Employment and Wage Patterns of Enrolled LaGuardia Students On and Off Campus

Nathan Dickmeyer
Institutional Research & Assessment
LaGuardia Community College
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Note: Students receiving "under-the-table" wages are not included in this analysis. Only students with wages reported to the New York State Department of Labor for Unemployment Insurance purposes are included. Although Federal Work Study (FWS) wages are reported, these wages were excluded from all counts and calculations. Students with only FWS wages were not counted as employed, unless wages from another source were reported.

Also, because this study concerns the increasing likelihood that students gain employment as they progress through their academic career, only students who began at LaGuardia as first-time freshmen are included. Transfer students are excluded.

Findings

- **From 2004 to 2013, employment among LaGuardia degree students beginning as freshmen fell.** For example, the percentage of students in their 4th, 5th and 6th semester fell from 53% employed in Fall 2004 to 51% employed in Fall 2013. Students in their first semester dropped more, falling from 48% employed to 42% over the same period. Also note, from academic year 2004-05 to the year 2012-13 the proportion of degree students on financial aid rose from 53% to 63%. In September 2004 New York City seasonally adjusted unemployment stood at 6.6% and in September 2013 it stood at 8.6% (NYS Department of Labor Statistics). (In November 2009 NYC unemployment reached a high point of 10.1%.)

- **Students who began as freshmen became increasingly more likely to be employed as they continued their academic career.** Freshmen who began in Fall 2009 had the largest gain in employment with 41% employed in their first semester and 58% employed in their seventh semester. While some of this was caused in later semesters simply by the higher likelihood of students who don't work graduating faster, in the early semesters this is not the case (see Figure 7).

- **Student constant dollar wages fell from 2004 to 2012.** Working students saw a decline in their constant dollar wages, which, for students in their third semester fell from $6,256 to $4,554 for the third and fourth quarters of 2004 and 2012 respectively ($4,932 to $4,492 in nominal dollars).

- **Students appear to work more the longer they attend LaGuardia.** Constant dollar wages increased with each semester of attendance. Third and fourth quarter average constant dollar wages increased from $5,366 in Fall 2008 to $9,993 in Fall 2012 for students who began as freshmen in Fall 2008. This is an 86% increase or about a 15% increase on average per year. An increase of that magnitude is not likely to have come from wage increases.

- **Students who are not working are more likely to graduate in any given semester.** Although, except for the first semester, working students do not appear to be more likely to drop out, the Fall 2008 freshmen who earned reported wages in any semester were less likely to graduate in that semester than those who did not report wages.

Methodology notes

- Employment and wage data come from the New York State Department of Labor unemployment insurance contribution records under a data sharing agreement with CUNY. Data are held in a secure environment available only to two researchers who have been trained in DOL confidentiality standards and who have signed confidentiality agreements. No salary or employment averages are derived from cells of ten people or fewer with nearly all at least one hundred in size. All temporary files have been erased.
- Cohorts are followed by semester of attendance and thus do not exactly follow calendar years. All students in their third semester from a cohort, regardless of the actual date of the semester, are combined. The majority of freshmen students from Fall 2008, for example, however, attended their third semester in Fall 2009. Those who took a semester off, however, would have attended during some other calendar semester.
- Several non-cohort graphs do not show spring semesters. Fall semesters include much of the summer and tend to show heavier employment and higher wages. Including spring semesters produces “saw-tooth” graphs that are hard to read.

Summary

There are no surprises in these data, but we hope the numerical support given to anecdotal information is helpful. Many students work. The longer they study, the more likely they are to work and the more they work. They don’t make much money. Summer is better than winter for earning.

While working does seem to disadvantage the chances of graduating in any semester, only the differences in semesters six and seven are statistically significant.

Acknowledgments

Erez Lenchner prepared the DOL data files, adding semester/session indicators linked to the quarters and reformatting identification numbers. Jeffrey Weintraub added two tables to the IR&A data warehouse that contain information on enrollment and graduation information from three primary, but unconnected, CUNY data systems. Their work made these analyses possible.

Data Graphs and Explanations

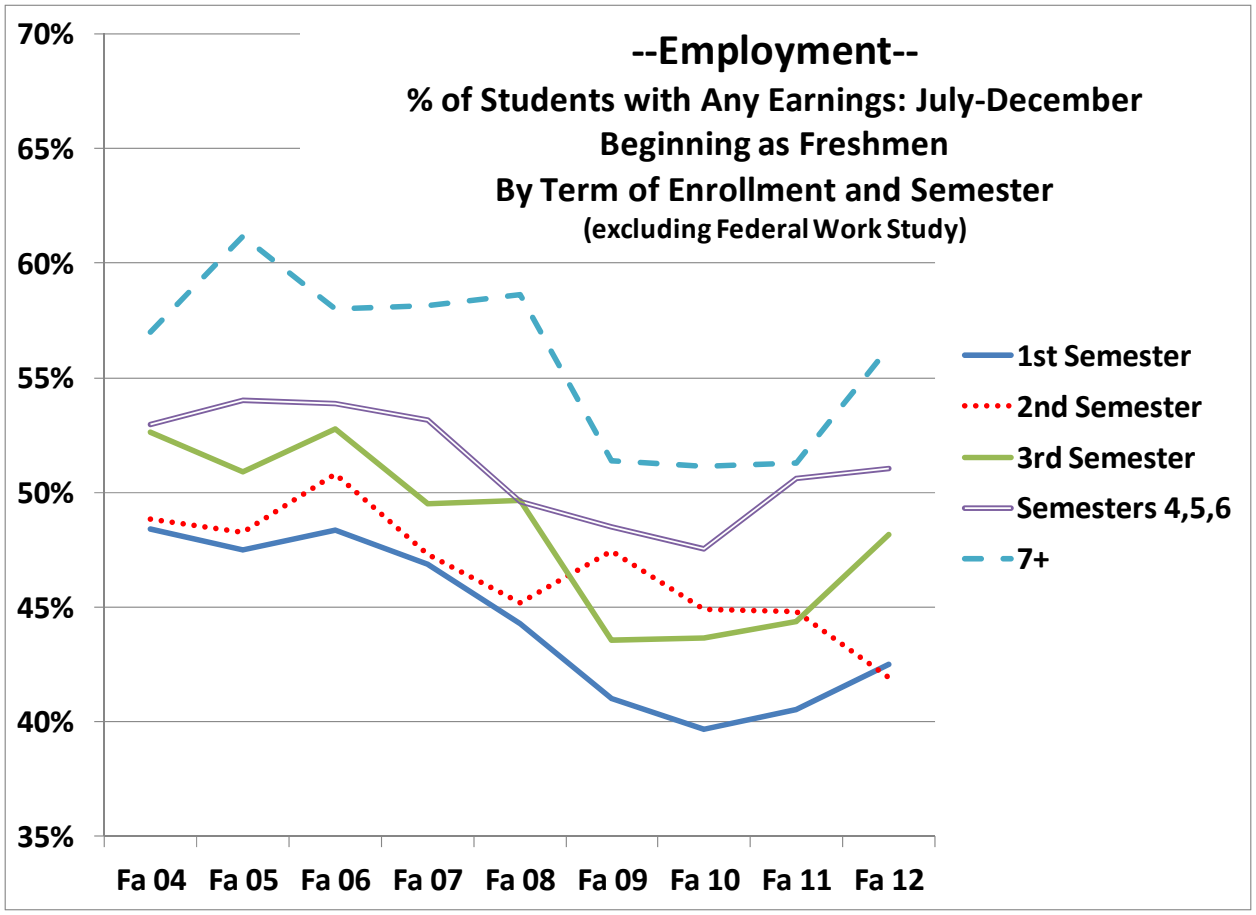

Figure 1

Figure 1 shows the percentage of students who began as freshmen who were reported as having any wage, excluding Federal Work Study, in the six-month periods from July to December that contains each Fall I semester.

Each of the Fall semesters shown gives the percentage employment among students, broken down by the number of semesters that the student had attended LaGuardia at that time. The lowest, blue line, for example, shows the average July through December employment percentage of students (excluding Federal Work Study employment) in their first semester of attendance. Thus, for any given Fall semester on the horizontal axis, one can see the average percentage of employment for students with five different levels of college experience, from first semester to those with seven or more semesters of attendance.

In general, employment declined from Fall 2005 through Fall 2010 for most cohorts at the same levels of college experience.

In general, students in any given semester who have been longer in attendance also are more likely to be employed. There are exceptions, however. In Fall 2009 and Fall 2010, for example,

students in their second semester were more likely to be employed than students in their third semester.

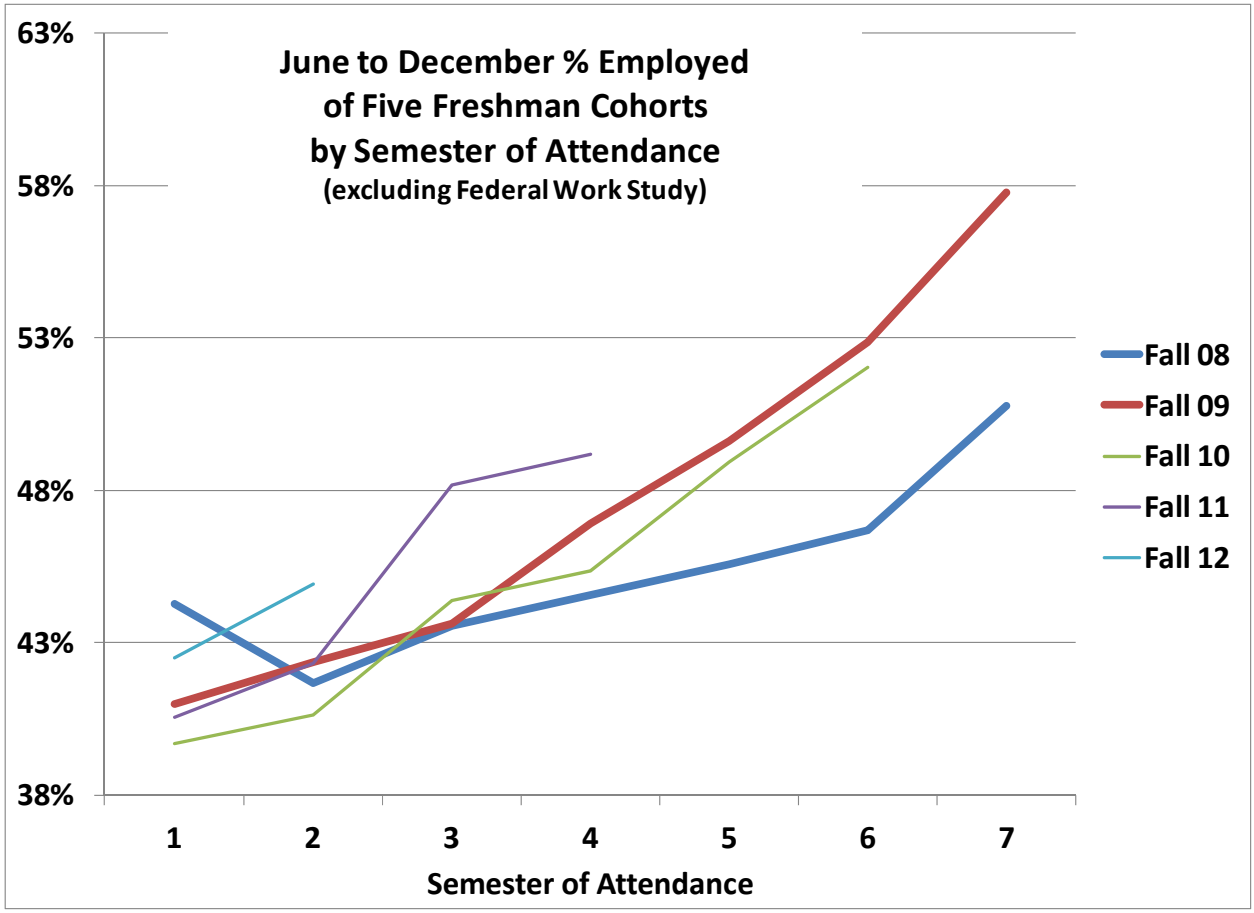

Figure 2

Figure 2 follows the employment percentages of students in five cohorts. Only Fall 2008 and Fall 2009 have enough history to show seven semesters of attendance.

With one exception (Fall 2008 cohort between the first and second semesters) cohorts show increasing probability of employment with each semester of attendance.

Those freshmen who began in Fall 2009 show the fastest gain in employment.

The Fall 2012 cohort already has higher levels of employment in the second semester than all the other cohorts shown in that semester.

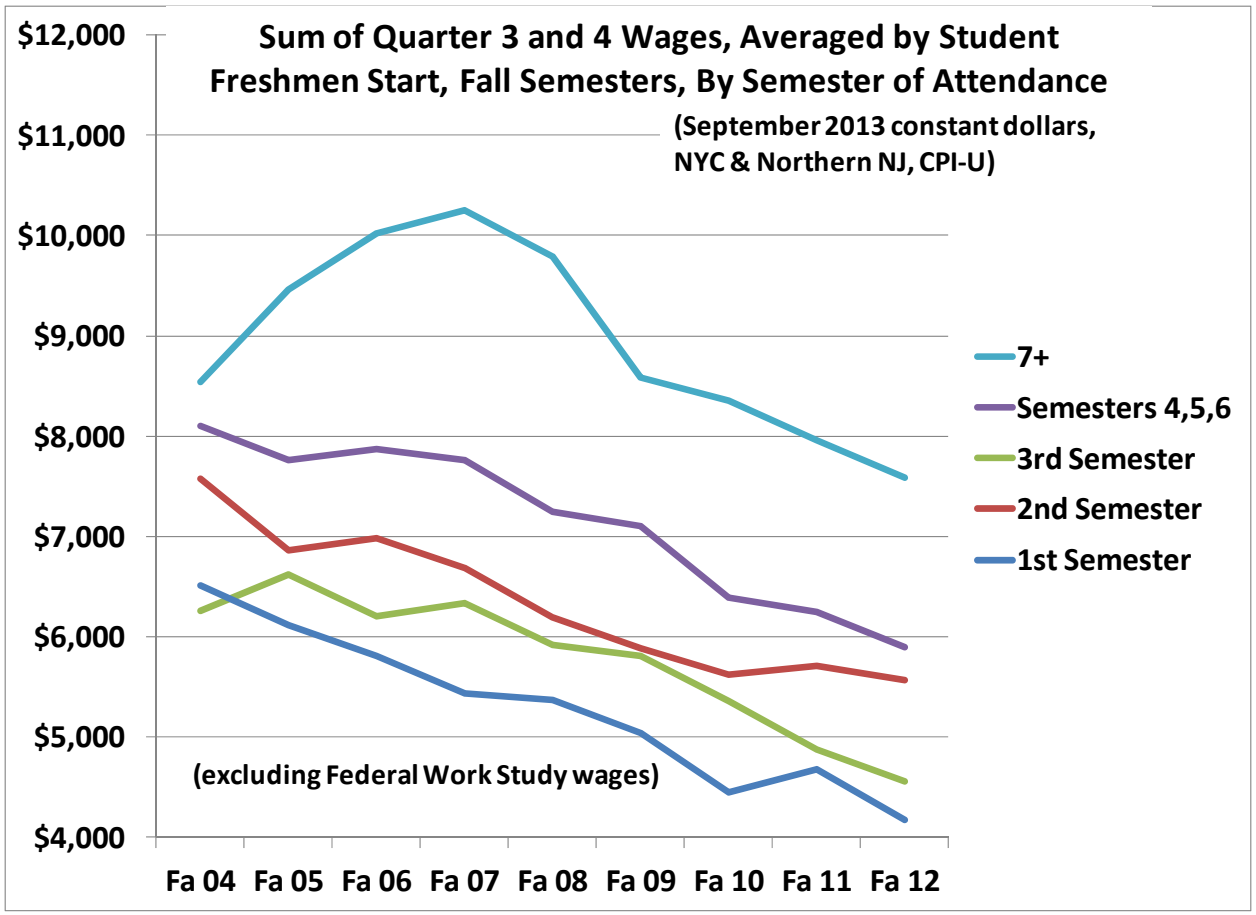

Figure 3

Figure 3 shows average six-month (July to December) wages for working students, enrolled in Fall semesters 2004 through Fall 2012 by the number of semesters of attendance. All dollars are restated in constant 2013 dollars. Federal Work Study wages have been excluded.

Strangely, students in their third semester made less than students in their second semester in each of the Fall semesters shown.

With that exception, however, the longer that a student had been in attendance, the higher the wage. In Fall 2012, if we assume all students made $10/hour, then working first semester students worked 16 hours per week and students in their 4^{th}, 5^{th} or 6^{th} semester worked 23 hours per week. If, on the other hand, we assumed that all working students worked 15 hours per week, first semester students made $11/hour, while students in 4^{th}, 5^{th} or 6^{th} semester made $16/hour, equivalent to an annual increase of about eight per cent. While "a little of both" undoubtedly occurred, the increase in hours would be more likely for students not gaining a degree.

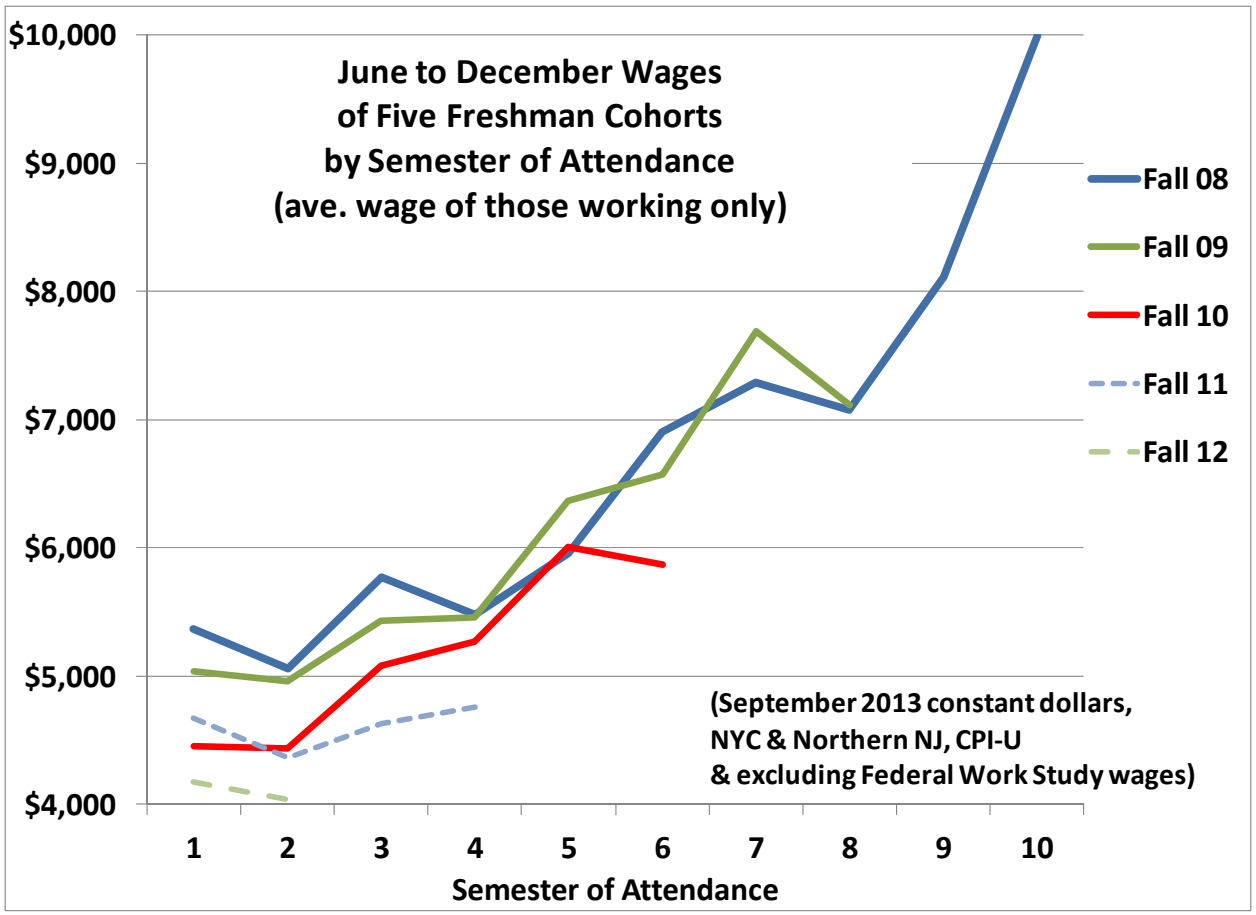

Figure 4

Figure 4 shows the changes in average constant dollar six-month wages of students by Fall freshman cohorts. The largely spring semesters shown as even-numbered semesters of attendance generally show a decrease in wages.

Later cohorts show a small decline in average wage in each new cohort's Fall first semester, except Fall 2011, parallel with the decline in employment shown in Figure 2, even though non-working students are not included in the average wage. From Fall 2008 through Fall 2010 each succeeding cohort of students was less likely to be working and less likely to make as much as the preceding cohort.

The rise in wages for the Fall 2008 cohort is very large. Once again, calculating hours, assuming $10/hour throughout the period, gives an increase in hours of from 20 hours in the first semester to 38 in the tenth. If we assume a steady 15 hour work week, however, the average wage would go from $14/hour to $25/hour over the ten semester (five year) period.

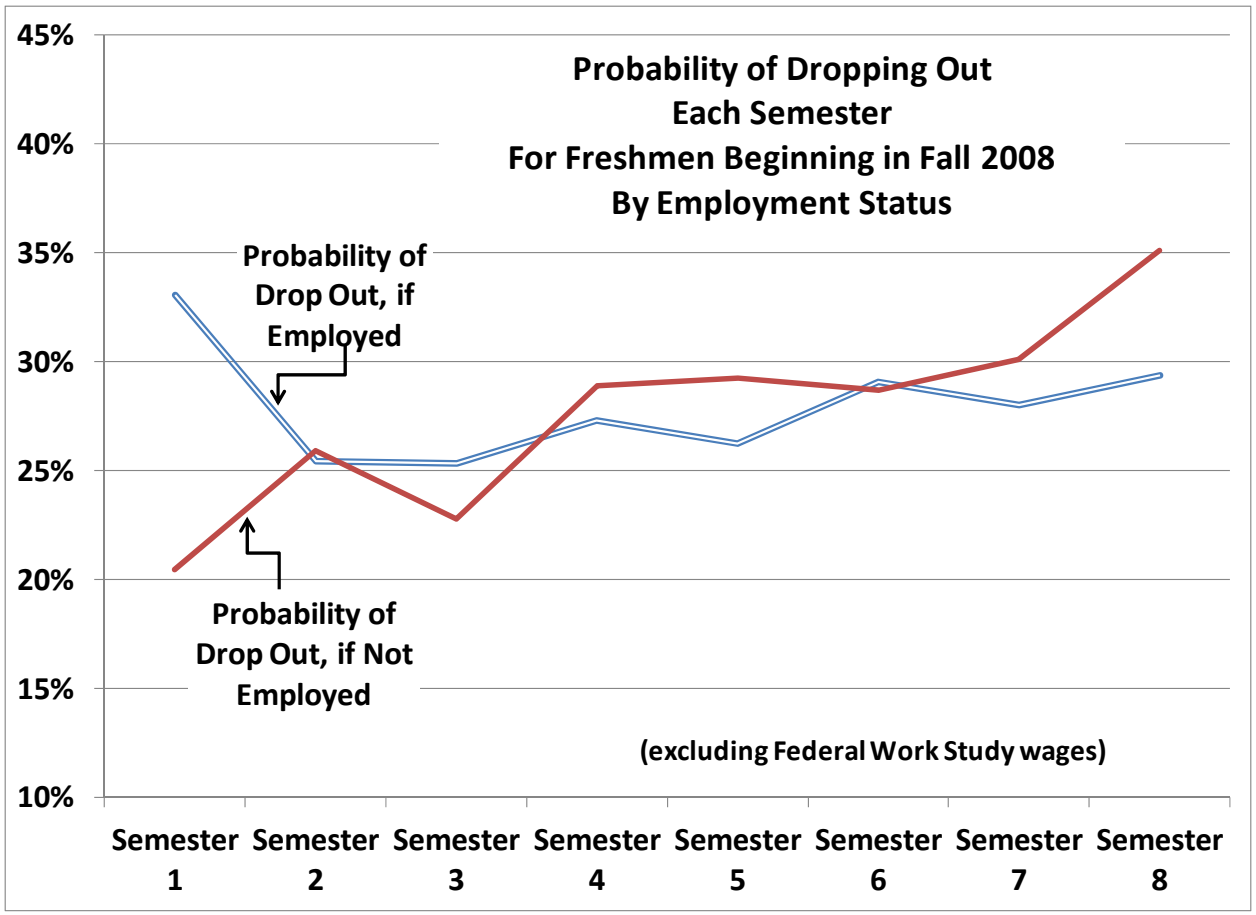

Figure 5

The blue line in Figure 5 shows the percentage of students who failed to return in any semester out of all those who were employed. The red line shows the percentage of those who failed to return to LaGuardia among those who were not employed that semester. These statistics are for a single cohort, the Fall 2008 freshmen cohort.

The only semester where employment may be a factor in dropping out is the first. Working students in the first semester appear more likely to drop out, and the difference is statistically significant. After that, there is no difference in the probability of dropping out. We will need to examine more cohorts before we would claim that employment is a factor in dropping out, even in the first semester.

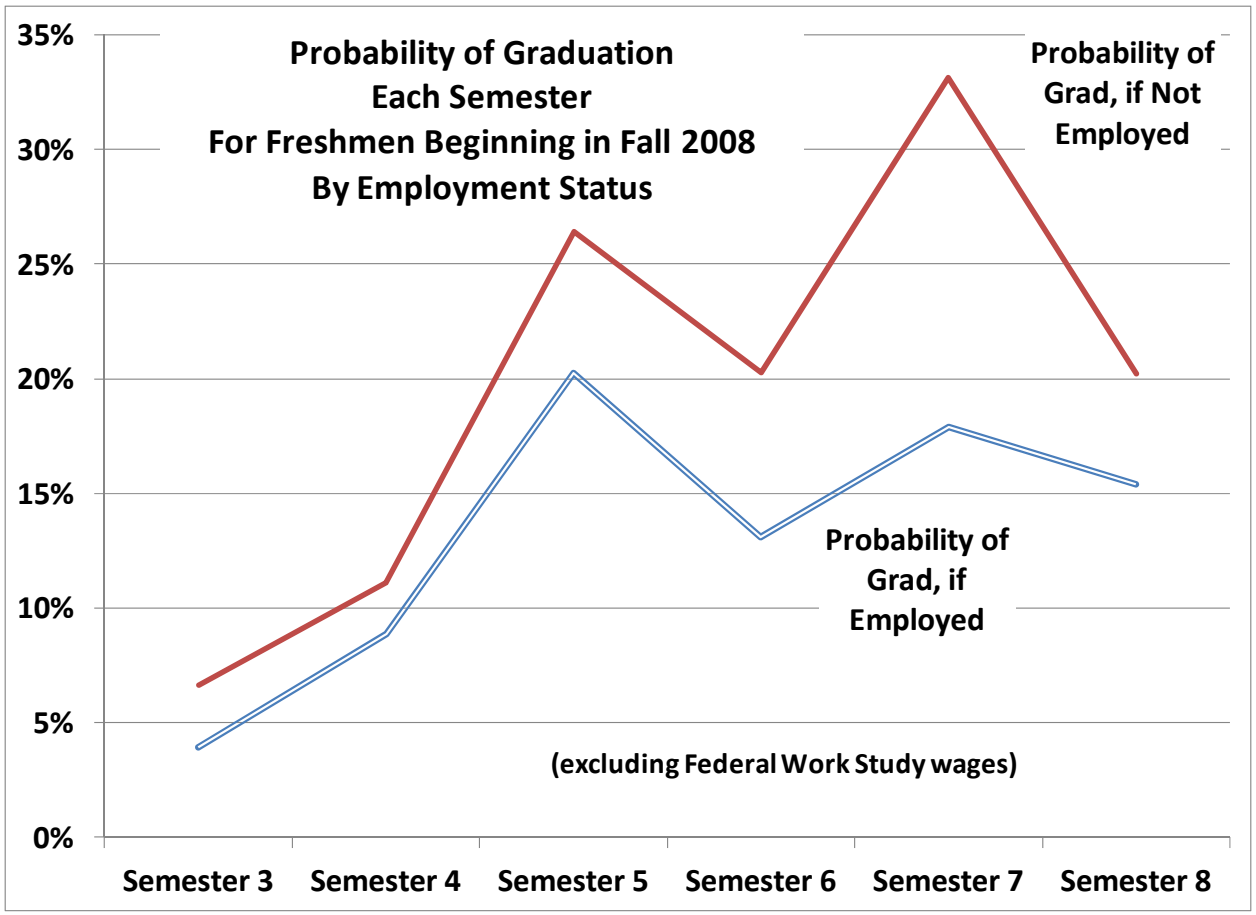

Figure 6

The blue line in Figure 6 shows the percentage of students who graduated in that semester out of all those who were employed. The red line shows the percentage of those who graduated that semester among those who were not employed that semester. These statistics are for a single cohort, the Fall 2008 freshmen cohort.

In all semesters the probability of graduating that semester was higher for non-working students. Nevertheless, statistical significance is only achieved in the sixth and seventh semesters.

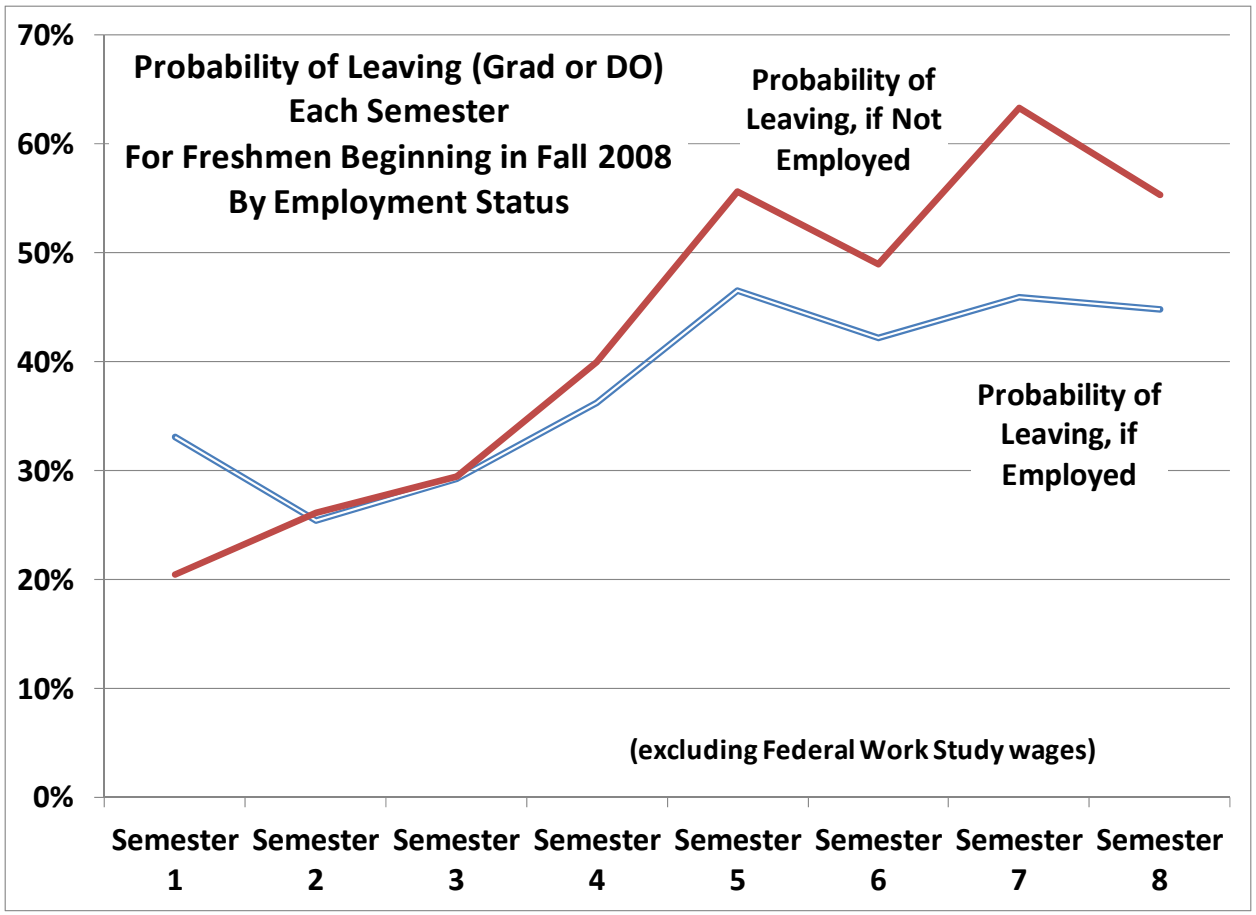

Figure 7

If non-working students tended to be more likely to leave than working students in any semester, then an increase in the proportion of working students could simply be an artifact of who leaves and not a result of retained students finding employment.

This graph shows that a small amount of the increase in employed students is only possible because of this statistical artifact after the fourth semester. After that semester, however, it does appear that much of the increase in the proportion of working students is a result of the higher leaving rates (graduation, transfer out, and dropping out) of non-employed students.