

# The Employment and Earnings Impact of the Caroline Center's Employment Training Program



**Caroline Center**

Committed to Women  
Committed to Work

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## Introduction and Overview

The Caroline Center retained the Jacob France Institute of the Merrick School of Business at the University of Baltimore (JFI) to analyze the employment, earnings and welfare (TCA) participation of its training program graduates. This report found that:

- While the short term gains in employment for training program graduates were mixed, graduates of all of the six job training programs offered by the Caroline Center had higher rates of workforce participation one year after training.
- Caroline Center training program graduates experienced gains in earnings, but it took time for this earnings growth to occur. Graduates of five of the six training programs offered experienced declines in quarterly earnings one quarter after graduation. Graduates of four of the six programs experienced gains in annual earnings compared to before training, and all experienced gains in earnings in the second year after graduation.
- For Caroline Center graduates, second year annual earnings gains ranged from a low of \$2,474 for graduates of the Culinary Arts Program to a high of \$7,087 for graduates of the CNA Program.
- For the Caroline Center's largest program, the Certified Nursing Assistant (CNA) Program, graduates experienced a 10% increase in employment participation in the quarter after graduation and a 33% increase one year after training. CNA Program graduates experienced a \$4,303, 55% gain in annual post training earnings and a \$7,087, 91% gain in earnings two years after graduation.
- For the Caroline Center's newest program, the Pharmacy Technician Program, after an initial decline in employment, graduates experienced a 10% increase in employment participation one year after training. After an initial modest \$54 decline in earnings the year after graduation, Pharmacy Technician Program graduates experienced a \$4,570, 35% gain in earnings two years after graduation.
- 599 or 69% of the 871 graduates of Caroline Center's training programs were employed in the first quarter of 2007.
- The average quarterly earnings across all employed graduates in the first quarter of 2007 are \$4,621 and the average annual earnings (four quarter) are \$18,270.
- The rate of welfare program (Temporary Cash Assistance – TCA) participation one year after completing a training program declined for graduates from five of the six training programs and was unchanged for the sixth.

## Analysis and Results – By Training Program

The Caroline Center provided a database of all of its graduates since 1996. This database contained 1,009 graduates. In order to conduct this analysis of employment, earnings and welfare participation, the JFI limited the study group to living individuals, with valid social security numbers, who completed a training program. The JFI excluded a total of 38 records from the database for the following reasons – twenty-one individuals did not complete their training; eleven individuals lacked social security numbers; and six were known to be deceased. Thus, this analysis is based on 971 valid records. We further restricted our analysis to graduates from training programs prior to 2007, eliminating 48 graduates, because the JFI only had wage and salary data through the first quarter of 2007, removed the 31 graduates of the GED Program – because this program was not a direct job training program, and removed the 21 graduates of the Upholstery program – because these graduates are primarily involved in piecework as an independent contractor and, thus, their full earnings are not likely to be included in the Maryland wage record data. This reduced the number of graduates used in this analysis to 871. As presented in Table 1, the Caroline Center’s Certified Nursing Assistant (CNA) Program had the largest number of graduates (427) and accounted for 49% of the total number of graduates, followed by the Clerical Training Program with 195 graduates and 22% of the total and the Childcare Program with 146 graduates and 17% of the total. These three programs accounted for 87% of all 1996-2006 training Program graduates.

**Table 1**  
**Number of Caroline Center**  
**Training Program Graduates, by Program**  
**For 1996 through 2006**

Training Program	# of Graduates	% of Total
Total	871	
Childcare	146	17%
Clerical	195	22%
CNA	427	49%
Culinary Arts	22	3%
House Painting	6	1%
Pharmacy Tech	75	9%

Source: The Caroline Center and The Jacob France Institute

The Jacob France Institute then analyzed the employment, earnings and welfare (Temporary Cash Assistance – TCA) participation of these 871 graduates. As presented in Table

2, the graduates of all of the six job training programs offered by the Caroline Center had higher rates of workforce participation one year after training. Workforce participation rates for the quarter immediately after training was higher for four of the six programs, with no change for the House Painting program and lower workforce participation for the Pharmacy Technician Program. For graduates of the Pharmacy Technician Program the lower level of workforce participation may be due to the need to obtain a license after graduation and prior to starting employment.

**Table 2**  
**The Caroline Center Training Program Evaluation Report**  
**Analysis of Results By Training Program**  
**Employment Participation**

Program/Item	% Employed Pre-Training Quarter	% Employed Post -Training Quarter	Change	% Employed One Year After Training	Change
CNA	48.5%	58.8%	10.3%	81.3%	32.8%
Childcare	41.1%	45.2%	4.1%	72.6%	31.5%
Clerical	35.4%	49.2%	13.8%	83.1%	47.7%
Culinary Arts	40.9%	45.5%	4.5%	45.5%	4.5%
House Painting	33.3%	33.3%	0.0%	66.7%	33.3%
Pharmacy Tech	57.3%	50.7%	(6.7%)	68.0%	10.7%

Source: The Jacob France Institute

The average pre- and post- training earnings for the employed training program graduates are presented in Table 3.<sup>1</sup> Interestingly, average quarterly earnings in the quarter immediately following training declined for graduates of five of the six programs. Only graduates of the House Painting Program experienced an increase in quarterly earnings. The decline in post-training quarterly earnings may be attributable to the time required to find new employment, and in the case of CNA and Pharmacy Technicians, the requirement to take and pass a licensing test and obtain a license prior to starting employment. Graduates of the larger CNA and Clerical Programs both experienced gains in post-graduation annual earnings for the first year after completing training, with the CNA Program graduates experiencing a \$4,303 and 55% gain in annual earnings and Clerical Program graduates experiencing a \$1,506 and 20% gain in annual earnings. Graduates of the smaller House Painting Program experienced the largest wage gains as a percentage of pre-training income, \$2,299 and 125%, and graduates of the Childcare Program experienced a \$438 or 6% increase in earnings.

<sup>1</sup> All earnings figures are in constant 2007 dollars.

Graduates of all of the six Caroline Center's job training programs experienced gains in annual earnings when earnings for the second year after completing training are compared to annual earnings the year before completing training. As presented in the final three columns of Table 3, second year annual earnings gains ranged from a low of \$2,474 for graduates of the Culinary Arts Program to a high of \$7,087 for graduates of the CNA Program.

Annual earnings the year after completing training remained low for many training program graduates, ranging from \$4,137 for the House Painting Program to \$12,868 for Pharmacy Technicians; however annual earnings increased for graduates of all of the six training programs in the second year after graduation; indicating that employed graduates were improving their earnings. This finding is further examined in the Selected Cohort earnings analysis below. Annual earnings the second year after training ranged from \$7,458 for House Painting Program graduates to \$17,491 for Pharmacy Technicians.

Graduates of the Culinary Arts and Pharmacy Technician Programs all reported decreases in annual earnings for the year immediately after graduation. In the case of Pharmacy Technicians, the decline in first year annual earnings was small, \$54 and less than 1% and may be attributed to the time required for obtaining a license and changing jobs. By their second year after graduation, employed Pharmacy Technicians are earning on average \$17,491 – 35% higher than their pre-training annual earnings

**Table 3**  
**The Caroline Center Training Program Evaluation Report**  
**Analysis of Results By Training Program**  
**Earnings of Employed Graduates**

Program/Item	Average Quarterly Earnings Pre-Training	Average Quarterly Earnings Post -Training	Change	Average Annual Earnings Pre-Training	Average Annual Earnings Post -Training	Change	% Change	Average Annual Earnings 2 Years Post -Training	Change	% Change
CNA	\$2,612	\$2,382	(\$230)	\$7,779	\$12,082	\$4,303	55%	\$14,866	\$7,087	91%
Childcare	\$2,411	\$1,940	(\$472)	\$6,789	\$7,226	\$438	6%	\$11,868	\$5,080	75%
Clerical	\$2,547	\$2,148	(\$400)	\$7,656	\$9,162	\$1,506	20%	\$13,041	\$5,385	70%
Culinary Arts	\$1,864	\$748	(\$1,116)	\$5,878	\$4,671	(\$1,207)	(21%)	\$8,352	\$2,474	42%
House Painting	\$514	\$1,612	\$1,098	\$1,839	\$4,137	\$2,299	125%	\$7,458	\$5,619	306%
Pharmacy Tech	\$3,974	\$3,209	(\$766)	\$12,921	\$12,868	(\$54)	(0%)	\$17,491	\$4,570	35%

Source: The Jacob France Insitute

The employment status of the Caroline Center’s training program graduates by sector is presented in Table 4 for the fourth quarter of 2006.<sup>2</sup> Graduate employment is dispersed throughout the economy, although not surprisingly given the Caroline Center’s focus on the CNA Program, with a heavy concentration (48%) of employment in the health care sector. Eleven percent (11%) of employment is in the Administrative and Support Services sector, which includes temporary employment and staffing agencies. Sixty-two percent (62%) of CNA Program graduates are employed in the targeted health care sector (Ambulatory Health Care Services, Hospitals, and Nursing and Residential Care). Forty-seven percent (47%) of Pharmacy Technician Program graduates are employed in the targeted health care or pharmacy (Health and Personal Care Stores) sectors. An additional 7% of Pharmacy Technician program graduates are employed in the Warehousing and Storage sector, it is the opinion of Caroline Center staff that many of these workers were placed and continue to work at pharmaceutical distribution firms. For both of these programs, employment in temporary staffing agencies, Educational Services, Social Assistance, and Public Administration may also be health related, but there is no way of verifying this. Overall, only 7% of all program graduates work in the non-pharmacy retail sector and for the graduates of the Culinary program, these employees are likely to be working in the food preparation departments of food stores.

**Table 4**  
**The Caroline Center Training Program Evaluation**  
**Employment By Sector By Training Program**  
**The Fourth Quarter of 2006**

Industry/Program	Childcare	Clerical	CNA	Culinary Arts	House Painting	Pharmacy Tech	Sum
<b>Total Graduates</b>	146	195	427	22	6	75	871
% Employed 2006:Q4	66%	57%	70%	55%	67%	77%	67%
<b>Total Employed 2006:Q4</b>	97	111	299	12	4	58	581
Manufacturing		3	3			2	8
Retail (Not Including Health/Personal)	9	5	16	3	2	7	42
Health and Personal Care Stores						10	10
Warehousing and Storage		3	2			4	9
Transit and Ground Passenger Transportation	3	3	4				10
Administrative and Support Services	8	15	30	3	1	6	63
Educational Services	2	5	4			3	14
Ambulatory Health Care Services	4	7	21			2	34
Hospitals	4	18	68			10	100
Nursing and Residential Care Facilities	15	18	107	1		5	146
Social Assistance	37	2	10			2	51
Accommodation	2	2	3				7
Restaurant	1	5	8	5		2	21
Public Administration	4	13	6			2	25
Other	8	12	17	0	1	3	41

Source: The Jacob France Institute

<sup>2</sup> The most recent quarter for which industry identification – NAICs code – was available.

As presented in Table 5, the level of welfare program (Temporary Cash Assistance – TCA) participation was unchanged or increased slightly in the quarter immediately after graduating from training, but declined for graduates from five of the six programs one year after completing a training program. For the larger CNA, Childcare and Clerical Programs, TCA participation fell from 17.8%, 17.8% and 24.6% to 8.4%, 10.3% and 17.9% respectively. TCA participation fell by more than half for CNA graduates and all Culinary Arts and Pharmacy Technician Program graduates left the welfare rolls entirely (however these last two groups had low levels of participation to begin with).

**Table 5**  
**The Caroline Center Training Program Evaluation Report**  
**Analysis of Results By Training Program**  
**TCA Receipt**

Program/Item	% Receiving TCA			% Receiving TCA	
	Pre-Training Quarter	Post -Training Quarter	Change	One Year After Training	Change
CNA	17.8%	19.7%	1.9%	8.4%	(9.4%)
Childcare	17.8%	18.5%	0.7%	10.3%	(7.5%)
Clerical	24.6%	27.7%	3.1%	17.9%	(6.7%)
Culinary Arts	4.5%	4.5%	0.0%	0.0%	(4.5%)
House Painting	33.3%	33.3%	0.0%	33.3%	0.0%
Pharmacy Tech	5.3%	5.3%	0.0%	0.0%	(5.3%)

Source: The Jacob France Institute

## **Selected Cohort Analysis**

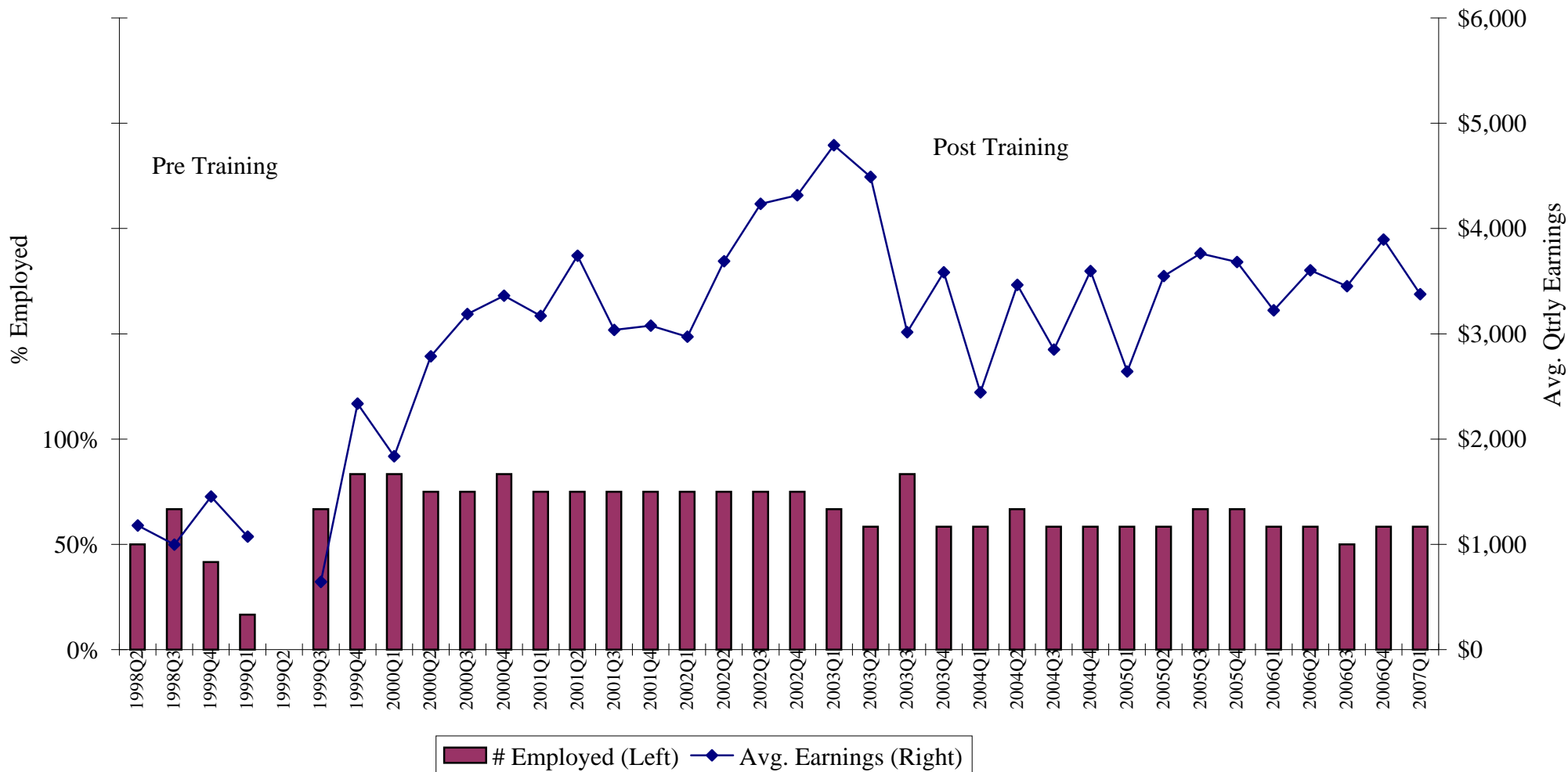
The Jacob France Institute analyzed the employment and earnings performance of each and every training class offered by the Caroline Center over the past ten years. Due to the large number of classes offered, 144 courses, and the small size of the many of the classes, ranging in size from 1 to 24 graduates, especially outside of the CNA Program, we are not able to present the results for each and every class. Presented below are graphs of the earnings and employment performance for seven cohorts of graduates of four programs. Data are presented for four CNA classes offered between 1999 and 2002, and one Clerical, Childcare and Pharmacy Technician classes. Because of their small class sizes, the Jacob France Institute was not able to prepare graphs for any of the Culinary Arts or House Painting classes. As presented in these seven graphs, these cohorts, as well as most of the cohorts analyzed, experience long-term gains in employment participation and general, if fluctuating, gains in average earnings.

Some general conclusions of the cohort level of analysis are as follows:

- 599 or 69% of the 871 graduates of Caroline Center's training programs were employed in the first quarter of 2007.
- The average quarterly earnings across all employed graduates in the first quarter of 2007 are \$4,621 and the average annual earnings (four quarter) are \$18,270.
- The average earnings over the past four quarters (2006:Q2 to 2007:Q1) for employed CNA Program graduates are \$18,153.
- The average earnings over the past four quarters (2006:Q2 to 2007:Q1) for employed Clerical Program graduates are \$20,552.
- The average earnings over the past four quarters (2006:Q2 to 2007:Q1) for employed Child Care Program graduates are \$16,459.
- The average earnings over the past four quarters (2006:Q2 to 2007:Q1) for employed Pharmacy Technician Program graduates are \$20,329.
- The average earnings over the past four quarters (2006:Q2 to 2007:Q1) for employed Culinary Arts Program graduates are \$7,543.
- The average earnings over the past four quarters (2006:Q2 to 2007:Q1) for employed House Painting Program are \$13,352.

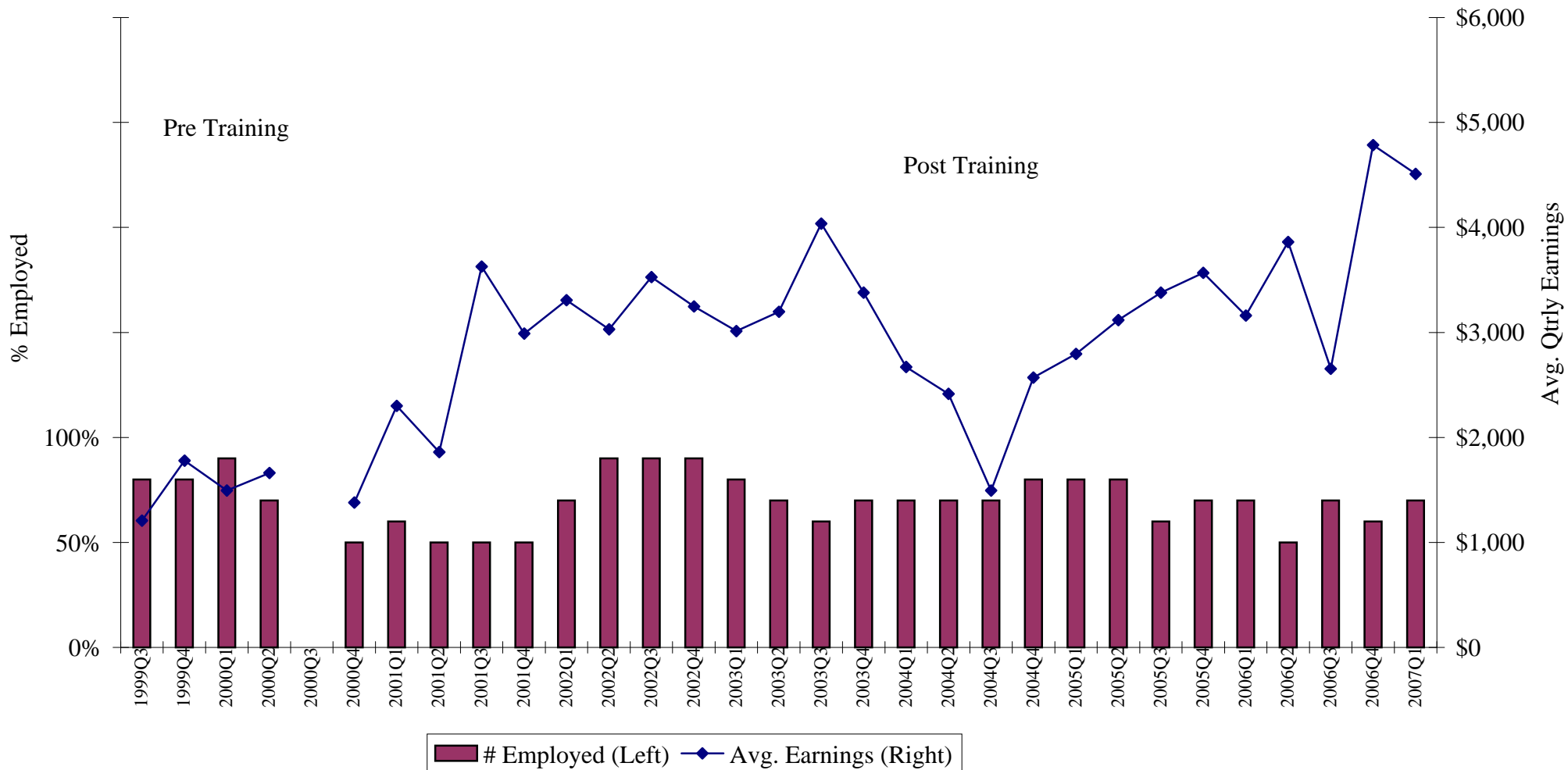
## Cohort 1

### CNA 1999:Q2 Cohort - Percentage Employed and Average Earnings



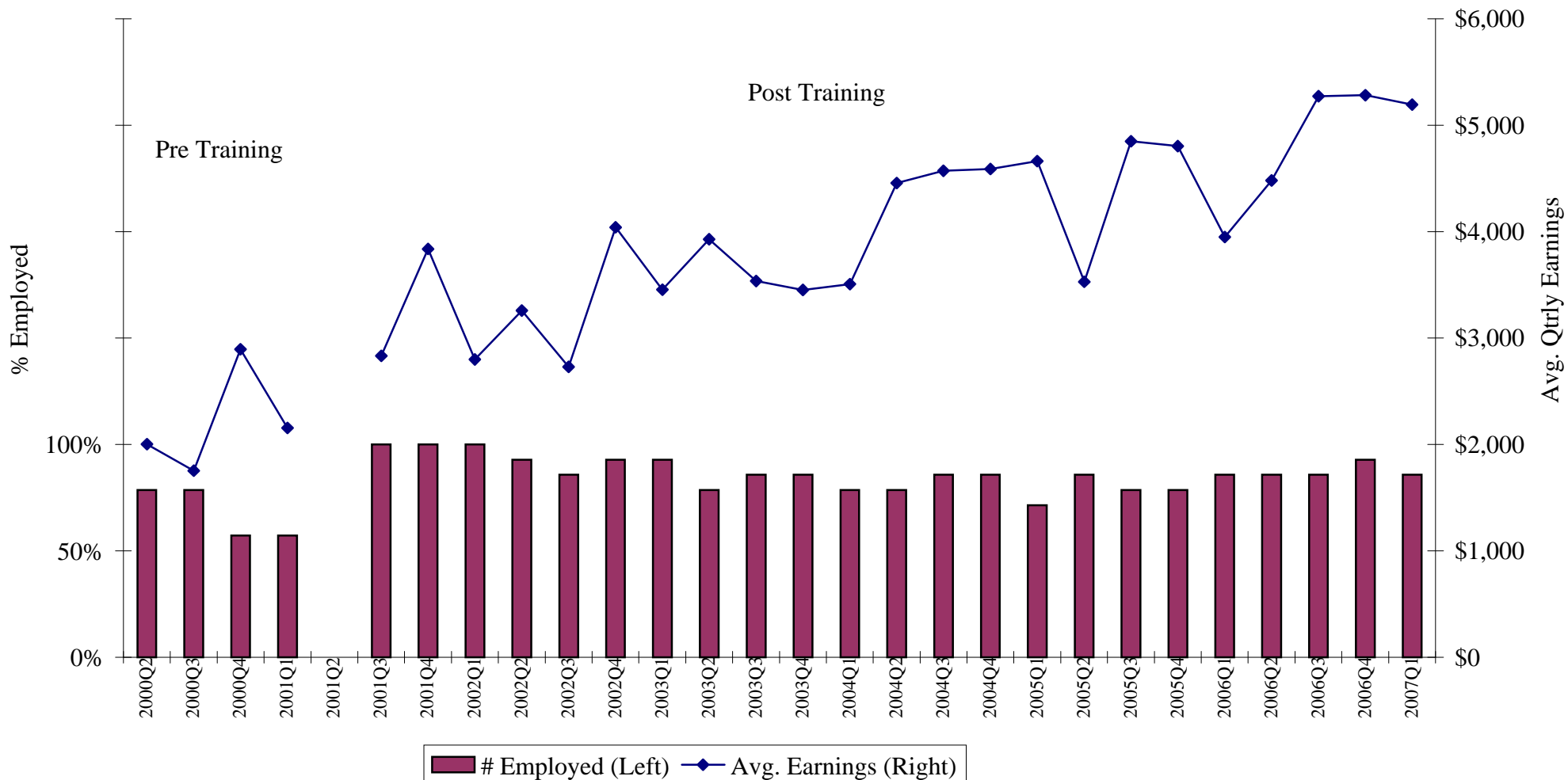
## Cohort 2

### CNA 2000:Q3 Cohort - Percentage Employed and Average Earnings

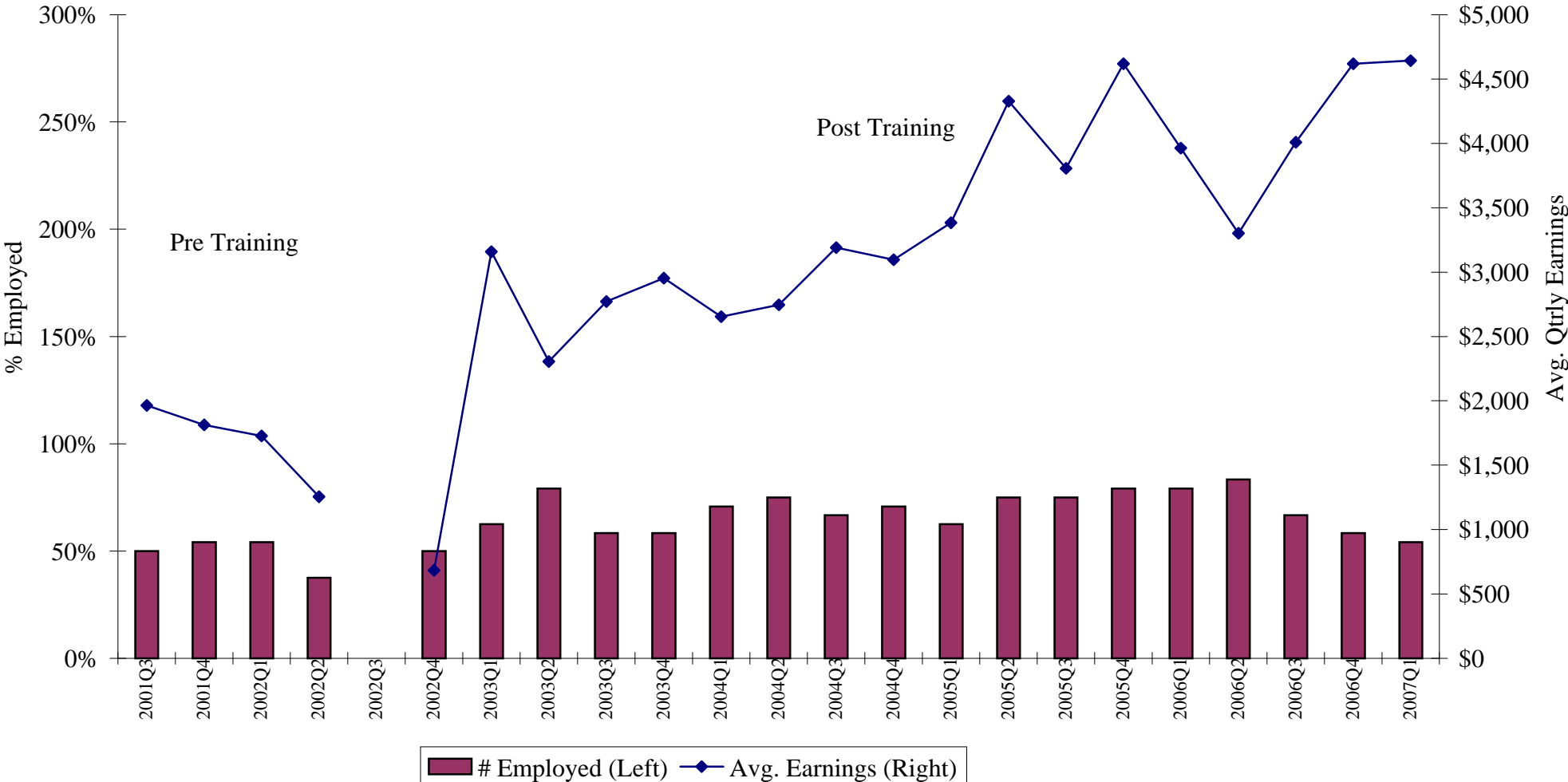


### Cohort 3

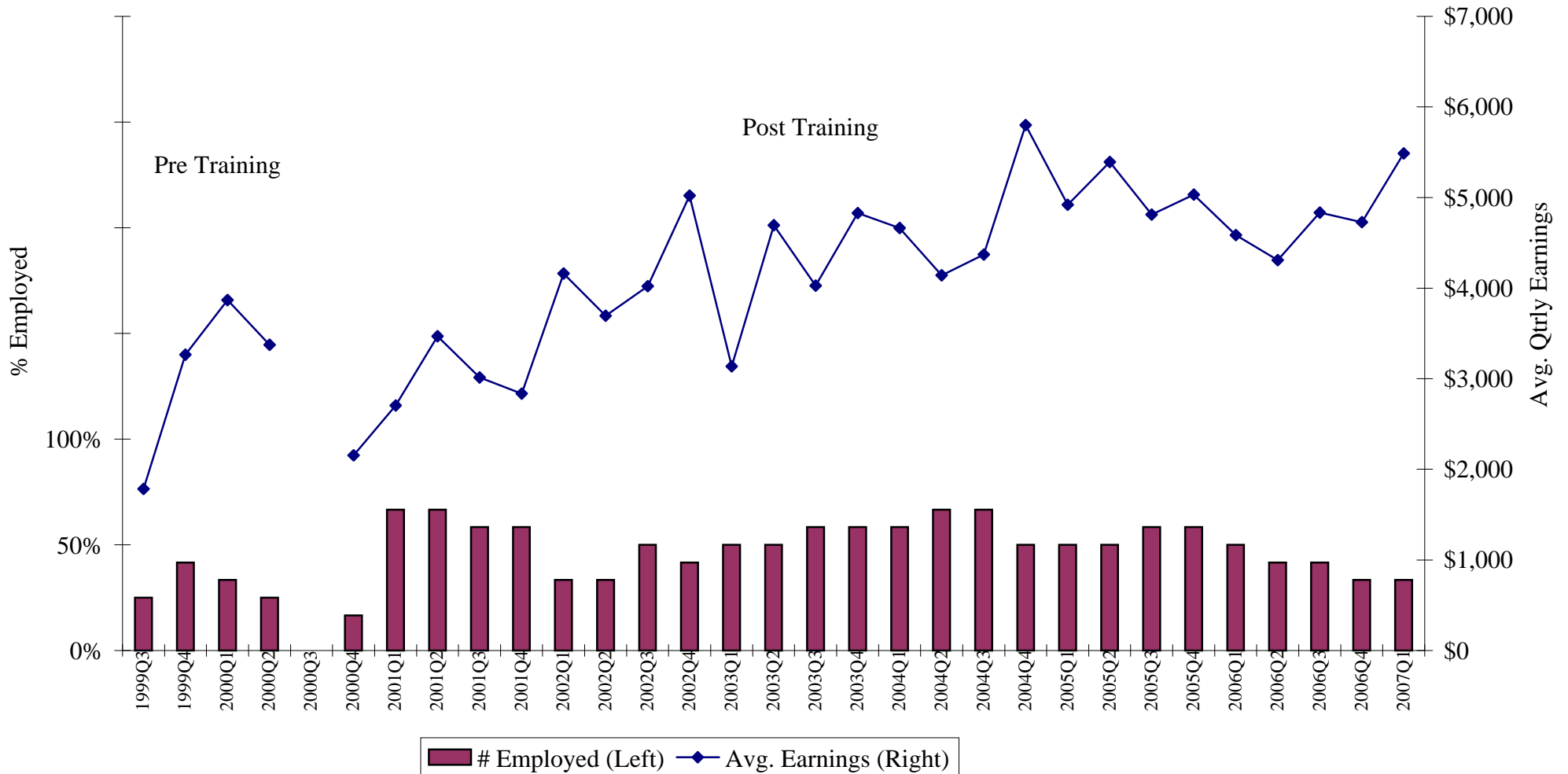
#### CNA 2001:Q2 Cohort - Percentage Employed and Average Earnings



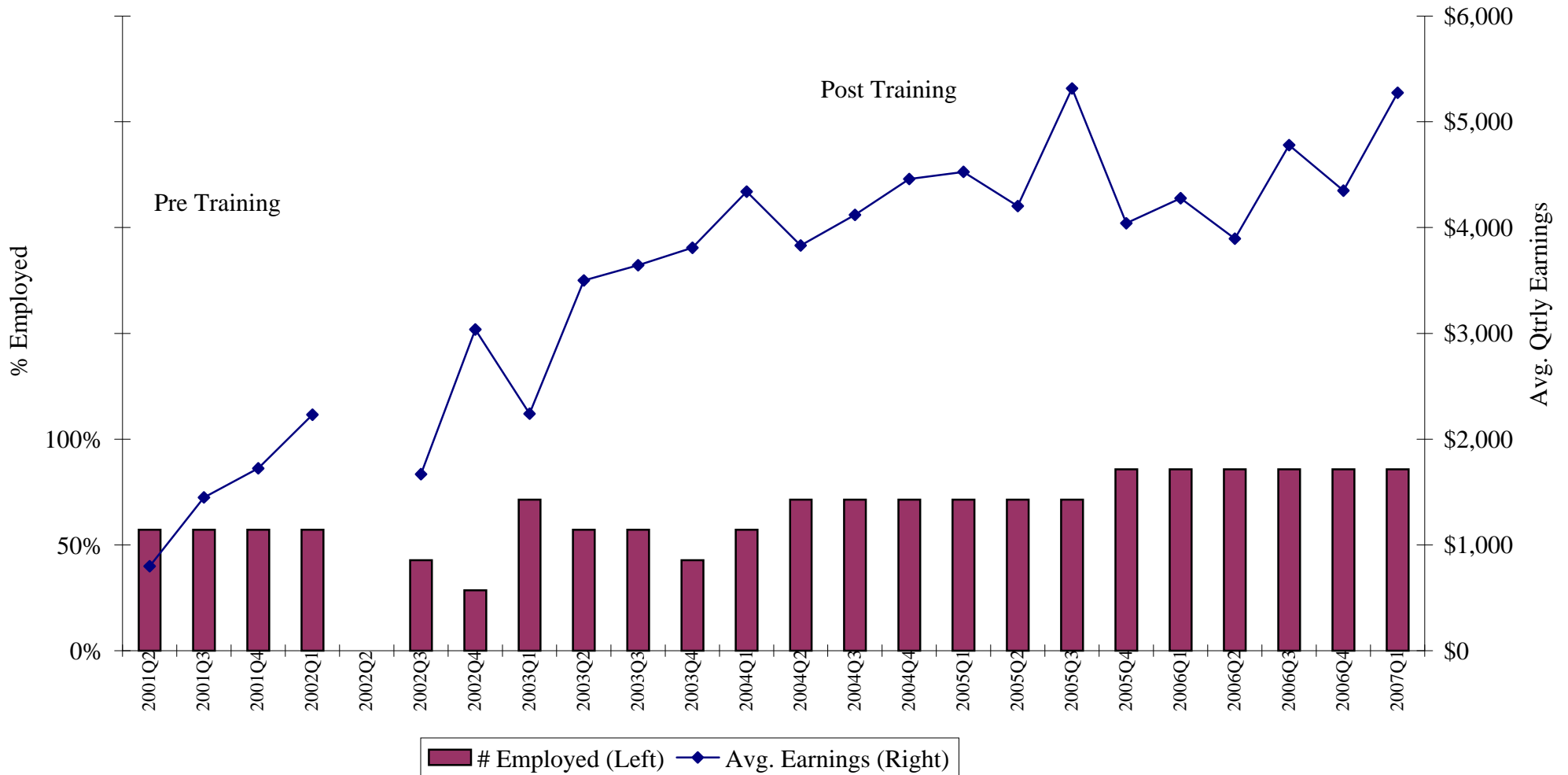
### Cohort 4 CNA 2002:Q3 Cohort - Percentage Employed and Average Earnings



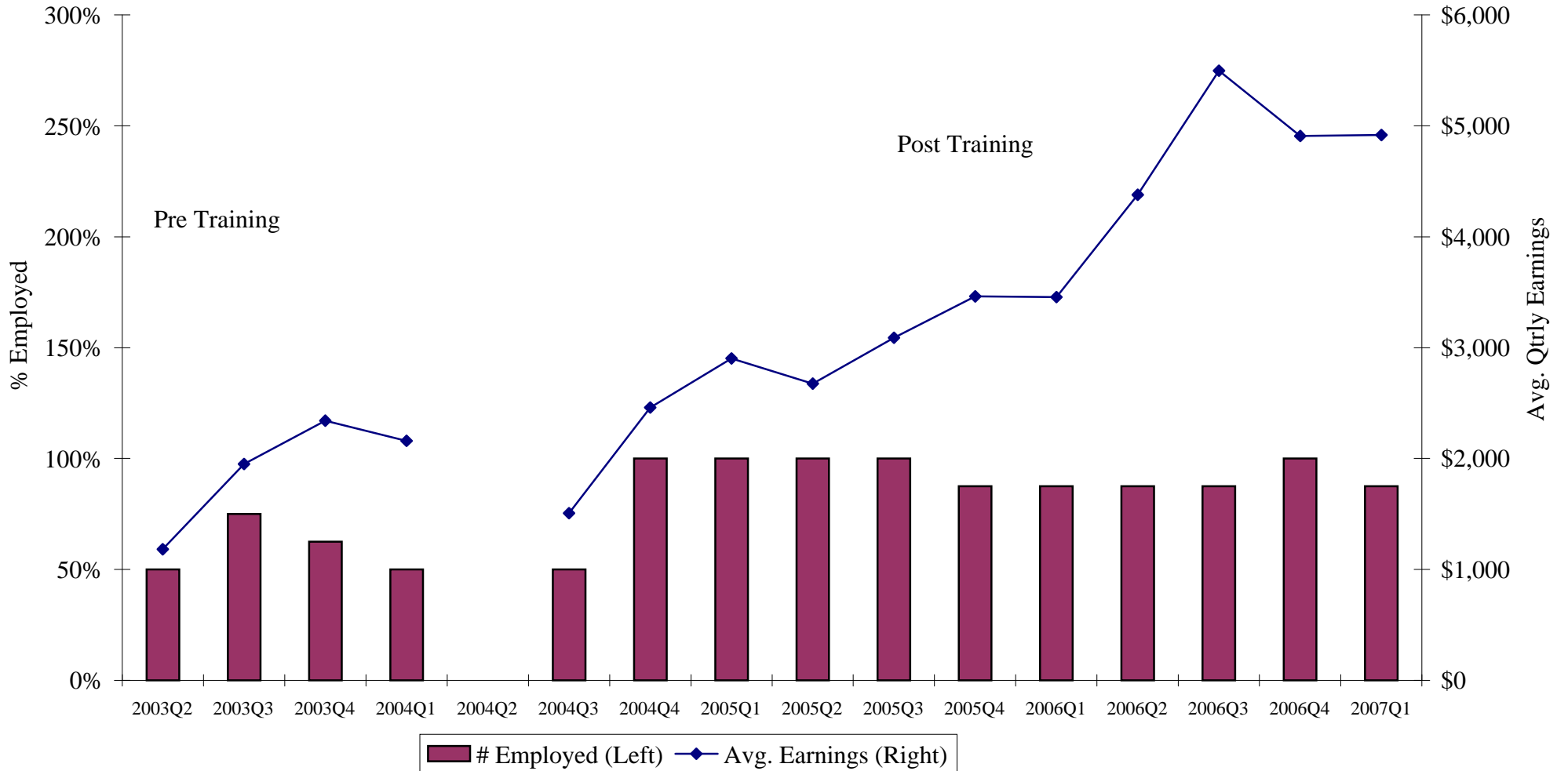
### Cohort 5 Clerical 2000:Q3 Cohort - Percentage Employed and Average Earnings



### Cohort 6 Childcare 2002:Q2 Cohort - Percentage Employed and Average Earnings



**Cohort 7**  
**Pharmacy Tech 2004:Q2 Cohort - Percentage Employed and Average Earnings**



## **Summary and Conclusion**

The employment training programs offered by the Caroline Center led to gains in employment and long-term earnings for their graduates. The results of the Jacob France Institute's analysis of the earnings and employment of Caroline Center graduates are comparable to analyses conducted for other employment programs in terms of increases in employment participation, but lag the results of other programs in short term earnings growth. Based on our analysis of longer-term earnings – two years after graduation – and of selected cohorts of graduates, Caroline Center programs do, however, create opportunities for longer-term earnings growth.

The goal of the Caroline Center's training programs is to get the people served on a career path. The decline in short term earnings for some of the training programs provided is consistent with this goal as Caroline Center focuses on placing its graduate with employers where there are long-term opportunities for growth, rather than any available employer. On average, the graduates of the Pharmacy Technician, Clerical, and CNA programs all earned non-poverty wages over the last four quarters. The 69% employment rate for graduates is also consistent with other workforce programs and the target population served. The average training program participant is 28 and many have children. The variability in employment rates may be due to family pressures as well as job changes.

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