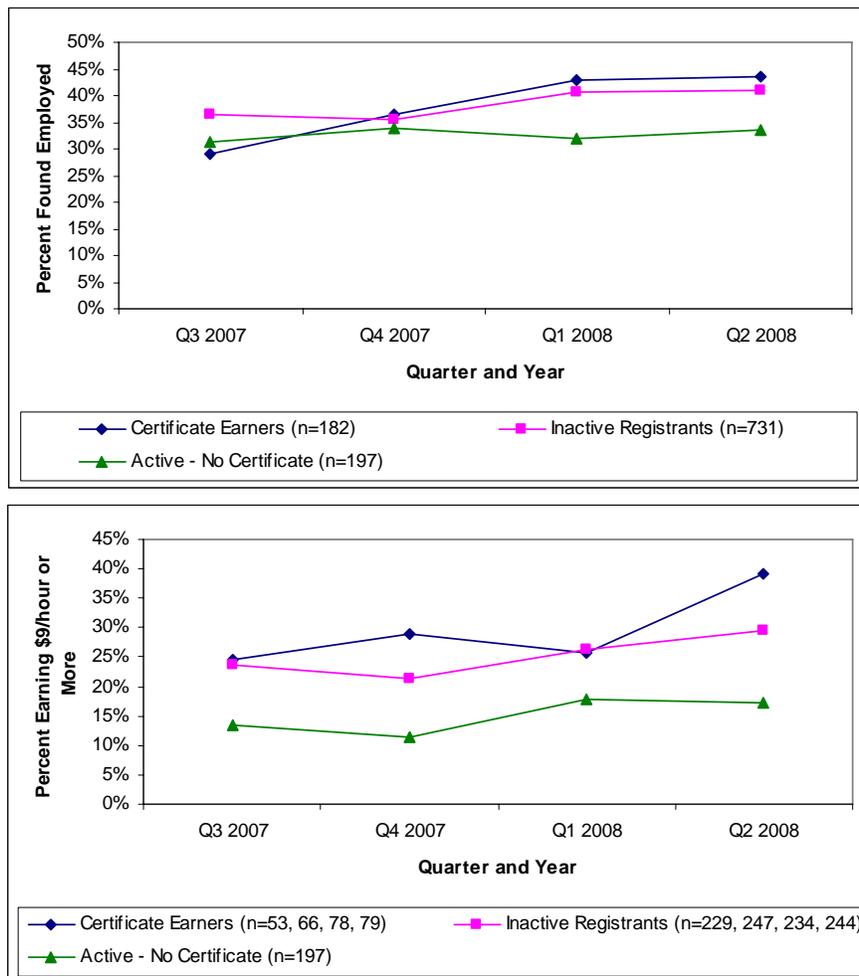
The primary purpose of the program from the perspective of the participating students/jobseekers is to develop their skills required for admission into post-secondary education or a workforce training program and ultimately to improve employment outcomes. One way to evaluate the performance of the program in this regard is to examine the job placement and earnings data of program completers (credential earners) and compare the numbers to those of a similar group of individuals over the same period of time. At the time of the analysis, enrollment data was available for July 1, 2007 – December 31, 2008.

Employment and estimated hourly wage data, however, were available only through June 30, 2008 (second quarter).³ Therefore, the only quarterly cohort available that has a full year of employment and earnings data is the first quarter of program data (July 1 – September 30, 2007). Enrollments have ramped up significantly since inception, but the first quarter comprises a relatively small number of active student jobseekers (n=2,293). The small number in the cohort reduces the robustness of the findings.

³ Employment and earnings data were extracted from the Florida Education and Training Placement Information Program (FETPIP).

The second challenge encountered when analyzing employment and wage data is finding a valid comparison group. The first chart in Exhibit 6 compares the percentage of participants found employed among credential earners from the third quarter of 2007 to the following: 1) registrants in that quarter who had no further program activity and 2) registrants in the same quarter who were active but never earned a credential.⁴ The chart shows that credential earners made the most gains, moving from the lowest employment percentage to the highest. The second chart shows the trends among the same three groups in the percentage of employed participants earning \$9 per hour or more. Credential earners and inactive registrants started at virtually the same percentage, but by the fourth quarter credential earners have nearly a ten-point advantage, on average, compared to inactive registrants.

Exhibit 6
Placement and Estimated Wages by Quarter



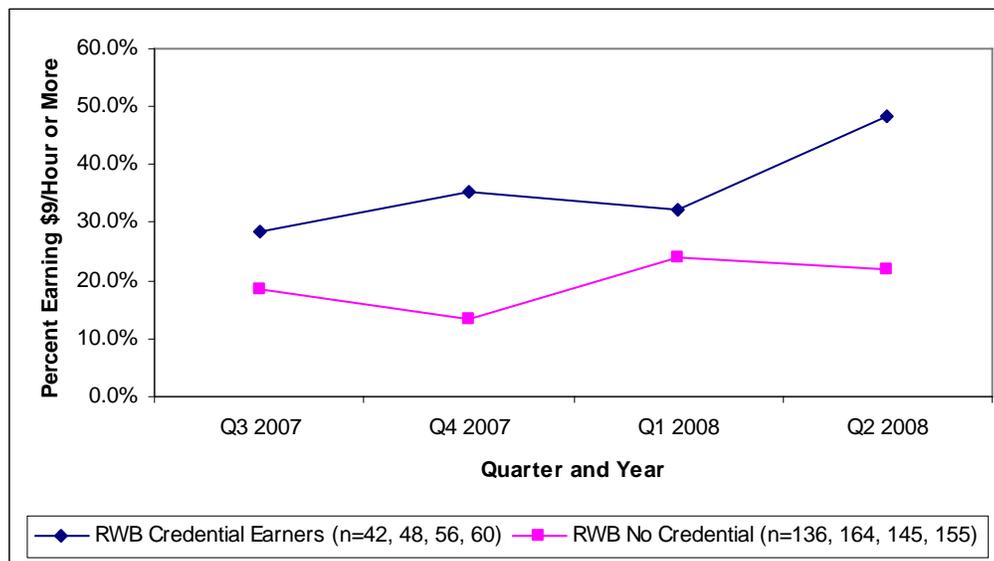
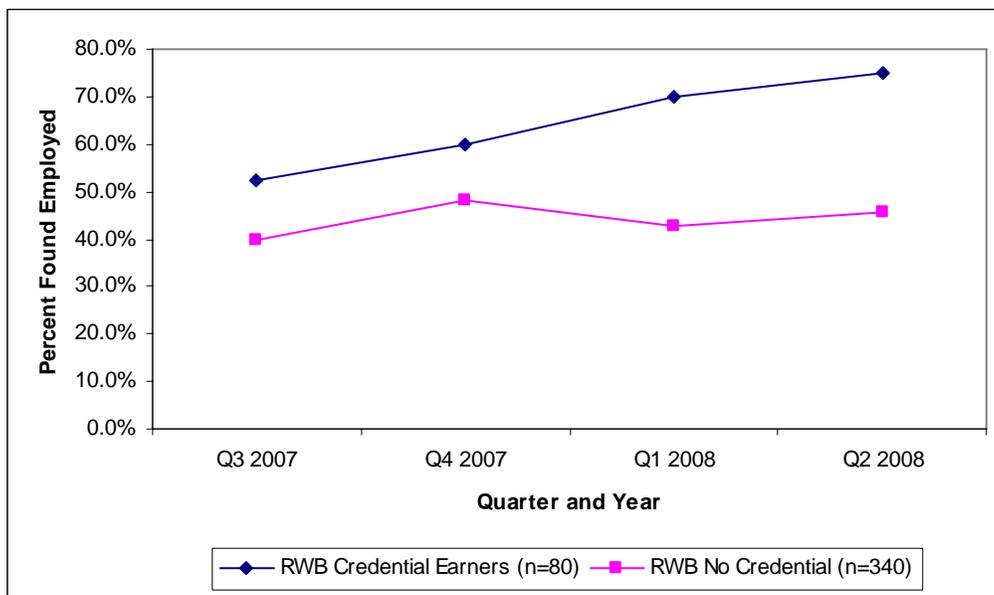
⁴ Participants found enrolled in postsecondary education in the first quarter of 2008 or with invalid Social Security Numbers are excluded from all employment and earning comparisons in this report.

Because performance can be influenced by the characteristics of participating students/jobseekers (e.g. age, education, cognitive ability), it is important to make apples-to-apples comparisons. Unfortunately, being a new program, there is inadequate data at this time to do sophisticated statistical analysis that controls for participant characteristics. In examining the data, however, it is clear that active participants who do not earn a credential are very different, on average, than credential earners and inactive registrants. Active participants who do not earn a credential are much more likely to have entered the program through a high school assessment center (17.4%) compared to credential earners (1.6%) and inactive registrants (6.1%). Also, available data indicate that active participants who do not earn a credential are approximately three times more likely to be under the age of 19 than credential earners and inactive registrants.

To control for differences in participant characteristics, a comparison within the same assessment center category may be more valid. Participants registered through Regional Workforce Boards comprise a population that is both highly motivated (jobseekers needing training, re-training, and/or placement) and poised to benefit immediately from certification. Comparing active Regional Workforce Board assessment center participants who earn a certification (n=80) to those who do not (n=340) should control for some participant characteristics.

When employment and estimated wages (Exhibit 7) of the two groups are compared, we see that credential earners perform better in the first quarter of the analysis, and that gap grows substantially over the next three quarters. This suggests that, in the short term, credential earners are performing better in the job market than their counterparts who did not earn a credential, but this difference may be explained by differences in baseline knowledge, skills, and abilities—factors which are not considered in this analysis.

Exhibit 7
Placement and Estimated Wages by Quarter, Regional Workforce Board
Participants Only



Future Research

This report represents a first step toward understanding RTW's impact on participants' skill acquisition and employment outcomes, and the initial findings suggest that the program had a positive impact on students and job seekers. As data become available on larger cohorts of credential earners over longer periods of time the initial findings in this report on employment and wages will be tested. In addition, more work will be done on controlling for student/jobseeker characteristics to make more refined comparisons.