# **Career Academies:**

# Impacts on Students' Initial Transitions to Post-Secondary Education and Employment

December 2001

# **Technical Resources**



Unit 1: Issues Underlying the Impact Analyses and Comparisons with National Data

> Unit 2: Additional Impacts for the Full Sample

Unit 3: Additional Impacts for the Risk Subgroups and Impacts for Subgroups Defined by Gender, Race, and Educational Expectations

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Unit 1

Issues Underlying the Impact Analyses and Comparisons with National Data

## I. Post-High School Survey Data and Analysis Issues

The Career Academies Post-High School Survey, which was administered to students in the study sample approximately 14 months after their scheduled graduation from high school, constitutes the primary data source for this report. The survey sample of 1,482 students represents 84 percent of the full study sample — 85 percent of the Academy group and 83 percent of the non-Academy group. The overall response rate and the similarity between the response rates for the Academy and non-Academy groups are very high by the standards of survey research.

Whenever survey response rates are less than 100 percent, however, it is important to investigate two factors that may confound interpretation of the findings. The first part of this unit focuses on whether the respondent sample systematically differs from the nonrespondent sample. It concludes that there were a number of differences between respondents and nonrespondents. Most notably, in the respondent sample students in the high-risk subgroup were underrepresented and students in the low-risk subgroup were overrespresented. As a result, caution should be exercised in generalizing the impact findings from the respondent sample to the full report sample.

A second and more serious concern is that respondents in the Academy group may differ systematically from respondents in the non-Academy group. The second part of this unit concludes that there were no systematic differences in background characteristics between the Academy and non-Academy group members who responded to the survey, affording a high degree of confidence that differences in outcomes between the two groups reflect impacts of the Career Academies rather than preexisting differences in background characteristics.

Although there were no systematic differences in background characteristics between the Academy and non-Academy group members who responded to the survey, further analysis revealed that the response rate among those who dropped out of high school before the end of their 12<sup>th</sup>-grade year was lower than that among those who remained in high school through the end of their 12<sup>th</sup>-grade year. More importantly, the response rate was lower among dropouts in the non-Academy group (70 percent) than among dropouts in the Academy group (81 percent).

The third part of this unit discusses results from "sensitivity tests" of the impacts, that is, analyses that attempt to take these differences into account by using sampling weights. It concludes that the use of sampling weights would result in only negligible changes in the impact estimates and would not change the pattern of impacts for the full sample or for the risk subgroups.

The final part of this unit compares the results for the students in the survey sample with those for the students whose high school transcript records were available, that is, those who were the focus of the previous impact report from the evaluation.<sup>1</sup>

## A. Post-High School Survey Response Rates

The evaluation team attempted to obtain information about high school graduation and initial post-high school education and employment experiences for the full sample of 1,764 stu-

<sup>&</sup>lt;sup>1</sup>James J. Kemple and Jason C. Snipes. 2000. *Career Academies: Impacts on Students' Engagement and Performance in High School.* New York: Manpower Demonstration Research Corporation.

dents in all nine sites participating in the study.<sup>2,3</sup> For the present purpose, this group of students — all of whom applied for a place in an Academy — is referred to as the *study sample*. Of the students in the study sample, 959 (54 percent) were randomly selected to enroll in an Academy (the *Academy group*). The remaining 805 students (46 percent of the study sample) were not invited to participate in the Academies but could choose other options available in their high school or school district (the *non-Academy group*).

Each student entered the study at the end of the 1992-1993, 1993-1994, or 1994-1995 school year, at which point he or she was at the end of the 8<sup>th</sup>- or 9<sup>th</sup>-grade year. Whether students were in the 8<sup>th</sup> grade or 9<sup>th</sup> grade at the point of application depended on the Academy program to which they applied; two of the Academies began in the 9<sup>th</sup> grade, and the remaining seven began in the 10<sup>th</sup> grade. Students applied for admission to the programs at the end of the school year before expected enrollment. This report follows sample members through the end of the year after they were scheduled to graduate from high school — that is, the 1996-1997, 1997-1998, or 1998-1999 school year, depending on the year during which and the grade level at which sample members entered the study.

Table 1.1 lists the percentages of students in the Academy and non-Academy groups who responded to the Post-High School Survey. The first line in the table shows the response rates for the full study sample, and the next three lines show the response rates for each of the three risk subgroups discussed in the report. The remainder of the table lists the response rates for other subgroups for which impacts were estimated; the impacts for these other subgroups are presented in Unit 3 of the Technical Resources.

The first line in Table 1.1 shows that the small difference in response rates between the Academy and non-Academy groups was not statistically significant. The table also shows that there were no systematic differences in response rates between Academy and non-Academy students in the high-risk and medium-risk subgroups. However, the response rate was somewhat higher among low-risk Academy students than among low-risk non-Academy students. The response rate for male students in the Academy group was also slightly higher than that for male students in the non-Academy group. When the response rate is larger for one research group than the other, impact estimates may be biased if there are systematic differences in the background characteristics or the pre-random assignment experiences of Academy and non-Academy students who responded. As discussed shortly, however, there were no systematic differences between Academy and non-Academy students who responded to the survey in any of the sub-groups.

<sup>&</sup>lt;sup>2</sup>Details about site selection can be found in the following previous report from the evaluation: James J. Kemple and JoAnn Leah Rock. 1996. *Career Academies: Early Implementation Lessons from a 10-Site Evaluation*. New York: Manpower Demonstration Research Corporation.

<sup>&</sup>lt;sup>3</sup>As discussed in Kemple and Rock (1996), the initial research sample consisted of 1,953 students in 10 sites. A total of 189 of these students were dropped from the initial research sample, and efforts to collect data for them were discontinued. Students who were dropped from the sample include the following: 126 students who attended an Academy in the initial sample that was disbanded after two years in the study and was unable to provide sufficient follow-up data for its students and the 59 students in the initial sample who applied for an Academy program during their 10<sup>th</sup>-grade year and should not have been included in the study. This information was obtained from pre-random assignment school records and was confirmed with school staff. Finally, over the course of the data collection period, MDRC learned through contact with the schools and families that four other students were deceased.

A key question for interpreting the findings presented in this report is whether students for whom Post-High School Survey data are available are representative of the full study sample. To address this question, multiple regression was used to determine the extent to which the average characteristics of the students who responded differed from the average characteristics of students who did not respond. The analysis indicated that there were systematic differences between respondents and nonrespondents in background characteristics. An illustration of the differences can be seen by comparing the response rates for the high-risk, medium-risk, and low-risk subgroups in Table 1.1. The response rates were lowest for the students in the high-risk subgroup and highest for students in the low-risk subgroup.

In short, the analysis of response rates indicates that the samples of students for whom Post-High School Survey data are available are not perfectly representative of the full study sample of 1,764 students. Thus, caution should be exercised when attempting to generalize the findings beyond the students who are included in the analyses. Nevertheless, the overall response rates show that data are available for the vast majority of students in the study sample, making the findings fairly representative.

## B. Comparison of Respondents in the Academy and Non-Academy Groups

The main strength of a random assignment research design is that it ensures that there are no systematic differences between the research groups in measured or unmeasured background characteristics when sample members enter the study. As a result, any differences that emerge after that point can be attributed with confidence to the fact that one group had access to an Academy and the other group did not. Previous reports from the Career Academies Evaluation demonstrated that there were indeed no systematic differences in background characteristics between Academy and non-Academy students in the study sample.

A key question underlying the analyses presented in this report is: Do the Post-High School Survey response patterns preserve the lack of systematic differences between the research groups ensured by the random assignment design? In other words, does the Post-High School Survey sample exhibit the same lack of systematic differences between Academy and non-Academy students, both overall and for each of the risk subgroups? Table 1.2 presents the average characteristics of Academy and non-Academy students in the Post-High School Survey sample. This table shows that, with two exceptions, there were no statistically significant differences between the groups on any of the characteristics.

A more rigorous way to test for such differences is to use multiple regression analysis. Table 1.3 presents linear regression estimates and statistical tests of whether there were any systematic differences between Academy and non-Academy students in the survey sample and in each of the three risk subgroups. The first column in Table 1.3 shows that none of the characteristics were statistically significant and that there was no systematic difference overall between the groups. The first column, the p-value of the F-statistic for the full study sample, is very close to 1, providing strong evidence that there was no overall pattern of differences between Academy and non-Academy students in the survey sample. A p-value of .10 or lower is typically considered a "high" likelihood that there are systematic differences between groups.

The three remaining columns in Table 1.3 present the same analysis for each of the three risk subgroups. These columns indicate that there are slight differences on a few individual char-

acteristics but no overall pattern of differences between Academy and non-Academy students for any of the subgroups. The p-values of the F-statistic for the subgroups range from .754 to .921.

In summary, the random assignment design resulted in two groups of students who did not differ systematically with respect to background characteristics or prior school experiences. The pattern of survey response rates for the full sample and for each of the risk subgroups preserves this feature of the research design, affording confidence that any differences in the outcome measures found are the result of the Academy group's enrollment in the Career Academies.

## C. <u>Response Rates for Dropouts and Nondropouts</u>

Further analysis of the Post-High School Survey response rates revealed substantial differences between the sample members who had dropped out of high school before the end of their 12<sup>th</sup>-grade year and those who remained in school. Table 1.4 presents response rates by 12<sup>th</sup>-grade enrollment status and by risk subgroup. It shows, for example, that 89 percent of those who remained enrolled in high school through the end of their 12<sup>th</sup>-grade year completed the survey, compared with only 76 percent of those who dropped out. This is consistent with the difference in the response rates of the high- and low-risk subgroups.

Potentially more troubling, however, is the fact that the response rate among dropouts from the non-Academy group (70 percent) was much lower than that among Academy group dropouts (81 percent). This could be a serious problem, because previously reported findings from the evaluation indicate that the Career Academies actually reduced the high school dropout rate for students who entered high school at the highest risk of doing so. Specifically, the difference in response rates between dropouts in the Academy and non-Academy groups may lead to underestimation of the Academies' true impacts on high school graduation and post-secondary education outcomes because the non-Academy group of respondents includes a disproportion-ately low percentage of dropouts relative to what the percentage would have been if the response rate were as high as it was among the Academy group dropouts.

This section presents results from analyses that use sampling weights in an attempt to "correct" for the differences in response rates. The goal of these analyses is to determine the extent to which the high school graduation and post-secondary education impacts presented in the report are sensitive to the "dropout composition" of the respondent sample. In summary, the results indicate that the specific estimates are only marginally sensitive to this correction and that the general pattern of findings remains the same as that presented in the report.

Overall, the goal of constructing sampling weights is to make the survey sample reflect the distribution of student characteristics (including 12<sup>th</sup>-grade dropout status and Academy and non-Academy group status) in the original sample. Following is a summary of the primary weighting strategy that was tested.

A straightforward way to construct sampling weights for the survey that reflect the distribution of dropouts in the full sample is to divide the percentage of dropouts in the full sample by the percentage of dropouts in the survey respondent sample. In this way, respondents with characteristics that are underrepresented in the survey sample (relative to the full sample) would be given more weight (a weight greater than 1.0) in the analysis and those with characteristics that are overrepresented in the survey sample would be given less weight (a weight less than 1.0). The same strategy can be employed to construct separate sampling weights for dropouts and nondropouts within the Academy and non-Academy groups and within each risk subgroup. This approach has the effect of reconstructing the original distribution of dropouts and nondropouts across the research groups and risk subgroups in the full study sample. It assumes, however, that respondent dropouts (or nondropouts) have the same background characteristics as nonrespondent dropouts (or nondropouts), an assumption that could well be incorrect.

As a result, sampling weights were instead constructed using "scores" based on regression analyses that predicted the survey response rates using sample members' background characteristics and 12<sup>th</sup>-grade dropout status. This strategy was aimed at reducing the influence of the assumption that respondent dropouts have the same characteristics as nonrespondent dropouts. Also, separate regression analyses were performed for the Academy and non-Academy groups and for each risk subgroup. This strategy accounts for the possibility that any survey nonresponse bias that existed may have differed across subgroups.

Further analysis comparing the two strategies outlined above indicates that the added specifications for the sampling weights (using regression on background characteristics split by risk subgroup) do not make much difference to the impact estimates. However, the regression-based strategy enables more rigorous testing of the central assumption that respondents and non-respondents have similar characteristics. Following is an overview of the findings concerning the sensitivity of the impact estimates to the survey response patterns.

First, Table 1.5 lists the average sampling weights constructed for the Academy and non-Academy groups, split by risk subgroup and 12<sup>th</sup>-grade enrollment status. A sampling weight greater than 1 for a given group indicates that sample members in that group were underrepresented in the Post-High School Survey sample and should be given more weight in the impact estimates. Conversely, a sampling weight of less than 1 for a given group indicates that sample members in that group were overrepresented in the Post-High School Survey sample and should be given group indicates that sample members in that group were overrepresented in the Post-High School Survey sample and should be given less weight in the impact estimates.

Table 1.6 presents weighted and unweighted impact estimates for the full Post-High School Survey sample. The left panel in the table presents the unweighted impact estimates, and the right panel presents the impact results sample using the sampling weights described above. Comparing the results in the two panels reveals that the sampling weights had only a negligible effect on the impact estimates and virtually no effect on the general pattern of findings.

Tables 1.7–1.9 present weighted and unweighted impact estimates for the high-, medium-, and low-risk subgroups, respectively. The left panel in each table presents the unweighted impact estimates presented in the current report, and the right panel presents the same impact estimates adjusted using the sampling weights described above. Again, the tables indicate that the sampling weights had only a minor effect on the impact estimates and no effect on the general pattern of findings.

## D. <u>Comparing Results for the Post-High School Survey Sample with Results for the</u> <u>School Records Sample</u>

Findings presented in an earlier report<sup>4</sup> from the evaluation indicate that the Career Academies reduced dropout rates in the high-risk subgroup by approximately 11 percentage points. This is larger than the 6 percentage point increase in the on-time graduation rate for the high-risk subgroup presented in the current report. The difference between the magnitude of the on-time graduation impact presented here and the magnitude of the dropout impact reported previously is partly due to the fact that the estimates are based on slightly different samples of students.

The impact estimates presented in the earlier report were based primarily on the *School Records* sample, which consisted of 1,454 students (82 percent of the full sample) for whom school administrative records data were available through the end of the 12<sup>th</sup>-grade year or until a student was identified as a dropout. Post-High School Survey data were available for 1,271 (87 percent) of these students.

This unit of the Technical Resources compares the impacts for the Post-High School Survey sample with the impacts for the students in the School Records sample for whom Post-High School Survey data are available. In general, this analysis indicates that, with one important exception, both the pattern and magnitude of impacts are very similar for the two samples. The exception is the impact on high school dropout status and the on-time graduation rate for students in the two samples' high-risk subgroups.

The left panel in Table 1.10 presents the impact estimates for the Post-High School Survey sample, and the right panel presents the impact estimates for the School Records sample. Comparing the results in the two panels reveals that the pattern of impacts is generally similar across the two samples. In most cases, there are only minor differences between the samples in the specific impact estimates. A notable exception is the impact on dropout status, which is shown in the first line of Table 1.10. The left panel of the table indicates that there was a very small increase in the dropout rate for students in the Post-High School Survey sample, and the right panel indicates that there was a small decrease in the dropout rate for students in the School Records sample. But neither result is statistically significant, indicating that the Career Academies had no impact on the dropout rate for either sample. This conclusion is consistent with results presented in the previous report. Furthermore, the results in the remainder of the table are consistent across the two samples.

Tables 1.11–1.13 compare the impact estimates for the Post-High Schools Survey sample with those for the School Records sample for the high-, medium, and low-risk subgroups, respectively. The left panel in each table presents the impact estimates for the Post-High School Survey sample, while the right panel presents impact estimates for the School Records Sample. Comparing the results across the two panels for the medium- and low-risk subgroups indicates that the pattern of impacts is generally similar between the two samples. In most cases, there are only minor differences in the impact estimates.

For the high-risk subgroup, Table 1.11 indicates that there are two noteworthy differences between the samples. First, the left panel indicates that the Academies produced a small, not sta-

<sup>&</sup>lt;sup>4</sup>Kemple and Snipes, 2000.

tistically significant reduction in the dropout rate, while the right panel indicates that the Academies produced a moderate, statistically significant reduction in dropout rates. The primary difference between the two impact estimates is that the dropout rate for non-Academy students is higher in the School Records sample than it is in the Post-High School Survey sample.

This difference is partly due to different patterns in the response rates for the two data sources. On the one hand, non-Academy dropouts were somewhat underrepresented in the Post-High School Survey sample relative to in the full study sample. The estimated impact on dropout rates for the high-risk subgroup in the Post-High School sample therefore may have been smaller than it would have been had these data been available for everyone in the full study sample. On the other hand, non-Academy dropouts were somewhat overrepresented in the School Records sample, possibly leading the impact estimate to be somewhat larger than it would have been had these data been available for the full study sample.

Table 1.11 also reveals a difference between the two samples in the impact the on-time graduation rate for the high-risk subgroup. Whereas the left panel indicates that the Academies produced a modest, not statistically significant increase in the on-time graduation rate for the high-risk subgroup, the right panel indicates that they produced a moderately large, statistically significant increase in the on-time graduation rate in the same subgroup. This discrepancy, too, is partly due to the differential representation of dropouts — and thus on-time graduates — in the two samples.

In short, the general pattern of results and most of the specific impact estimates are highly consistent across the two samples. The primary differences are confined to the impacts on the dropout rate and the on-time graduation rate for the high-risk subgroup. Even here, however, the positive impacts on the on-time graduation rate for the School Records sample did not translate into an impact on the Post-High School Survey sample's initial transitions to post-secondary education.

## II. <u>Comparisons with the National Education Longitudinal Survey Sample</u>

In an effort to provide further context for evaluating the performance of students in the study sample, the report compares outcomes for the non-Academy group with those of a nationally representative group of similar students. For this comparison, the evaluation drew on data collected from a sample of students in the National Education Longitudinal Study (NELS) of 1988 through 1994. This section describes the NELS dataset and explains how outcomes for use in this comparison were estimated.

NELS, which is sponsored by the U.S. Department of Education, followed a nationally representative sample of nearly 25,000 students from the 8<sup>th</sup> grade through the second year following their scheduled graduation from high school. The first round of NELS surveys was administered to students in the 8<sup>th</sup> grade in 1988, and follow-up surveys were administered in 1990, 1992, and 1994. The study collected detailed demographic information as well as data on high

school experiences and outcomes, postsecondary education, and employment. These data are publicly available through the National Center for Education Statistics.<sup>5</sup>

The goal of this analysis was to identify a group of students in the NELS sample that was similar to the students in the Career Academies Evaluation in the following ways: the types of high schools they attended, the type of educational programs in which they were enrolled, and their individual background characteristics and school experiences prior to the 10<sup>th</sup> grade. Thus, only a subset of the full NELS sample was used in the analysis. Following is an overview of the specific criteria and the strategy used to identify such a comparison sample.

First, in order to maintain comparability with the schools in the Career Academies Evaluation, only NELS sample members from public, nonselective, comprehensive high schools located in urban school districts were included in the comparisons. The NELS variables specifying which were urban public schools were straightforward to interpret; however, in order to identify which high schools were comprehensive, it was necessary to rely on several different variables describing the types of schools that students attended. The following were excluded from the analysis: schools that never or rarely admitted students based on where they resided, schools that always admitted students based on admission tests or auditions, schools that always admitted students on the basis of some other admission criteria, and students enrolled in special education programs for the physically and/or learning disabled.

Second, the analyses focused on three subsamples of students in the NELS database: (1) students who reported being enrolled in an academic-honors or college-preparatory program in their high school, (2) students who reported being enrolled in the high school's general curriculum program, and (3) students who reported being enrolled in a career, technical, or vocational program. In general, Career Academies tend to be a mix of these three types of high school programs or curriculum tracks, although they are less comparable to the academic-honors or college-preparatory programs than to the other two types of programs. Also, based on information from student transcripts, it appears that non-Academy students in the study sample tended to be enrolled in their high school's general curriculum program, and many of them took at least one career, vocational, or technical course. NELS sample members for whom high school program information was missing, as well as students enrolled in "other" types of programs, were excluded from the comparison group.

Third, because virtually all the students in the non-Academy group completed the 9<sup>th</sup> grade, the analyses presented here focus on students in the NELS sample who were 10<sup>th</sup>-graders in 1990 (rather than all students who were 8<sup>th</sup>-graders in 1988).

Once a comparison group was identified, it was necessary to create a set of equivalent outcome measures. In general, the outcomes used by NELS were very similar to those measured in the Career Academies Evaluation. One significant difference, however, was that the NELS study followed students through two years after their scheduled graduation from high school, whereas the Career Academies Evaluation Post-High School Survey was administered 14 months following scheduled graduation.

<sup>&</sup>lt;sup>5</sup>For data products and publications list, see the National Center for Education Statistics Web site: nces.ed.gov/surveys/nels88/.

In order to make the outcome measures more comparable, the analysis focuses only on outcomes attained by students in the NELS sample through August of the year following scheduled graduation. For example, any student who earned a high school credential after that point was considered a nongraduate for the purpose of the comparisons made in this report. Likewise, NELS data on post-high school employment (ever employed and duration of employment) were truncated to cover the period through August of the year following scheduled graduation.

Adjusting the NELS indicator of "highest post-secondary educational enrollment" was somewhat more complicated, because students could have enrolled in multiple programs at various levels over the course of the follow-up period. Students whose initial post-secondary enrollment occurred later than 14 months after scheduled high school graduation were not considered a post-secondary education enrollee. However, students whose first enrollment fell within those 14 months were given credit for all post-secondary enrollments, even those occurring after the 14month cutoff. Overall, however, only about 11 percent of the full NELS sample attended more than one post-secondary institution, so this inconsistency is likely to have only a minor effect on the findings.

Finally, the outcomes for the NELS sample were regression-adjusted and mean-centered based on the distribution of background characteristics and prior school experiences among the non-Academy students in the Career Academies Evaluation sample. This means that the numbers presented from the NELS dataset in this report do not represent outcomes for an actual subsample of NELS students. Rather, these adjustments allowed for a closer approximation of what the NELS outcome levels would have looked like if the NELS sample had a distribution of characteristics more like those in the Career Academies Evaluation sample.

The background characteristics measured by NELS were very similar to those measured for students in the Career Academies Evaluation at the start of the study. In fact, many of the questions used in the Career Academies Evaluation Baseline Questionnaire were drawn from the NELS surveys.<sup>6</sup> Following is a list of the characteristics, all measured at baseline, that were used in the estimation of outcomes for the NELS sample:

- Gender and ethnicity
- Lives in a single-parent household
- Has an older sibling who dropped out of high school
- Is overage for his/her grade
- Has parents who did not finish high school
- English grades
- Math grades
- Attendance rate
- Number of risk factors from the following list: single-parent household, sibling who dropped out, low parental education, limited English proficiency, three or more hours left unsupervised each day, low family income.

Adjusting the NELS outcomes to reflect the distribution of background characteristics in the Career Academy Evaluation sample entailed three steps: (1) using multiple regression to

<sup>&</sup>lt;sup>6</sup>James J. Kemple and JoAnn Leah Rock. 1996. *Career Academies: Early Implementation Lessons from a 10-Site Evaluation*. New York: Manpower Demonstration Research Corporation.

identify the relationship between each outcome and the above characteristics, (2) calculating the mean for the Career Academy Evaluation sample on each of the above characteristics, and (3) multiplying the Career Academy sample means by the parameter estimates from each regression and adding them to each intercept. In order to estimate outcomes for the risk subgroups, the same parameter estimates were used, but in this case the sample means from each individual risk subgroup were used instead of the means from the full Career Academy sample.

Table 1.14 presents the regression-adjusted outcomes for the full sample and for the risk subgroups, split by type of high school program. These outcomes, including high school completion status, post-secondary enrollment status, ever employed, and duration of employment, can be compared with the findings for the Career Academies Evaluation sample presented in Figures 5, 6, 8, and 9 and Tables 2 and 4 in the report.

#### Table 1.1

			Academy	Non-Academy
	Sample	Total	Group	Group
Subgroup	Size	(%)	(%)	(%)
Full sample	1764	84.0	85.2	82.6
Risk subgroup				
High risk	474	78.5	80.6	75.9
Medium risk	869	84.0	84.1	83.9
Low risk	421	90.3	92.6	87.4 *
Gender				
Male	773	80.1	82.2	77.4 *
Female	991	87.1	87.6	86.5
Ethnicity				
Hispanic	972	86.1	87.2	84.8
Black	523	82.2	84.3	79.7
White	111	75.7	77.2	74.1
Asian/Native American	124	83.1	81.7	84.9
Educational expectations				
Does not expect to graduate from college	448	84.8	84.8	84.9
Graduate from college	671	84.4	86.2	81.9
Attend higher level of school after college	614	83.4	84.8	81.8

## Response Rates for the Post-High School Survey by Risk Subgroup, Gender, Ethnicity, and Educational Expectations

SOURCE: MDRC calculations from the Career Academies Evaluation Post-High School Follow-Up Survey Database.

NOTES: A chi-square test was used to evaluate differences between Academy and non-Academy response rates. Statistical significance levels are indicated as: \*\*\* = 1 percent; \*\* = 5 percent; \* = 10 percent.

The definition of risk subgroups involved identifying background characteristics that best predicted dropping out among students in the non-Academy group. High-risk students have an array of these characteristics associated with the highest likelihood of dropping out; low-risk students have an array of these characteristics associated with the lowest likelihood of dropping out; medium-risk students represent the remaining students with neither a particularly high nor particularly low likelihood of dropping out.

The educational expectations subgroups are based on students' self-reports at the time they applied for an Academy. Expectations for the first group ranged from not finishing high school to attending some college; the majority, however, expected to attend some college. The middle group expected to graduate from college but did not intend to pursue schooling beyond college. The group with the highest expectations planned to attend a higher level of school after graduating from college.

## Table 1.2

		Academy	Non-Academy
Chamatariatia	Full Sample	Group	Group
Characteristic	(%)	(%)	(%)
Demographic and family characteristics			
Gender			
Male	41.8	43.1	40.2
Female	58.2	56.9	59.9
Age of student at time of application			
13 or younger	8.6	7.6	9.8
14	35.9	36.2	35.6
15	46.5	46.8	46.0
16 or older	9.1	9.4	8.6
Race/ethnicity			
Black	29.6	30.6	28.4
White	5.8	5.5	6.2
Hispanic	57.6	56.8	58.6
Asian or Native American	7.1	7.2	6.9
Student speaks limited English <sup>a</sup>	7.6	6.4	9.1 *
Student lives with			
Mother and father	62.7	62.1	63.4
Mother only	27.9	28.1	27.6
Father only	4.2	4.8	3.4
Other family/nonrelative	5.3	5.0	5.6
Student lives in single-parent household	37.3	37.9	36.6
Father's education level			
Did not finish high school	40.6	40.3	40.9
High school graduate/GED recipient	32.0	31.9	32.1
Completed some post-secondary	15.6	14.4	17.0
College graduate	11.9	13.5	10.1
Mother's education level			
Did not finish high school	37.4	36.7	38.3
High school graduate/GED recipient	34.3	33.9	34.8
Completed some post-secondary	18.0	19.3	16.5
College graduate	10.2	10.1	10.4
Neither parent has high school diploma	29.6	30.2	28.9
Parental work			
Both parents work	48.1	47.2	49.2
Father works	23.9	23.8	24.0
Mother works	17.6	19.3	15.4
Neither parent works	10.5	9.8	11.4

# Differences Between Academy and Non-Academy Sample Members Background Characteristics

		Academy	Non-Academy
Characteristic	Full Sample	Group	Group
Characteristic	(70)	(70)	(70)
Family receives welfare or food stamps	23.4	23.3	23.6
Family mobility in past two years			
Have not moved	60.7	59.9	61.7
Moved 1 or 2 times Moved 3 or more times	32.8	34.1 6.0	31.2
	0.5	0.0	1.2
Student is home alone more than 3 hours per day	13.6	13.7	13.5
Educational characteristics			
8 <sup>th</sup> -grade math test score <sup>b</sup>			
75 <sup>th</sup> percentile or higher	9.1	9.3	8.8
50 <sup>th</sup> to 74 <sup>th</sup> percentile	19.9	20.7	18.8
25 <sup>th</sup> to 49 <sup>th</sup> percentile	31.7	30.2	33.6
24 <sup>th</sup> percentile or lower	39.3	39.7	38.9
8 <sup>th</sup> -grade reading test score <sup>c</sup>			
75 <sup>th</sup> percentile or higher	8.5	9.1	7.7
50 <sup>th</sup> to 74 <sup>th</sup> percentile	21.4	23.0	19.4
25 <sup>th</sup> to 49 <sup>th</sup> percentile	32.9	30.7	35.8
24 <sup>th</sup> percentile or lower	37.2	37.3	37.1
Student does not feel safe at school	22.6	22.3	23.0
Frequency of cutting classes			
Never	80.1	79.8	80.4
At least 1 time a week	18.7	19.5	17.7
Dany	1.2	0.8	1.8
Sent to office for misbehavior			
Never	82.4	81.9	83.0
3-10 times	29	3.0	2.8
	,	2.0	
Does not expect to graduate from college	35.1	34 7	35.6]*
Graduate from college	38.8	41.0	36.1
Attend higher level of school after college	26.1	24.3	28.3
Hours per week spent on homework			
1 hour or less	28.4	27.9	29.0
2-3 hours	37.9	38.7	36.9
4-6 hours 7 hours or more	17.6	18.5	16.4
/ hours of more	10.2	14.9	17.0
Hours per day spent watching TV	11 7	11.0	12.2
Less man an nour 1-2 hours	11./ 27.1	11.2 27 4	12.2 26.6
2-3 hours	26.6	25.4	28.1
Over 3 hours	34.6	35.9	33.1

Table 1.2 (continued)

		Academy	Non-Academy
Characteristic	Full Sample	Group	Group
Student has worked for pay	34.8	34.9	34.8
Characteristics are sisted with duaming out of sale		51.9	51.0
Characteristics associated with dropping out of sch	<u>1001</u>		
Attendance rate, year prior to random assignment			
96-100%	55.5	54.8	56.4
91-95%	23.9	22.6	25.5
86-90%	10.5	12.0	8.6
85% or lower	10.2	10.7	9.5
Credits earned in 9 <sup>th</sup> grade <sup>d</sup>			
5 or more credits	82.3	81.5	83.2
3-4 credits	12.8	13.4	12.2
2 or fewer credits	4.9	5.1	4.6
Grade point average in year of random assignment <sup>e</sup>			
3.1 or higher	36.9	35.6	38.5
2.1-3.0	38.7	39.6	37.7
2.0 or lower	24.4	24.8	23.8
Student is overage for grade level <sup>t</sup>	20.2	20.2	20.1
Student transferred schools 2 or more times	25.8	26.3	25.2
Student has sibling who dropped out of high school	20.1	20.0	20.4
Risk of dropping out of high school <sup>g</sup>			
Low risk	25.6	26.1	25.1
Medium risk	49.3	48.5	50.2
High risk	25.1	25.5	24.7
Sample size	1482	817	665

# Table 1.2 (continued)

SOURCES: MDRC calculations from the Career Academies Evaluation Student Baseline Questionnaire Database and Student School Records Database.

NOTES: All characteristics were measured at the time students applied to the Career Academy program and prior to being randomly selected to the Academy and non-Academy groups.

Invalid or missing values are not included in individual variable distributions. Rounding may cause slight discrepancies in calculating of sums and differences.

A chi-square test was applied to differences in the distribution of characteristics across the Academy and non-Academy groups. Statistical significance levels are indicated as: \*\*\* = 1 percent; \*\* = 5 percent; \* = 10 percent.

<sup>a</sup>These are students who responded that they spoke English "not well" or "not at all."

<sup>b</sup>Several different standardized, nationally normed math tests were administered to students, depending on the district where their school was located and the year they entered the study. National percentile scores were used because they were the only standardized scores available across tests.

<sup>c</sup>Several different standardized, nationally normed reading tests were administered to students, depending on the district where their school was located and the year they entered the study. National percentile scores were used because they were the only standardized scores available across tests.

<sup>d</sup>This was applicable only to students who applied to the Career Academy at the end of their 9<sup>th</sup>-grade year.

<sup>e</sup>Grade point averages were converted to a standard 4.0 scale from 100-point or 5-point scales for some sites.

<sup>f</sup>A student is defined as overage for grade at the time of random assignment if she or he turns 15 before the start of the  $9^{th}$  grade, or 16 before the start of the  $10^{th}$  grade. This indicates that the student was likely to have been held back in a previous grade.

<sup>g</sup>The definition of risk subgroups involved identifying background characteristics that best predicted dropping out among students in the non-Academy group. High-risk students have an array of these characteristics associated with the highest likelihood of dropping out; low-risk students have an array of these characteristics associated with the lowest likelihood of dropping out; medium-risk students represent the remaining students with neither a particularly high nor particularly low likelihood of dropping out.

## Table 1.3

# Regression Coefficcients for the Probability of Being in the Program Group for the Full Study Sample and Risk Subgroups (Post-High School Survey Sample, N = 1,482)

	<b>Full Study Sample</b>	<u>High-Risk Subgroup</u>	<u>Medium-Risk Subgroup</u>	Low-Risk Subgroup
	Parameter	Parameter	Parameter	Parameter
	Estimate	Estimate	Estimate	Estimate
Variable	(Standard Error)	(Standard Error)	(Standard Error)	(Standard Error)
Intercept	0.197	-0.426	0.751	2.077
	(0.431)	(0.807)	(0.795)	(1.776)
Site 1	0.029	-0.237	0.208 *	-0.054
	(0.080)	(0.157)	(0.120)	(0.177)
Site 2	-0.027	-0.167	0.028	-0.031
	(0.088)	(0.174)	(0.125)	(0.234)
Site 3	0.056	-0.086	0.063	0.030
	(0.101)	(0.228)	(0.141)	(0.270)
Site 4	-0.011	-0.010	-0.098	-0.072
	(0.101)	(0.175)	(0.150)	(0.320)
Site 5	0.015	0.034	-0.017	-0.011
	(0.068)	(0.118)	(0.105)	(0.153)
Site 6	0.047	0.060	0.144	-0.178
	(0.061)	(0.111)	(0.093)	(0.133)
Site 7	0.031	-0.082	0.075	0.104
	(0.052)	(0.098)	(0.079)	(0.108)
Site 8	0.053	-0.012	0.090	0.053
	(0.050)	(0.104)	(0.074)	(0.102)
Graduation cohort 1996	0.058	0.016	0.097	0.003
	(0.041)	(0.093)	(0.060)	(0.083)
Graduation cohort 1997	0.026	-0.069	0.043	0.020
	(0.035)	(0.085)	(0.050)	(0.067)
In 8th grade at application to Academy	0.030	0.012	-0.011	0.182
	(0.082)	(0.155)	(0.113)	(0.237)
Female	-0.036	0.008	-0.036	-0.047
	(0.028)	(0.060)	(0.040)	(0.056)
Age at application to Academy	0.033	0.060	0.000	0.040
	(0.025)	(0.049)	(0.037)	(0.053)

	Full Study Sample	High-Risk Subgroup	Medium-Risk Subgroup	Low-Risk Subgroup
	Parameter	Parameter	Parameter	Parameter
	Estimate	Estimate	Estimate	Estimate
Variable	(Standard Error)	(Standard Error)	(Standard Error)	(Standard Error)
Hispanic	0.042	0.236 *	* -0.039	0.022
	(0.060)	(0.135)	(0.083)	(0.125)
Black	0.110	0.307 *	* 0.031	0.108
	(0.078)	(0.161)	(0.113)	(0.156)
Asian/Native American	0.045	0.164	-0.051	0.151
	(0.078)	(0.169)	(0.112)	(0.157)
75th percentile or higher in 8th grade math	-0.001	0.208	0.027	-0.067
	(0.064)	(0.198)	(0.089)	(0.113)
25th percentile or lower in 8th grade math	0.024	0.092	0.055	-0.145 *
	(0.037)	(0.074)	(0.052)	(0.078)
Missing 8th grade math test score	0.187	0.161	0.500 *	-0.188
	(0.153)	(0.300)	(0.255)	(0.271)
75th percentile or higher in 8th grade reading	0.044	-0.056	0.079	0.060
	(0.058)	(0.161)	(0.080)	(0.106)
25th percentile or lower in 8th grade reading	-0.003	0.018	-0.041	0.014
	(0.037)	(0.075)	(0.053)	(0.077)
Missing 8th grade reading percentile	-0.194	-0.143	-0.462 *	0.079
	(0.156)	(0.304)	(0.257)	(0.285)
Has sibling who dropped out	-0.010	0.024	-0.002	-0.663 *
	(0.033)	(0.059)	(0.057)	(0.400)
Is overage for grade level	-0.040	-0.067	0.014	0.140
	(0.042)	(0.077)	(0.066)	(0.188)
Transferred schools 2 or more times	0.006	0.030	0.013	-0.025
	(0.031)	(0.058)	(0.052)	(0.271)
Attendance rate, year prior to random assignment	-0.002	-0.002	-0.001	-0.023
	(0.002)	(0.003)	(0.005)	(0.014)
Credits earned in 9th grade	-0.007	-0.002	-0.051	0.064
	(0.016)	(0.024)	(0.044)	(0.093)
Grade point average, year of random assignment	0.009	0.012	0.036	-0.097
	(0.026)	(0.059)	(0.044)	(0.075)

Table 1.3 (continued)

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	<b>Full Study Sample</b>	High-Risk Subgroup	Medium-Risk Subgroup	Low-Risk Subgroup
	Parameter	Parameter	Parameter	Parameter
	Estimate	Estimate	Estimate	Estimate
Variable	(Standard Error)	(Standard Error)	(Standard Error)	(Standard Error)
Sample size	1482	372	730	380
Degrees of freedom	28	28	28	28
Mean of dependent variable	0.551	0.559	0.542	0.561
R-square	0.009	0.050	0.030	0.060
F-statistic	0.476	0.642	0.770	0.802
p-value of F-statistic	0.991	0.921	0.798	0.754

Table 1.3 (continued)

SOURCE: MDRC calculations from the Career Academies Evaluation Post-High School Follow-Up Survey Database.

NOTES: The statistical significance of parameter estimates is indicated as \*\*\* = 1 percent, \*\* = 5 percent, \* = 10 percent.

The definition of risk subgroups involved identifying background characteristics that best predicted dropping out among students in the non-Academy group. Highrisk students have an array of these characteristics associated with the highest likelihood of dropping out; low-risk students have an array of these characteristics

associated with the lowest likelihood of dropping out; medium-risk students represent the remaining students with neither a particularly high nor particularly low

#### likelihood of dropping out.

Several different standardized, nationally normed math tests were administered to students, depending on the district where their school was located and the year they entered the study. National percentile scores were used because they were the only standardized scores available across tests.

Several different standardized, nationally normed reading tests were administered to students, depending on the district where their school was located and the year they entered the study. National percentile scores were used because they were the only standardized scores available across tests.

A student is defined as overage for grade at the time of random assignment if she or he turns 15 before the start of the 9th grade, or 16 before the start of the 10th grade. This indicates that the student was likely to have been held back in a previous grade.

Credits earned in 9th grade applies only to students who applied to the Career Academy at the end of their 9th-grade year.

Grade point averages were converted to a standard 4.0 scale from 100-point or 5-point scales for some sites.

A student is defined as overage for grade at the time of random assignment if she or he turns 15 before the start of the 9th grade, or 16 before the start of the 10th grade. This indicates that the student was likely to have been held back in a previous grade.

#### Table 1.4

Subgroup	Sample Size	Total (%)	Academy Group (%)	Non-Academy Group (%)
Enrolled at the end of 12th grade	1436	88.8	89.3	88.2
High risk subgroup	298	86.6	88.0	84.7
Medium risk subgroup	739	88.2	87.8	88.7
Low risk subgroup	399	91.5	93.1	89.6
Not enrolled at the end of 12th grade	226	75.7	80.5	69.9 *
High risk subgroup	128	77.3	82.8	71.9
Medium risk subgroup	82	74.4	76.0	71.9
Low risk subgroup	16	68.8	88.9	42.9 (**)
Unknown 12th grade enrollment status	102	35.3	41.7	26.2
High risk subgroup	48	31.3	29.6	33.3
Medium risk subgroup	48	35.4	46.4	20.0 *
Low risk subgroup	6	66.7	80.0	0.0

### **Response Rates for the Post-High School Survey** by Twelfth Grade Enrollment Status and Risk Subgroup

SOURCE: MDRC calculations from the Career Academies Evaluation Post-High School Follow-Up Survey Database.

NOTES: A chi-square test was used to evaluate differences between Academy and non-Academy response rates. Statistical significance levels are indicated as: \*\*\* = 1 percent; \*\* = 5 percent; \* = 10 percent. Parentheses indicate that because of small sample size, the chi-square may not be a valid test.

Twelfth grade enrollment status was based on school records data, rosters completed by the host high school, and student self-reports on a survey administered at the end of scheduled 12th grade. Approximately 6% of the full study sample lacked conclusive information from any of these three sources and were thus categorized as unknown.

The definition of risk subgroups involved identifying background characteristics that best predicted dropping out among students in the non-Academy group. High-risk students have an array of these characteristics associated with the highest likelihood of dropping out; low-risk students have an array of these characteristics associated with the lowest likelihood of dropping out; medium-risk students represent the remaining students with neither a particularly high nor particularly low likelihood of dropping out.

### Table 1.5

## Average Sampling Weights by Twelfth Grade Enrollment Status and Risk Subgroup

Subgroup	Sample Size	Total	Academy Group	Non-Academy Group
Enrolled at the end of 12th grade				
High risk subgroup	258	0.907	0.917	0.894
Medium risk subgroup	652	0.952	0.958	0.945
Low risk subgroup	365	0.986	0.994	0.977
Not enrolled at the end of 12th grade				
High risk subgroup	99	1.014	0.973	1.061
Medium risk subgroup	61	1.134	1.115	1.165
Low risk subgroup	11	1.230	1.033	1.755
Unknown 12th grade enrollment status				
High risk subgroup	15	2.346	2.468	2.206
Medium risk subgroup	17	2.498	1.762	4.892
Low risk subgroup	4	1.208	1.208	

SOURCE: MDRC calculations from the Career Academies Evaluation Post-High School Follow-Up Survey Database.

NOTES: Twelfth grade enrollment status was based on school records data, rosters completed by the host high school, and student self-reports on a survey administered at the end of scheduled 12th grade. Approximately 2% of the post-high school follow-up survey sample lacked conclusive information from any of these three sources and were thus categorized as unknown.

The definition of risk subgroups involved identifying background characteristics that best predicted dropping out among students in the non-Academy group. High-risk students have an array of these characteristics associated with the highest likelihood of dropping out; low-risk students have an array of these characteristics associated with the lowest likelihood of dropping out; medium-risk students represent the remaining students with neither a particularly high nor particularly low likelihood of dropping out.

#### Table 1.6

## Impacts on High School Graduation, Post-Secondary Education, and Employment With and Without Sampling Weights

	Post-High School Survey Sample, Unweighted			Post-High School Survey Sample, Weighted		
Outcome	Academy Group	Non-Academy Group	Impact	Academy N Group	Ion-Academy Group	Impact
Earned high school diploma or GED (%)	87.2	86.7	0.5	86.2	85.6	0.5
On-time graduate	74.0	74.4	-0.4	72.3	72.2	0.1
Late graduate	5.8	7.4	-1.6	5.8	7.8	-2.0
Received a GED or other certificate	7.5	5.0	2.5 **	8.0	5.6	2.4 *
Enrolled in post-secondary						
education degree program (%)	54.8	54.6	0.2	54.1	53.6	0.5
Bachelor's degree program	14.7	15.5	-0.9	14.8	15.4	-0.7
Associate's degree program	27.3	27.8	-0.5	26.6	27.2	-0.6
Skills training program	12.8	11.3	1.6	12.7	11.0	1.7
Ever employed (%)	88.7	87.2	1.5	88.4	87.6	0.8
Ever employed full-time (%)	66.9	67.2	-0.3	67.0	68.2	-1.2
Held two or more jobs (%)	42.7	42.8	-0.1	42.1	43.5	-1.4
Number of months employed	9.4	9.3	0.2	9.4	9.2	0.2
Sample size (N=1,482)	817	665		817	665	

SOURCE: MDRC calculations from the Career Academies Evaluation Post-High School Follow-Up Survey Database.

NOTES: All measures refer to the fourteen-month period ending in August of the year following scheduled graduation. Estimates are regression-adjusted using ordinary least squares, controlling for background characteristics. Rounding may cause slight discrepancies in calculating differences. A two-tailed t-test was applied to differences between the Academy and non-Academy groups. Statistical significance levels are indicated as: \*\*\* = 1 percent; \*\* = 5 percent; \* = 10 percent.

Students were considered on-time graduates if they graduated in June or earlier of the year they were scheduled to graduate.

#### Table 1.7

## Impacts on High School Graduation, Post-Secondary Education, and Employment With and Without Sampling Weights for the High Risk Subgroup

	Post-High School Survey Sample, Unweighted			Post-High School Survey Sample, Weighted		
0-4	Academy	Non-Academy	Turn a st	Academy	Non-Academy	Turra e et
Outcome	Group	Group	Impact	Group	Group	Impact
Earned high school diploma or GED (%)	76.6	72.9	3.7	75.3	71.2	4.1
On-time graduate	55.5	49.7	5.9	53.3	45.7	7.5
Late graduate	5.6	10.0	-4.4	5.9	9.7	-3.8
Received a GED or other certificate	15.5	13.3	2.2	16.1	15.7	0.4
Enrolled in post-secondary						
education degree program (%)	40.5	36.5	4.0	39.2	36.1	3.2
Bachelor's degree program	5.0	4.0	1.0	4.6	3.7	0.9
Associate's degree program	17.5	19.9	-2.4	16.7	19.6	-2.9
Skills training program	17.9	12.6	5.3	17.9	12.8	5.2
Ever employed (%)	87.6	87.7	-0.1	86.9	88.1	-1.2
Ever employed full-time (%)	72.8	72.9	-0.2	72.5	74.3	-1.8
Held two or more jobs (%)	47.1	40.3	6.8	45.4	41.9	3.5
Number of months employed	9.1	9.0	0.1	9.0	8.9	0.1
Sample size	208	164		208	164	

SOURCE: MDRC calculations from the Career Academies Evaluation Post-High School Follow-Up Survey Database.

NOTES: All measures refer to the fourteen-month period ending in August of the year following scheduled graduation. Estimates are regression-adjusted using ordinary least squares, controlling for background characteristics. Rounding may cause slight discrepancies in calculating differences. A two-tailed t-test was applied to differences between the Academy and non-Academy groups. Statistical significance levels are indicated as: \*\*\* = 1 percent; \*\* = 5 percent; \* = 10 percent.

The definition of risk subgroups involved identifying background characteristics that best predicted dropping out among students in the non-Academy group. Highrisk students (approximately 25 percent of both the Academy and the non-Academy groups) have an array of these characteristics associated with the highest likelihood of dropping out.

Students were considered on-time graduates if they graduated in June or earlier of the year they were scheduled to graduate.

#### Table 1.8

## Impacts on High School Graduation, Post-Secondary Education, and Employment With and Without Sampling Weights for the Medium Risk Subgroup

	Post-High School Survey Sample, Unweighted			Post-High School Survey Sample, Weighted		
Outcome	Academy Group	Non-Academy Group	Impact	Academy Group	Non-Academy Group	Impact
Earned high school diploma or GED (%)	86.9	88.5	-1.6	85.8	87.4	-1.6
On-time graduate	75.5	78.5	-3.0	73.7	76.4	-2.6
Late graduate	5.6	7.5	-1.9	5.4	8.5	-3.2 *
Received a GED or other certificate	5.9	2.6	3.3 **	6.7	2.5	4.2 ***
Enrolled in post-secondary						
education degree program (%)	53.9	55.0	-1.2	53.1	53.4	-0.2
Bachelor's degree program	13.3	16.6	-3.3	13.6	16.6	-3.1
Associate's degree program	29.1	27.2	1.9	28.3	26.0	2.3
Skills training program	11.5	11.2	0.3	11.3	10.7	0.6
Ever employed (%)	88.9	86.8	2.1	88.6	87.2	1.4
Ever employed full-time (%)	66.8	64.9	1.9	67.0	66.3	0.7
Held two or more jobs (%)	39.5	41.8	-2.3	38.9	42.0	-3.0
Number of months employed	9.6	9.4	0.3	9.6	9.3	0.3
Sample size	396	334		396	334	

SOURCE: MDRC calculations from the Career Academies Evaluation Post-High School Follow-Up Survey Database.

NOTES: All measures refer to the fourteen-month period ending in August of the year following scheduled graduation. Estimates are regression-adjusted using ordinary least squares, controlling for background characteristics. Rounding may cause slight discrepancies in calculating differences. A two-tailed t-test was applied to differences between the Academy and non-Academy groups. Statistical significance levels are indicated as: \*\*\* = 1 percent; \*\* = 5 percent; \* = 10 percent.

The definition of risk subgroups involved identifying background characteristics that best predicted dropping out among students in the non-Academy group. Medium risk students (approximately 50 percent of both the Academy and the non-Academy groups) have an array of these characteristics associated with neither a particularly low nor particularly high likelihood of dropping out.

Students were considered on-time graduates if they graduated in June or earlier of the year they were scheduled to graduate.

#### Table 1.9

## Impacts on High School Graduation, Post-Secondary Education, and Employment With and Without Sampling Weights for the Low Risk Subgroup

Outcome	Post-Hi	gh School Survey S Unweighted	Post-High School Survey Sample, Weighted			
	Academy Group	Non-Academy Group	Impact	Academy Group	Non-Academy Group	Impact
Earned high school diploma or GED (%)	97.8	96.8	1.1	97.8	96.2	1.6
On-time graduate	88.8	90.9	-2.0	88.6	89.8	-1.1
Late graduate	6.1	4.8	1.3	6.2	4.7	1.5
Received a GED or other certificate	2.9	1.1	1.8	3.0	1.7	1.3
Enrolled in post-secondary						
education degree program (%)	70.0	72.4	-2.5	70.0	72.1	-2.2
Bachelor's degree program	25.6	26.0	-0.4	25.8	25.2	0.7
Associate's degree program	33.9	36.3	-2.4	33.7	36.6	-2.9
Skills training program	10.4	10.1	0.3	10.4	10.4	0.1
Ever employed (%)	89.5	87.6	1.9	89.6	87.7	1.9
Ever employed full-time (%)	62.1	65.1	-3.1	62.5	65.4	-2.9
Held two or more jobs (%)	45.0	46.2	-1.2	45.3	46.4	-1.1
Number of months employed	9.5	9.2	0.3	9.5	9.2	0.3
Sample size (n=372)	213	167		213	167	

SOURCE: MDRC calculations from the Career Academies Evaluation Post-High School Follow-Up Survey Database.

NOTES: All measures refer to the fourteen-month period ending in August of the year following scheduled graduation. Estimates are regression-adjusted using ordinary least squares, controlling for background characteristics. Rounding may cause slight discrepancies in calculating differences. A two-tailed t-test was applied to differences between the Academy and non-Academy groups. Statistical significance levels are indicated as: \*\*\* = 1 percent; \*\* = 5 percent; \* = 10 percent.

The definition of risk subgroups involved identifying background characteristics that best predicted dropping out among students in the non-Academy group. Lowrisk students (approximately 25 percent of both the Academy and the non-Academy groups) have an array of these characteristics associated with the lowest likelihood of dropping out.

Students were considered on-time graduates if they graduated in June or earlier of the year they were scheduled to graduate.

#### **Table 1.10**

## Impacts on High School Graduation, Post-Secondary Education, and Employment for the Full Post-High School Survey Sample and the School Records Subsample

	Post-I	High School Survey	/ Sample	School Records Subsample		
Outcome	Academy Group	Non-Academy Group	Impact	Academy Group	Non-Academy Group	Impact
Dropped out of school (%)	10.1	9.6	0.5	10.0	12.5	-2.5
Earned high school diploma or GED (%) On-time graduate Late graduate Received a GED or other certificate	87.2 74.0 5.8 7.5	86.7 74.4 7.4 5.0	0.5 -0.4 -1.6 2.5 **	88.9 75.1 7.4 6.4	87.6 74.6 8.7 4.3	1.3 0.4 -1.3 2.1 *
Enrolled in post-secondary education degree program (%) Bachelor's degree program Associate's degree program Skills training program	54.8 14.7 27.3 12.8	54.6 15.5 27.8 11.3	0.2 -0.9 -0.5 1.6	55.8 15.2 28.1 12.5	56.8 16.4 29.6 10.8	-1.0 -1.2 -1.5 1.7
Ever employed (%) Ever employed full-time (%) Held two or more jobs (%) Number of months employed	88.7 66.9 42.7 9.4	87.2 67.2 42.8 9.3	1.5 -0.3 -0.1 0.2	89.6 66.8 41.9 9.5	86.9 65.8 43.0 9.3	2.7 1.0 -1.0 0.2
Sample size	817	665		699	582	

SOURCE: MDRC calculations from the Career Academies Evaluation Post-High School Follow-Up Survey Database.

NOTES: Unless otherwise indicated, all measures refer to the fourteen-month period ending in August of the year following scheduled graduation. Estimates are regression-adjusted using ordinary least squares, controlling for background characteristics. Rounding may cause slight discrepancies in calculating differences. A two-tailed t-test was applied to differences between the Academy and non-Academy groups. Statistical significance levels are indicated as: \*\*\* = 1 percent; \*\* = 5 percent; \*

= 10 percent.

Students in the school records subsample are those students who have both a post-high school follow-up survey and complete school records data.

Dropout status was measured at the end of scheduled twelfth grade.

Students were considered on-time graduates if they graduated in June or earlier of the year they were scheduled to graduate.

#### **Table 1.11**

## Impacts on High School Graduation, Post-Secondary Education, and Employment for the Full Post-High School Survey Sample and the School Records Subsample for the High Risk Subgroup

	Post-I	High School Survey	v Sample	School Records Subsample		
	Academy	Non-Academy		Academy	Non-Academy	- -
Outcome	Group	Group	Impact	Group	Group	Impact
Dropped out of school (%)	21.9	25.7	-3.8	20.7	32.9	-12.2 ***
Earned high school diploma or GED (%)	76.6	72.9	3.7	80.4	71.2	9.2 *
On-time graduate	55.5	49.7	5.9	59.4	47.7	11.7 **
Late graduate	5.6	10.0	-4.4	7.2	10.2	-3.0
Received a GED or other certificate	15.5	13.3	2.2	13.7	13.3	0.4
Enrolled in post-secondary						
education degree program (%)	40.5	36.5	4.0	42.0	36.0	6.1
Bachelor's degree program	5.0	4.0	1.0	5.8	3.5	2.3
Associate's degree program	17.5	19.9	-2.4	19.3	21.6	-2.3
Skills training program	17.9	12.6	5.3	17.0	10.9	6.1
Ever employed (%)	87.6	87.7	-0.1	88.1	87.3	0.9
Ever employed full-time (%)	72.8	72.9	-0.2	73.9	70.9	3.0
Held two or more jobs (%)	47.1	40.3	6.8	48.1	41.4	6.8
Number of months employed	9.1	9.0	0.1	8.9	9.1	-0.1
Sample size	208	164		163	132	

SOURCE: MDRC calculations from the Career Academies Evaluation Post-High School Follow-Up Survey Database.

NOTES: Unless otherwise indicated, all measures reflect a fourteen-month period ending in August of the year following scheduled graduation. Estimates are regressionadjusted using ordinary least squares, controlling for background characteristics. Rounding may cause slight discrepancies in calculating differences. A two-tailed t-test was applied to differences between the Academy and non-Academy groups. Statistical significance levels are indicated as: \*\*\* = 1 percent; \*\* = 5 percent; \* = 10 percent.

The definition of risk subgroups involved identifying background characteristics that best predicted dropping out among students in the non-Academy group. Highrisk students have an array of these characteristics associated with the highest likelihood of dropping out.

Students in the school records subsample are those students who have both a post-high school follow-up survey and complete school records data.

Dropout status was measured at the end of scheduled twelfth grade.

Students were considered on-time graduates if they graduated in June or earlier of the year they were scheduled to graduate.

#### **Table 1.12**

## Impacts on High School Graduation, Post-Secondary Education, and Employment for the Full Post-High School Survey Sample and the School Records Subsample for the Medium Risk Subgroup

	Post-I	Post-High School Survey Sample			School Records Subsample		
Outcome	Academy Group	Non-Academy Group	Impact	Academy Group	Non-Academy Group	Impact	
Dropped out of school (%)	8.3	5.5	2.9	8.9	8.2	0.6	
Earned high school diploma or GED (%) On-time graduate Late graduate Received a GED or other certificate	86.9 75.5 5.6 5.9	88.5 78.5 7.5 2.6	-1.6 -3.0 -1.9 3.3 **	88.0 75.5 7.3 5.2	89.9 78.8 9.3 1.8	-2.0 -3.3 -2.0 3.4 **	
Enrolled in post-secondary education degree program (%) Bachelor's degree program Associate's degree program Skills training program	53.9 13.3 29.1 11.5	55.0 16.6 27.2 11.2	-1.2 -3.3 1.9 0.3	54.5 13.3 29.3 11.8	57.6 17.2 29.2 11.1	-3.1 -3.9 0.1 0.7	
Ever employed (%) Ever employed full-time (%) Held two or more jobs (%) Number of months employed	88.9 66.8 39.5 9.6	86.8 64.9 41.8 9.4	2.1 1.9 -2.3 0.3	89.5 66.1 37.7 9.7	86.1 63.7 42.3 9.4	3.3 2.4 -4.6 0.2	
Sample size	396	334		344	291		

SOURCE: MDRC calculations from the Career Academies Evaluation Post-High School Follow-Up Survey Database.

NOTES: Unless otherwise indicated, all measures reflect a fourteen-month period ending in August of the year following scheduled graduation. Estimates are regressionadjusted using ordinary least squares, controlling for background characteristics. Rounding may cause slight discrepancies in calculating differences. A two-tailed t-test was applied to differences between the Academy and non-Academy groups. Statistical significance levels are indicated as: \*\*\* = 1 percent; \*\* = 5 percent; \* = 10 percent.

The definition of risk subgroups involved identifying background characteristics that best predicted dropping out among students in the non-Academy group. Mediumrisk students have an array of these characteristics associated with neither a particularly low nor particularly high likelihood of dropping out.

Students in the school records subsample are those students who have both a post-high school follow-up survey and complete school records data.

Dropout status was measured at the end of scheduled twelfth grade.

Students were considered on-time graduates if they graduated in June or earlier of the year they were scheduled to graduate.

#### **Table 1.13**

## Impacts on High School Graduation, Post-Secondary Education, and Employment for the Full Post-High School Survey Sample and the School Records Subsample for the Low Risk Subgroup

	Post-I	High School Survey	v Sample	School Records Subsample		
Outcome	Academy Group	Non-Academy Group	Impact	Academy Group	Non-Academy Group	Impact
Dropped out of school (%)	2.4	1.8	0.6	2.0	2.8	-0.8
Earned high school diploma or GED (%) On-time graduate Late graduate Received a GED or other certificate	97.8 88.8 6.1 2.9	96.8 90.9 4.8 1.1	1.1 -2.0 1.3 1.8	98.1 87.7 7.4 3.1	96.7 89.6 6.5 0.6	1.4 -2.0 0.9 2.5 *
Enrolled in post-secondary education degree program (%) Bachelor's degree program Associate's degree program Skills training program	70.0 25.6 33.9 10.4	72.4 26.0 36.3 10.1	-2.5 -0.4 -2.4 0.3	69.8 25.9 33.9 10.0	72.9 26.6 36.4 9.9	-3.1 -0.7 -2.5 0.1
Ever employed (%) Ever employed full-time (%) Held two or more jobs (%) Number of months employed	89.5 62.1 45.0 9.5	87.6 65.1 46.2 9.2	1.9 -3.1 -1.2 0.3	91.2 62.8 44.6 9.7	87.7 64.4 44.9 9.2	3.5 -1.6 -0.3 0.5
Sample size	213	167		192	159	

SOURCE: MDRC calculations from the Career Academies Evaluation Post-High School Follow-Up Survey Database.

NOTES: Unless otherwise indicated, all measures reflect a fourteen-month period ending in August of the year following scheduled graduation. Estimates are regressionadjusted using ordinary least squares, controlling for background characteristics. Rounding may cause slight discrepancies in calculating differences. A two-tailed t-test was applied to differences between the Academy and non-Academy groups. Statistical significance levels are indicated as: \*\*\* = 1 percent; \*\* = 5 percent; \* = 10 percent.

The definition of risk subgroups involved identifying background characteristics that best predicted dropping out among students in the non-Academy group. Low-risk students have an array of these characteristics associated with the lowest likelihood of dropping out.

Students in the school records subsample are those students who have both a post-high school follow-up survey and complete school records data.

Dropout status was measured at the end of scheduled twelfth grade.

Students were considered on-time graduates if they graduated in June or earlier of the year they were scheduled to graduate.

## **Table 1.14**

## Outcomes for NELS 10th Graders in Urban, Public, Non-Selective High Schools Regression-Adjusted by MDRC Risk Subgroup

Outcome	All	Career/	Comoral	Asselancia
Outcome	Programs	Technical	General	Academic
<u>10th Grade Enrollees</u>				
Earned high school diploma or GED (%)	85.7	81.4	86.2	88.4
On-time graduate	73.1	63.8	68.8	84.6
Late graduate	8.4	14.0	11.3	3.5
Received a GED or other certificate	4.1	3.6	6.1	0.3
Enrolled in post-secondary				
education degree program (%)	47.0	41.8	43.9	53.4
Bachelor's degree program	20.6	20.7	15.6	26.1
Associate's degree program	17.3	17.0	17.5	18.6
Skills training program	9.1	4.1	10.8	8.8
Ever employed (%)	82.8	84.5	82.6	80.0
Total number of months employed	8.9	9.3	9.0	8.0
High Risk Subgroup				
Earned high school diploma or GED (%)	78.9	76.7	79.2	81.2
On-time graduate	63.1	57.5	57.3	77.5
Late graduate	8.9	12.0	12.3	3.7
Received a GED or other certificate	6.8	7.2	9.6	0.0
Enrolled in post-secondary				
education degree program (%)	35.2	38.3	31.7	40.8
Bachelor's degree program	9.1	17.9	5.8	11.9
Associate's degree program	17.9	17.0	18.3	19.5
Skills training program	8.2	3.4	7.5	9.4
Ever employed (%)	79.7	83.3	80.3	74.3
Total number of months employed	8.6	9.7	8.7	7.0
<u>Medium Risk Subgroup</u>				
Earned high school diploma or GED (%)	86.5	81.8	86.9	89.8
On-time graduate	74.3	64.6	70.2	86.0
Late graduate	8.3	13.7	11.1	3.4
Received a GED or other certificate	3.9	3.5	5.7	0.4
Enrolled in post-secondary				
education degree program (%)	48 1	42.2	44.6	55 3
Bachelor's degree program	21.9	21.2	16.6	27.7
Associate's degree program	17.1	16.6	17.1	18.8
Skills training program	9.1	4.4	10.9	8.8
Ever employed (%)	83.3	84.8	82.9	80.7
Total number of months employed	8.9	9.3	9.1	8.1

	All	Career/		
Outcome	Programs	Technical	General	Academic
Low Risk Subgroup				
Earned high school diploma or GED (%)	91.5	86.1	92.6	93.7
On-time graduate	81.7	69.2	78.9	89.9
Late graduate	8.1	16.9	10.6	3.3
Received a GED or other certificate	1.7	0.0	3.1	0.5
Enrolled in post-secondary				
education degree program (%)	58.0	44.6	56.0	63.5
Bachelor's degree program	30.9	22.9	24.6	38.4
Associate's degree program	17.0	17.7	17.2	17.0
Skills training program	10.0	4.0	14.2	8.2
Ever employed (%)	85.4	85.4	84.7	84.9
Total number of months employed	9.1	8.8	9.2	8.7
Sample size	1899	269	886	744

## Table 1.14 (continued)

SOURCE: MDRC calculations from the NELS:88-94 database, adjusted using the Career Academies Evaluation Post-High School Follow-Up Survey Database.

NOTES: All measures refer to the fourteen-month period ending in August of the year following scheduled graduation. Estimates are regression-adjusted to reflect the background characteristics of the MDRC sample.

The definition of MDRC risk subgroups involved identifying background characteristics that best predicted dropping out among students in the non-Academy group. High-risk students (approximately 25 percent of both the Academy and the non-Academy groups) have an array of these characteristics associated with the highest likelihood of dropping out; low-risk students (approximately 25% of both the Academy and non-Academy groups) have an array of these characteristics associated with the lowest likelihood of dropping out; medium-risk students (approximately 50% of both the Academy and non-Academy groups) have an array of these characteristics associated with the lowest likelihood of dropping out; medium-risk students (approximately 50% of both the Academy and non-Academy groups) represent the remaining students with neither a particularly high nor particularly low likelihood of dropping out.

"Earned high school diploma or GED" and "Enrolled in post-secondary education degree program" were not directly estimated from the NELS data. The measures that comprise them were estimated directly, and then added together. Rounding may cause slight discrepancies in calculating sums.

Students were considered on-time graduates if they graduated in June or earlier of the year they were scheduled to graduate.

Students were considered enrolled in a post-secondary education degree program if they received a high school diploma or GED and were enrolled in a bachelor's degree program, associate's degree program, or skills training program leading to a certificate or license. Post-secondary enrollment numbers may include some students whose highest post-secondary enrollment occurred more than 14 months after scheduled graduation.

Unit 2

Additional Impacts for the Full Sample

## Table 2.1

-	Academy	Non-Academy		Percent	Impact per
Outcome (%)	Group	Group	Impact	Change	Enrollee
Ever enrolled in a Career Academy during high school	87.0	6.6	80.4 ***		
Was enrolled in a Career Academy at the end of scheduled grade 12	52.6	4.1	48.5 ***		
High school graduation status					
Earned high school diploma or GED On-time graduate Late graduate Received a GED or other certificate	87.2 74.0 5.8 7.5	86.7 74.4 7.4 5.0	0.5 -0.4 -1.6 2.5 **	0.6 -0.5 -21.8 49.6	0.6 -0.5 -2.0 3.1
No high school diploma or GED Still in high school Dropped out	12.8 1.7 11.1	13.3 1.4 11.9	-0.5 0.3 -0.7	-3.7 18.3 -6.3	-0.6 0.3 -0.9
Enrollment in education programs					
Enrolled in post-secondary education degree program Bachelor's degree program Associate's degree program Skills training program	54.8 14.7 27.3 12.8	54.6 15.5 27.8 11.3	0.2 -0.9 -0.5 1.6	0.3 -5.6 -1.8 13.9	0.2 -1.1 -0.6 1.9
Enrolled in post-secondary education non-degree program	7.6	8.1	-0.4	-5.5	-0.6
Completed post-secondary skills training program	6.5	5.7	0.8	14.6	1.0
Exited a post-secondary education degree program before completion Job-related reason School-related reason Personal reason	10.9 4.1 2.0 4.8	10.0 4.1 3.6 2.2	0.9 0.0 -1.6 * 2.5 ***	9.1 -0.4 -44.8 112.7	1.1 0.0 -2.0 3.1
Received high school diploma or GED but never enrolled in post-secondary education	24.8	24.0	0.7	3.1	0.9
No high school diploma or GED and Enrolled in skills training Enrolled in basic education No education program	1.1 4.9 6.8	2.3 3.7 7.3	-1.2 * 1.2 -0.6	-51.2 33.3 -7.7	-1.4 1.5 -0.7

# Impacts on High School Graduation and Post-Secondary Education Enrollments for the Full Study Sample
	Academy	Non-Academy		Percent	Impact per
Outcome (%)	Group	Group	Impact	Change	Enrollee
Education program enrollment status at end of follow-up period					
Enrolled in post-secondary education degree program	38.8	41.4	-2.6	-6.4	-3.3
Bachelor's degree program	11.9	13.5	-1.6	-12.0	-2.0
Associate's degree program	21.0	21.0	0.0	-0.1	0.0
Skills training program	5.9	6.9	-1.0	-14.6	-1.3
Enrolled in post-secondary education non-degree program	6.3	5.0	1.3	26.0	1.6
Received high school diploma or GED but not enrolled in post-secondary education	42.1	40.3	1.8	4.5	2.3
No high school diploma or GED and					
Enrolled in skills training	0.6	1.7	-1.0 *	-63.0	-1.3
Enrolled in basic education	2.5	1.7	0.8	45.6	1.0
No education program	9.7	9.9	-0.2	-2.3	-0.3
Sample size (N=1,482)	817	665			

#### Table 2.1 (continued)

SOURCE: MDRC calculations from the Career Academies Evaluation Post-High School Follow-Up Survey Database.

NOTES: Unless otherwise indicated, statuses reflect a fourteen-month period ending in August of the year following scheduled graduation. Estimates are regression-adjusted using ordinary least squares, controlling for background characteristics. Rounding may cause slight discrepancies in calculating differences. A two-tailed t-test was applied to differences between the Academy and non-Academy groups. Statistical significance levels are indicated as: \*\*\* = 1 percent; \*\* = 5 percent; \* = 10 percent.

Percent change is the impact divided by the non-Academy group average.

Impact per enrollee is defined as the impact divided by the difference in the percentage of Academy and non-Academy group members ever enrolled in a Career Academy. It is italicized because its calculation does not involve a direct comparison of Academy and non-Academy students.

Students were considered on-time graduates if they graduated in June or earlier of the year they were scheduled to grduate. Students were considered still in high school if they last attended high school in May or later of the year following scheduled graduation but had not graduated.

Students were considered enrolled in a post-secondary education degree program if they received a high school diploma or GED and were enrolled in a bachelor's degree program, associate's degree program, or skills training program leading to a certificate or license.

Post-secondary non-degree programs include classes at a two- or four- year institution or a skills training program but not leading to a degree, certificate, or a license.

Basic education includes students enrolled in GED or ABE programs or in high school.

#### Table 2.2

#### Impacts on Employment for the Full Study Sample

	Academy	Non-Academy		Percent	Impact per
Outcome	Group	Group	Impact	Change	Enrollee
Employment status					
Ever employed (%)	88.7	87.2	1.5	1.7	1.8
Ever employed full-time (%)	66.9	67.2	-0.3	-0.4	-0.3
Worked at two or more jobs (%)	42.7	42.8	-0.1	-0.3	-0.2
Total number of months employed	9.4	9.3	0.2	2.0	0.2
Employed in 12 or more months (%)	46.4	45.0	1.4	3.1	1.7
Employed at the end of the follow-up period (%)	66.2	64.3	1.9	3.0	2.4
Characteristics of primary job					
Average hours worked per week	32.8	32.4	0.4	1.4	0.5
Average hourly wage (\$)	7.44	7.17	0.26	3.7	0.33
Average earnings per week (\$)	241.38	233.25	8.14	3.5	10.12
Number of months employed	9.2	9.2	0.0	-0.3	0.0
Sample size (N=1,482)	817	665			

SOURCE: MDRC calculations from the Career Academies Evaluation Post-High School Follow-Up Survey Database.

NOTES: Unless otherwise indicated, statuses reflect a fourteen-month period ending in August of the year following scheduled graduation. Estimates are regression-adjusted using ordinary least squares, controlling for background characteristics. Rounding may cause slight discrepancies in calculating differences. A two-tailed t-test was applied to differences between the Academy and non-Academy groups. Statistical significance levels are indicated as: \*\*\* = 1 percent; \*\* = 5 percent; \* = 10 percent.

Percent change is defined as the impact divided by the non-Academy group average.

Impact per enrollee is defined as the impact divided by the difference in the percentage of Academy and non-Academy group members ever enrolled in a Career Academy. It is italicized because its calculation does not involve a direct comparison of Academy and non-Academy students.

Primary job is defined as the job at which the student worked the greatest number of months during the 14-month follow-up period. Numbers in italics only include employed sample members. They do not represent experimental comparisons, and no tests of statistical significance were performed.

## Table 2.3

## Impacts on Combining Education and Employment During the School Year Following Scheduled High School Graduation for the Full Study Sample

	Academy	Non-Academy		Percent I	Impact per
Outcome	Group	Group	Impact	Change	Enrollee
Combining Education and Employment					
Enrolled in education program and employed for at least one month (%)	55.4	53.9	1.5	2.9	1.9
Average number of months combining education and employment	3.6	3.5	0.1	2.6	0.1
Primary activity was combining education and employment (%)	39.9	37.4	2.5	6.6	3.1
Attending Education Program and Not Wor	king				
Attended an education program without working for at least one month (%)	36.5	37.2	-0.7	-1.8	-0.8
Average number of months attending an education program without working	1.8	2.0	-0.2	-10.4	-0.3
Primary activity was attending an education program without working (%)	16.8	20.3	-3.4 *	-17.0	-4.3
Working and Not Attending an Education P	<u>rogram</u>				
Worked without attending an education program for at least one month (%)	55.4	54.1	1.3	2.5	1.7
Average number of months working without attending an education program	3.2	3.2	0.0	0.9	0.0
Primary activity was working without attending an education program (%)	30.7	32.7	-2.0	-6.0	-2.4
Working and/or Attending an Education Pro-	ogram				
Attended an education program and/or worked for at least one month (%)	96.2	96.6	-0.4	-0.4	-0.5
Average number of months working and/or attending an education program	8.6	8.7	-0.1	-1.0	-0.1
Primary activity was working and/or attending an education program (%)	87.4	90.4	-2.9 *	-3.3	-3.7
Sample size (N=1,482)	817	665			

NOTES: All measures reflect the average number of months spent in each status during the ten-month school year (September through June) following scheduled graduation from high school. Estimates are regression-adjusted using ordinary least squares, controlling for background characteristics. Rounding may cause slight discrepancies in calculating differences. A two-tailed t-test was applied to differences between the Academy and non-Academy groups. Statistical significance levels are indicated as: \*\*\* = 1 percent; \*\* = 5 percent; \* = 10 percent.

Percent change is defined as the impact divided by the non-Academy group average.

Impact per enrollee is defined as the impact divided by the difference in the percentage of Academy and non-Academy group members ever enrolled in a Career Academy. It is italicized because its calculation does not involve a direct comparison of Academy and non-Academy students.

Primary activity is defined as the activity in which the student spent the greatest number of months during the ten-month school-year period.

Unit 3

Additional Impacts for the Risk Subgroups and Impacts for Subgroups Defined by Gender, Race, and Educational Expectations

## Table 3.1a

# Impacts on High School Graduation and Post-Secondary Education Enrollments for Students in the High-Risk Subgroup

	Academy	Non-Academy		Percent	Impact per
Outcome (%)	Group	Group	Impact	Change	Enrollee
Ever enrolled in a Career Academy during high school	83.4	2.1	81.3 ***		
Was enrolled in a Career Academy at the end of scheduled grade 12	35.3	1.6	33.7 ***		
High school graduation status					
Earned high school diploma or GED On-time graduate Late graduate Received a GED or other certificate	76.6 55.5 5.6 15.5	72.9 49.7 10.0 13.3	3.7 5.9 -4.4 2.2	5.0 11.8 -44.0 16.6	4.5 7.2 -5.4 2.7
No high school diploma or GED Still in high school Dropped out	23.4 2.0 21.4	27.1 2.9 24.1	-3.7 -0.9 -2.8	-13.6 -31.3 -11.4	-4.5 -1.1 -3.4
Enrollment in education programs					
Enrolled in post-secondary education degree program Bachelor's degree program Associate's degree program Skills training program	40.5 5.0 17.5 17.9	36.5 4.0 19.9 12.6	4.0 1.0 -2.4 5.3	10.9 25.1 -11.9 42.3	4.9 1.2 -2.9 6.6
Enrolled in post-secondary education non-degree program	3.7	8.8	-5.1 **	-58.4	-6.3
Completed post-secondary skills training program	9.5	3.2	6.3 **	197.7	7.8
Exited a post-secondary education degree program before completion Job-related reason School-related reason Personal reason	11.4 4.4 3.0 4.1	7.4 3.6 2.3 1.6	4.0 0.8 0.7 2.5	53.6 21.9 31.6 158.5	4.9 1.0 0.9 3.1
Received high school diploma or GED but never enrolled in post-secondary education	32.5	27.7	4.8	17.5	5.9
No high school diploma or GED and Enrolled in skills training Enrolled in basic education No education program	0.7 9.9 12.8	4.5 7.6 14.9	-3.8 ** 2.2 -2.1	-83.5 29.3 -14.2	-4.7 2.7 -2.6

	Academy	Non-Academy		Percent	Impact per
Outcome (%)	Group	Group	Impact	Change	Enrollee
Education program enrollment status at end of follow-up period					
Enrolled in post-secondary education degree program	20.5	27.6	-71	-25.6	-8.7
Bachelor's degree program	1.4	3.7	-2.4	-63.0	-2.9
Associate's degree program	12.4	15.3	-2.9	-18.8	-3.5
Skills training program	6.7	8.5	-1.8	-21.3	-2.2
Enrolled in post-secondary education non-degree program	3.4	3.6	-0.2	-4.3	-0.2
Received high school diploma or GED but not enrolled in post-secondary education	52.6	41.8	10.9 **	26.1	13.4
No high school diploma or GED and Enrolled in skills training	0.4	3 1	_7 7 **	-87.0	-3 1
Enrolled in basic education	4.0	5.1 4 1	-0.1	-3.1	-02
No education program	19.0	19.8	-0.8	-4.1	-1.0
Sample size (n=372)	208	164			

#### Table 3.1a (continued)

SOURCE: MDRC calculations from the Career Academies Evaluation Post-High School Follow-Up Survey Database.

NOTES: Unless otherwise indicated, statuses reflect a fourteen-month period ending in August of the year following scheduled graduation. Estimates are regression-adjusted using ordinary least squares, controlling for background characteristics. Rounding may cause slight discrepancies in calculating differences. A two-tailed t-test was applied to differences between the Academy and non-Academy groups. Statistical significance levels are indicated as: \*\*\* = 1 percent; \*\* = 5 percent; \* = 10 percent.

The definition of risk subgroups involved identifying background characteristics that best predicted dropping out among students in the non-Academy group. High-risk students (approximately 25 percent of both the Academy and the non-Academy groups) have an array of these characteristics associated with the highest likelihood of dropping out.

Percent change is defined as the impact divided by the non-Academy group average.

Impact per enrollee is defined as the impact divided by the difference in the percentage of Academy and non-Academy group members ever enrolled in a Career Academy. It is italicized because its calculation does not involve a direct comparison of Academy and non-Academy students.

Students were considered on-time graduates if they graduated in June or earlier of the year they were scheduled to grduate. Students were considered still in high school if they last attended high school in May or later of the year following scheduled graduation but had not graduated.

Students were considered enrolled in a post-secondary education degree program if they received a high school diploma or GED and were enrolled in a bachelor's degree program, associate's degree program, or skills training program leading to a certificate or license.

Post-secondary non-degree programs include classes at a two- or four- year institution or a skills training program but not leading to a degree, certificate, or a license.

Basic education includes students enrolled in GED or ABE programs or in high school.

#### Table 3.1b

for Stu	for Students in the High-Risk Subgroup								
	Academy	Non-Academy		Percent	Impact per				
Outcome	Group	Group	Impact	Change	Enrollee				
Employment status									
Ever employed (%)	87.6	87.7	-0.1	-0.2	-0.2				
Ever employed full-time (%)	72.8	72.9	-0.2	-0.2	-0.2				
Worked at two or more jobs (%)	47.1	40.3	6.8	17.0	8.4				
Total number of months employed	9.1	9.0	0.1	0.8	0.1				
Employed in 12 or more months (%)	40.1	44.3	-4.2	-9.6	-5.2				
Employed at the end of the follow-up period (%)	61.3	60.1	1.1	1.9	1.4				
Characteristics of primary job									
Average hours worked per week	34.5	33.3	1.2	3.6	1.5				
Average hourly wage (\$)	7.38	7.34	0.04	0.6	0.05				
Average earnings per week (\$)	255.18	240.58	14.60	6.1	17.97				
Number of months employed	8.8	9.0	-0.2	-1.9	-0.2				
Sample size (n=372)	208	164							

## Impacts on Employment for Students in the High-Risk Subgroup

SOURCE: MDRC calculations from the Career Academies Evaluation Post-High School Follow-Up Survey Database.

NOTES: Unless otherwise indicated, statuses reflect a fourteen-month period ending in August of the year following scheduled graduation. Estimates are regression-adjusted using ordinary least squares, controlling for background characteristics. Rounding may cause slight discrepancies in calculating differences. A two-tailed t-test was applied to differences between the Academy and non-Academy groups. Statistical significance levels are indicated as: \*\*\* = 1 percent; \*\* = 5 percent; \* = 10 percent.

The definition of risk subgroups involved identifying background characteristics that best predicted dropping out among students in the non-Academy group. High-risk students (approximately 25 percent of both the Academy and the non-Academy groups) have an array of these characteristics associated with the highest likelihood of dropping out. Percent change is defined as the impact divided by the non-Academy group average.

Impact per enrollee is defined as the impact divided by the difference in the percentage of Academy and non-Academy group members ever enrolled in a Career Academy. It is italicized because its calculation does not involve a direct comparison of Academy and non-Academy students.

Primary job is defined as the job at which the student worked the greatest number of months during the 14-month follow-up period. Numbers in italics only include employed sample members. They do not represent experimental comparisons, and no tests of statistical significance were performed.

## Table 3.1c

# Impacts on Combining Education and Employment During the School Year Following Scheduled High School Graduation for Students in the High-Risk Subgroup

	Academy	Non-Academy		Percent	Impact per
Outcome	Group	Group	Impact	Change	Enrollee
Combining Education and Employment					
Enrolled in education program and employed for at least one month (%)	40.2	47.1	-6.9	-14.6	-8.5
Average number of months combining education and employment	2.3	2.6	-0.3	-11.7	-0.4
Primary activity was combining education and employment (%)	27.3	26.4	0.9	3.4	1.1
Attending Education Program and Not Wor	king				
Attended an education program without working for at least one month (%)	33.0	33.2	-0.2	-0.7	-0.3
Average number of months attending an education program without working	1.4	1.6	-0.2	-10.7	-0.2
Primary activity was attending an education program without working (%)	11.1	17.0	-5.8	-34.3	-7.2
Working and Not Attending an Education P	rogram				
Worked without attending an education program for at least one month (%)	66.9	61.4	5.5	9.0	6.8
Average number of months working without attending an education program	4.2	3.9	0.3	7.8	0.4
Primary activity was working without attending an education program (%)	41.2	40.4	0.7	1.9	0.9
Working and/or Attending an Education Pr	<u>ogram</u>				
Attended an education program and/or worked for at least one month (%)	93.7	93.9	-0.2	-0.2	-0.3
Average number of months working and/or attending an education program	7.9	8.1	-0.2	-2.2	-0.2
Primary activity was working and/or attending an education program (%)	79.6	83.8	-4.2	-5.0	-5.1
Sample size (n=372)	208	164			

NOTES: All measures reflect the average number of months spent in each status during the ten-month school year (September through June) following scheduled graduation from high school. Estimates are regression-adjusted using ordinary least squares, controlling for background characteristics. Rounding may cause slight discrepancies in calculating differences. A two-tailed t-test was applied to differences between the Academy and non-Academy groups. Statistical significance levels are indicated as: \*\*\* = 1 percent; \*\* = 5 percent; \* = 10 percent.

The definition of risk subgroups involved identifying background characteristics that best predicted dropping out among students in the non-Academy group. High-risk students (approximately 25 percent of both the Academy and the non-Academy groups) have an array of these characteristics associated with the highest likelihood of dropping out.

Percent change is defined as the impact divided by the non-Academy group average.

Impact per enrollee is defined as the impact divided by the difference in the percentage of Academy and non-Academy group members ever enrolled in a Career Academy. It is italicized because its calculation does not involve a direct comparison of Academy and non-Academy students.

Primary activity is defined as the activity in which the student spent the greatest number of months during the ten-month school-year period.

## Table 3.2a

# Impacts on High School Graduation and Post-Secondary Education Enrollments for Students in the Medium-Risk Subgroup

	Academy	Non-Academy		Percent	Impact per
Outcome (%)	Group	Group	Impact	Change	Enrollee
Ever enrolled in a Career Academy during high school	88.9	6.5	82.4 ***		
Was enrolled in a Career Academy at the end of scheduled grade 12	54.7	2.8	51.9 ***		
High school graduation status					
Earned high school diploma or GED On-time graduate Late graduate Received a GED or other certificate	86.9 75.5 5.6 5.9	88.5 78.5 7.5 2.6	-1.6 -3.0 -1.9 3.3 **	-1.8 -3.8 -25.8 130.1	-1.9 -3.6 -2.3 4.1
No high school diploma or GED Still in high school Dropped out	13.1 1.7 11.3	11.5 1.0 10.5	1.6 0.7 0.8	13.8 76.5 8.1	1.9 0.9 1.0
Enrollment in education programs					
Enrolled in post-secondary education degree program Bachelor's degree program Associate's degree program Skills training program	53.9 13.3 29.1 11.5	55.0 16.6 27.2 11.2	-1.2 -3.3 1.9 0.3	-2.1 -19.9 6.9 2.4	-1.4 -4.0 2.3 0.3
Enrolled in post-secondary education non-degree program	8.0	6.7	1.3	19.3	1.6
Completed post-secondary skills training program	4.6	6.5	-2.0	-30.1	-2.4
Exited a post-secondary education degree program before completion Job-related reason School-related reason Personal reason	11.1 4.6 1.8 4.6	10.2 3.8 4.2 2.3	0.9 0.9 -2.3 * 2.3 *	8.4 23.0 -56.6 102.1	1.0 1.1 -2.9 2.8
Received high school diploma or GED but never enrolled in post-secondary education	25.1	26.8	-1.7	-6.4	-2.1
No high school diploma or GED and Enrolled in skills training Enrolled in basic education No education program	1.8 4.1 7.1	1.8 3.2 6.5	0.0 0.9 0.6	1.9 28.8 9.7	0.0 1.1 0.8

	Academy	Non-Academy	T d	Percent	Impact per
Outcome (%)	Group	Group	Impact	Change	Enrollee
Education program enrollment status at end of follow-up period					
Enrolled in post-secondary	28.0	41.6	27	6.1	2.2
Bachelor's degree program	11.7 21.2	41.0 14.0 20.3	-2.7	-16.3	-3.2 -2.8
Skills training program	5.9	7.3	-1.4	-18.7	-1.7
Enrolled in post-secondary education non-degree program	6.6	4.5	2.1	47.9	2.6
Received high school diploma or GED but not enrolled in post-secondary		10.5			
education	41.4	42.5	-1.0	-2.5	-1.3
No high school diploma or GED and					
Enrolled in skills training	1.0	1.2	-0.2	-15.9	-0.2
Enrolled in basic education	2.5	0.9	1.6	166.3	1.9
No education program	9.6	9.3	0.2	2.4	0.3
Sample size (n=730)	396	334			

#### Table 3.2a (continued)

SOURCE: MDRC calculations from the Career Academies Evaluation Post-High School Follow-Up Survey Database.

NOTES: Unless otherwise indicated, statuses reflect a fourteen-month period ending in August of the year following scheduled graduation. Estimates are regression-adjusted using ordinary least squares, controlling for background characteristics. Rounding may cause slight discrepancies in calculating differences. A two-tailed t-test was applied to differences between the Academy and non-Academy groups. Statistical significance levels are indicated as: \*\*\* = 1 percent; \*\* = 5 percent; \* = 10 percent.

The definition of risk subgroups involved identifying background characteristics that best predicted dropping out among students in the non-Academy group. Medium-risk students (approximately 50 percent of both the Academy and the non-Academy groups) have an array of these characteristics associated with neither a particularly low nor particularly high likelihood of dropping out.

Percent change is defined as the impact divided by the non-Academy group average.

Impact per enrollee is defined as the impact divided by the difference in the percentage of Academy and non-Academy group members ever enrolled in a Career Academy. It is italicized because its calculation does not involve a direct comparison of Academy and non-Academy students.

Students were considered on-time graduates if they graduated in June or earlier of the year they were scheduled to grduate. Students were considered still in high school if they last attended high school in May or later of the year following scheduled graduation but had not graduated.

Students were considered enrolled in a post-secondary education degree program if they received a high school diploma or GED and were enrolled in a bachelor's degree program, associate's degree program, or skills training program leading to a certificate or license.

Post-secondary non-degree programs include classes at a two- or four- year institution or a skills training program but not leading to a degree, certificate, or a license.

Basic education includes students enrolled in GED or ABE programs or in high school.

#### Table 3.2b

#### Impacts on Employment for Students in the Medium-Risk Subgroup

	Academy	Non-Academy		Percent	Impact per
Outcome	Group	Group	Impact	Change	Enrollee
Employment status					
Ever employed (%)	88.9	86.8	2.1	2.4	2.5
Ever employed full-time (%)	66.8	64.9	1.9	2.9	2.3
Worked at two or more jobs (%)	39.5	41.8	-2.3	-5.5	-2.8
Total number of months employed	9.6	9.4	0.3	2.9	0.3
Employed in 12 or more months (%)	49.5	44.6	4.9	10.9	5.9
Employed at the end of the follow-up period (%)	68.1	68.0	0.1	0.2	0.1
Characteristics of primary job					
Average hours worked per week	33.0	32.6	0.4	1.1	0.4
Average hourly wage (\$)	7.51	6.95	0.55	7.9	0.67
Average earnings per week (\$)	243.93	226.23	17.70	7.8	21.49
Number of months employed	9.5	9.5	0.0	0.3	0.0
Sample size (n=730)	396	334			

SSOURCE: MDRC calculations from the Career Academies Evaluation Post-High School Follow-Up Survey Database.

NOTES: Unless otherwise indicated, statuses reflect a fourteen-month period ending in August of the year following scheduled graduation. Estimates are regression-adjusted using ordinary least squares, controlling for background characteristics. Rounding may cause slight discrepancies in calculating differences. A two-tailed t-test was applied to differences between the Academy and non-Academy groups. Statistical significance levels are indicated as: \*\*\* = 1 percent; \*\* = 5 percent; \* = 10 percent.

The definition of risk subgroups involved identifying background characteristics that best predicted dropping out among students in the non-Academy group. Medium-risk students (approximately 50 percent of both the Academy and the non-Academy groups) have an array of these characteristics associated with neither a particularly low nor particularly high likelihood of dropping out.

Percent change is defined as the impact divided by the non-Academy group average.

Impact per enrollee is defined as the impact divided by the difference in the percentage of Academy and non-Academy group members ever enrolled in a Career Academy. It is italicized because its calculation does not involve a direct comparison of Academy and non-Academy students.

Primary job is defined as the job at which the student worked the greatest number of months during the 14-month follow-up period. Numbers in italics only include employed sample members. They do not represent experimental comparisons, and no tests of statistical significance were performed.

## Table 3.2c

## Impacts on Combining Education and Employment During the School Year Following Scheduled High School Graduation for Students in the Medium-Risk Subgroup

	Academy	Non-Academy		Percent	Impact per
Outcome	Group	Group	Impact	Change	Enrollee
Combining Education and Employment					
Enrolled in education program and employed for at least one month (%)	56.4	51.7	4.7	9.1	5.7
Average number of months combining education and employment	3.7	3.5	0.2	4.8	0.2
Primary activity was combining education and employment (%)	38.0	37.2	0.8	2.1	1.0
Attending Education Program and Not Wor	king				
Attended an education program without working for at least one month (%)	34.7	35.5	-0.9	-2.5	-1.1
Average number of months attending an education program without working	1.8	1.9	-0.1	-4.9	-0.1
Primary activity was attending an education program without working (%)	17.8	18.1	-0.2	-1.2	-0.3
Working and Not Attending an Education P	rogram				
Worked without attending an education program for at least one month (%)	55.5	55.5	0.0	0.0	0.0
Average number of months working without attending an education program	3.3	3.3	0.0	0.3	0.0
Primary activity was working without attending an education program (%)	33.5	35.4	-1.8	-5.2	-2.2
Working and/or Attending an Education Pr	<u>ogram</u>				
Attended an education program and/or worked for at least one month (%)	96.7	96.8	-0.1	-0.1	-0.1
Average number of months working and/or attending an education program	8.7	8.7	0.1	1.0	0.1
Primary activity was working and/or attending an education program (%)	89.4	90.7	-1.3	-1.4	-1.5
Sample size (n=730)	396	334			

NOTES: All measures reflect the average number of months spent in each status during the ten-month school year (September through June) following scheduled graduation from high school. Estimates are regression-adjusted using ordinary least squares, controlling for background characteristics. Rounding may cause slight discrepancies in calculating differences. A two-tailed t-test was applied to differences between the Academy and non-Academy groups. Statistical significance levels are indicated as: \*\*\* = 1 percent; \*\* = 5 percent; \* = 10 percent.

The definition of risk subgroups involved identifying background characteristics that best predicted dropping out among students in the non-Academy group. Medium-risk students (approximately 50 percent of both the Academy and the non-Academy groups) have an array of these characteristics associated with neither a particularly low nor particularly high likelihood of dropping out.

Percent change is defined as the impact divided by the non-Academy group average.

Impact per enrollee is defined as the impact divided by the difference in the percentage of Academy and non-Academy group members ever enrolled in a Career Academy. It is italicized because its calculation does not involve a direct comparison of Academy and non-Academy students.

Primary activity is defined as the activity in which the student spent the greatest number of months during the ten-month school-year period.

## Table 3.3a

# Impacts on High School Graduation and Post-Secondary Education Enrollments for Students in the Low-Risk Subgroup

	Academy	Non-Academy		Percent	Impact per
Outcome (%)	Group	Group	Impact	Change	Enrollee
Ever enrolled in a Career Academy during high school	86.9	10.7	76.2 ***		
Was enrolled in a Career Academy at the end of scheduled grade 12	65.5	9.3	56.1 ***		
High school graduation status					
Earned high school diploma or GED On-time graduate Late graduate Received a GED or other certificate	97.8 88.8 6.1 2.9	96.8 90.9 4.8 1.1	1.1 -2.0 1.3 1.8	1.1 -2.2 27.7 159.8	1.4 -2.7 1.7 2.3
No high school diploma or GED Still in high school Dropped out	2.2 1.3 0.8	3.2 0.7 2.5	-1.1 0.6 -1.7	-33.1 93.4 -67.5	-1.4 0.8 -2.2
Enrollment in education programs					
Enrolled in post-secondary education degree program Bachelor's degree program Associate's degree program Skills training program	70.0 25.6 33.9 10.4	72.4 26.0 36.3 10.1	-2.5 -0.4 -2.4 0.3	-3.4 -1.5 -6.6 3.1	-3.2 -0.5 -3.1 0.4
Enrolled in post-secondary education non-degree program	10.7	10.3	0.3	3.2	0.4
Completed post-secondary skills training program	7.2	6.3	0.9	14.7	1.2
Exited a post-secondary education degree program before completion Job-related reason School-related reason Personal reason	9.9 3.0 1.2 5.7	11.9 5.1 3.9 3.0	-2.0 -2.1 -2.6 * 2.7	-17.1 -41.2 -68.7 92.0	-2.7 -2.8 -3.5 3.6
Received high school diploma or GED but never enrolled in post-secondary education	17.2	14.0	3.2	23.0	4.2
No high school diploma or GED and Enrolled in skills training Enrolled in basic education No education program	0.0 1.8 0.4	1.3 0.7 1.2	-1.3 * 1.1 -0.8	-104.0 146.6 -65.4	-1.7 1.4 -1.1

	Academy	Non-Academy		Percent	Impact per
Outcome (%)	Group	Group	Impact	Change	Enrollee
Education program enrollment status at end of follow-up period					
Enrolled in post-secondary education degree program Bachelor's degree program Associate's degree program Skills training program	55.7 21.4 29.0 5.2	55.3 23.6 27.6 4.1	0.4 -2.2 1.4 1.1	0.7 -9.2 5.1 27.6	0.5 -2.8 1.8 1.5
Enrolled in post-secondary education non-degree program	8.8	7.3	1.5	20.4	2.0
Received high school diploma or GED but not enrolled in post-secondary education	33.3	34.1	-0.8	-2.3	-1.1
No high school diploma or GED and Enrolled in skills training Enrolled in basic education No education program	0.0 1.3 0.9	1.3 0.7 1.3	-1.3 * 0.6 -0.4	-104.0 93.4 -31.5	-1.7 0.8 -0.5
Sample size (n=380)	213	167			

#### Table 3.3a (continued)

SOURCE: MDRC calculations from the Career Academies Evaluation Post-High School Follow-Up Survey Database.

NOTES: Unless otherwise indicated, statuses reflect a fourteen-month period ending in August of the year following scheduled graduation. Estimates are regression-adjusted using ordinary least squares, controlling for background characteristics. Rounding may cause slight discrepancies in calculating differences. A two-tailed t-test was applied to differences between the Academy and non-Academy groups. Statistical significance levels are indicated as: \*\*\* = 1 percent; \*\* = 5 percent; \* = 10 percent.

The definition of risk subgroups involved identifying background characteristics that best predicted dropping out among students in the non-Academy group. Low-risk students (approximately 25 percent of both the Academy and the non-Academy groups) have an array of these characteristics associated with the lowest likelihood of dropping out.

Percent change is defined as the impact divided by the non-Academy group average.

Impact per enrollee is defined as the impact divided by the difference in the percentage of Academy and non-Academy group members ever enrolled in a Career Academy. It is italicized because its calculation does not involve a direct comparison of Academy and non-Academy students.

Students were considered on-time graduates if they graduated in June or earlier of the year they were scheduled to grduate. Students were considered still in high school if they last attended high school in May or later of the year following scheduled graduation but had not graduated.

Students were considered enrolled in a post-secondary education degree program if they received a high school diploma or GED and were enrolled in a bachelor's degree program, associate's degree program, or skills training program leading to a certificate or license.

Post-secondary non-degree programs include classes at a two- or four- year institution or a skills training program but not leading to a degree, certificate, or a license.

Basic education includes students enrolled in GED or ABE programs or in high school.

#### Table 3.3b

#### Impacts on Employment for Students in the Low-Risk Subgroup

	Academy	Non-Academy		Percent	Impact per
Outcome	Group	Group	Impact	Change	Enrollee
Employment status					
Ever employed (%)	89.5	87.6	1.9	2.2	2.5
Ever employed full-time (%)	62.1	65.1	-3.1	-4.7	-4.0
Worked at two or more jobs (%)	45.0	46.2	-1.2	-2.6	-1.6
Total number of months employed	9.5	9.2	0.3	3.2	0.4
Employed in 12 or more months (%)	46.9	46.2	0.7	1.6	0.9
Employed at the end of the follow-up period (%)	67.9	60.6	7.3	12.1	9.6
Characteristics of primary job					
Average hours worked per week	31.1	30.5	0.6	1.9	0.8
Average hourly wage (\$)	7.32	7.50	-0.18	-2.4	-0.24
Average earnings per week (\$)	225.23	237.68	-12.45	-5.2	-16.35
Number of months employed	9.1	9.1	0.1	0.6	0.1
Sample size (n=380)	213	167			

SOURCE: MDRC calculations from the Career Academies Evaluation Post-High School Follow-Up Survey Database.

NOTES: Unless otherwise indicated, statuses reflect a fourteen-month period ending in August of the year following scheduled graduation. Estimates are regression-adjusted using ordinary least squares, controlling for background characteristics. Rounding may cause slight discrepancies in calculating differences. A two-tailed t-test was applied to differences between the Academy and non-Academy groups. Statistical significance levels are indicated as: \*\*\* = 1 percent; \*\* = 5 percent; \* = 10 percent.

The definition of risk subgroups involved identifying background characteristics that best predicted dropping out among students in the non-Academy group. Low-risk students (approximately 25 percent of both the Academy and the non-Academy groups) have an array of these characteristics associated with the lowest likelihood of dropping out.

Percent change is defined as the impact divided by the non-Academy group average.

Impact per enrollee is defined as the impact divided by the difference in the percentage of Academy and non-Academy group members ever enrolled in a Career Academy. It is italicized because its calculation does not involve a direct comparison of Academy and non-Academy students.

Primary job is defined as the job at which the student worked the greatest number of months during the 14-month follow-up period. Numbers in italics only include employed sample members. They do not represent experimental comparisons, and no tests of statistical significance were performed.

## Table 3.3c

## Impacts on Combining Education and Employment During the School Year Following Scheduled High School Graduation for Students in the Low-Risk Subgroup

	Academy	Non-Academy		Percent	Impact per
Outcome	Group	Group	Impact	Change	Enrollee
Combining Education and Employment					
Enrolled in education program and employed for at least one month (%)	67.9	65.5	2.5	3.8	3.2
Average number of months combining education and employment	4.8	4.6	0.2	4.4	0.3
Primary activity was combining education and employment (%)	55.0	49.6	5.4	10.9	7.1
Attending Education Program and Not Wor	king				
Attended an education program without working for at least one month (%)	44.0	43.9	0.0	0.0	0.0
Average number of months attending an education program without working	2.2	2.6	-0.5	-17.4	-0.6
Primary activity was attending an education program without working (%)	20.5	27.7	-7.2	-26.1	-9.5
Working and Not Attending an Education P	rogram				
Worked without attending an education program for at least one month (%)	44.5	43.2	1.3	3.0	1.7
Average number of months working without attending an education program	2.1	2.1	0.0	1.2	0.0
Primary activity was working without attending an education program (%)	16.8	17.6	-0.8	-4.6	-1.1
Working and/or Attending an Education Pro-	ogram				
Attended an education program and/or worked for at least one month (%)	97.8	99.3	-1.5	-1.5	-2.0
Average number of months working and/or attending an education program	9.1	9.3	-0.2	-2.5	-0.3
Primary activity was working and/or attending an education program (%)	92.3	94.9	-2.6	-2.8	-3.5
Sample size (n=380)	213	167			

NOTES: All measures reflect the average number of months spent in each status during the ten-month school year (September through June) following scheduled graduation from high school. Estimates are regression-adjusted using ordinary least squares, controlling for background characteristics. Rounding may cause slight discrepancies in calculating differences. A two-tailed t-test was applied to differences between the Academy and non-Academy groups. Statistical significance levels are indicated as: \*\*\* = 1 percent; \*\* = 5 percent; \* = 10 percent.

The definition of risk subgroups involved identifying background characteristics that best predicted dropping out among students in the non-Academy group. Low-risk students (approximately 25 percent of both the Academy and the non-Academy groups) have an array of these characteristics associated with the lowest likelihood of dropping out.

Percent change is defined as the impact divided by the non-Academy group average.

Impact per enrollee is defined as the impact divided by the difference in the percentage of Academy and non-Academy group members ever enrolled in a Career Academy. It is italicized because its calculation does not involve a direct comparison of Academy and non-Academy students.

Primary activity is defined as the activity in which the student spent the greatest number of months during the ten-month school-year period.

Table 3.4

## Impacts on High School Completion, Post-secondary Education and Employment for the Male Subgroup

Outcome	Academy Group	Non-Academy Group	Impact	Percent Change	Impact per Enrollee
Ever enrolled in a Career Academy during high school (%)	87.2	4.2	83.0 ***		
Was enrolled in a Career Academy at the end of scheduled grade 12 (%)	49.6	2.4	47.3 ***		
High school graduation status					
Earned high school diploma or GED (%) On-time graduate Late graduate Received a GED or other certificate	85.4 70.3 5.2 9.9	84.7 70.9 8.1 5.7	0.7 -0.6 -2.8 4.1 *	0.8 -0.8 -35.1 71.6	0.8 -0.7 -3.4 5.0
Ever dropped out of high school (%)	22.7	20.7	2.0	9.5	2.4
Enrollment in education programs					
Enrolled in post-secondary education degree program (%) Bachelor's degree program Associate's degree program Skills training program	53.2 14.0 23.6 15.6	52.3 16.0 25.5 10.8	1.0 -2.0 -1.9 4.8 *	1.8 -12.3 -7.4 44.3	1.1 -2.4 -2.3 5.8
Completed post-secondary skills training program (%)	7.7	4.8	2.8	58.7	3.4
Exited a post-secondary education degree program before completion (%)	10.3	10.4	-0.1	-1.0	-0.1
Employment status					
Ever employed (%) Ever employed full-time (%)	92.7 74.5	90.9 72.5	1.8 2.0	2.0 2.8	2.1 2.4
Characteristics of primary job					
Hours worked per week Hourly wage (\$) Earnings per week (\$) Number of months employed	35.0 7.84 272.64 9.4	33.9 7.46 254.04 9.1	1.1 0.38 18.60 0.3	3.2 5.1 7.3 3.2	1.3 0.46 22.40 0.4
Combining education and employment					
Number of months working or attending an education program Number of months combining	9.0	8.9	0.1	1.2	0.1
education and employment	3.7	3.7	0.0	0.3	0.0
Number of months attending an education program without working Number of months working without	1.6	1.9	-0.3	-17.9	-0.4
attending an education program	3.7	3.2	0.4	13.7	0.5
Sample size (n=619)	352	267			

NOTES: Unless otherwise indicated, statuses reflect a fourteen-month period ending in August of the year following scheduled graduation. Estimates are regression-adjusted using ordinary least squares, controlling for background characteristics. Rounding may cause slight discrepancies in calculating differences. A two-tailed t-test was applied to differences between the Academy and non-Academy groups. Statistical significance levels are indicated as: \*\*\* = 1 percent; \*\* = 5 percent; \* = 10 percent.

Percent change is defined as the impact divided by the non-Academy group average.

Impact per enrollee is defined as the impact divided by the difference in the percentage of Academy and non-Academy group members ever enrolled in a Career Academy. It is italicized because its calculation does not involve a direct comparison of Academy and non-Academy students.

Students were considered on-time graduates if they graduated in June or earlier of the year they were scheduled to graduate. Students were considered still in high school if they last attended high school in May or later of the year following scheduled graduation but had not graduated.

"Ever dropped out of high school" includes some students who eventually graduated late or earned a GED.

Students were considered enrolled in a post-secondary education degree program if they received a high school diploma or GED and were enrolled in a bachelor's degree program, associate's degree program, or skills training program leading to a certificate or license.

Primary job is defined as the job at which the student worked the greatest number of months during the 14-month follow-up period. Numbers in italics only include employed sample members. They do not represent experimental comparisons, and no tests of statistical significance were performed.

Table 3.5

Outcome	Academy Group	Non-Academy Group	Impact	Percent Change	Impact per Enrollee
Ever enrolled in a Career Academy during high school (%)	86.7	8.2	78.5 ***		
Was enrolled in a Career Academy at the end of scheduled grade 12 (%)	54.6	5.5	49.1 ***		
High school graduation status					
Earned high school diploma or GED (%) On-time graduate Late graduate Received a GED or other certificate	88.5 76.5 6.3 5.7	88.1 77.0 6.8 4.4	0.3 -0.5 -0.5 1.4	0.4 -0.7 -7.5 31.9	0.4 -0.7 -0.6 1.8
Ever dropped out of high school (%)	18.1	16.1	2.0	12.5	2.6
Enrollment in education programs					
Enrolled in post-secondary education degree program (%) Bachelor's degree program Associate's degree program Skills training program	56.4 15.1 30.4 10.9	55.7 15.3 29.1 11.4	0.7 -0.2 1.3 -0.4	1.2 -1.5 4.6 -3.9	0.8 -0.3 1.7 -0.6
Completed post-secondary skills training program (%)	5.8	6.0	-0.2	-2.7	-0.2
Exited a post-secondary education degree program before completion (%)	11.4	9.5	1.9	19.6	2.4
<u>Employment status</u>					
Ever employed (%) Ever employed full-time (%)	85.9 61.3	84.6 63.3	1.4 -2.0	1.6 -3.2	1.7 -2.6
Characteristics of primary job					
Hours worked per week Hourly wage (\$) Earnings per week (\$) Number of months employed	31.0 7.13 216.77 9.1	31.2 6.95 217.24 9.3	-0.1 0.18 -0.47 -0.2	-0.4 2.6 -0.2 -2.4	-0.2 0.23 -0.60 -0.3
Combining education and employment					
Number of months working or attending an education program Number of months combining	8.4	8.6	-0.2	-2.4	-0.3
education and employment	3.6	3.4	0.2	6.3	0.3
an education program without working Number of months working without	1.9	2.1	-0.1	-7.1	-0.2
attending an education program $Sample size (n=863)$	2.9	3.1	-0.3	-8.6	-0.3
Sample Size (II=005)	403	598			

## Impacts on High School Completion, Post-secondary Education and Employment for the Female Subgroup

NOTES: Unless otherwise indicated, statuses reflect a fourteen-month period ending in August of the year following scheduled graduation. Estimates are regression-adjusted using ordinary least squares, controlling for background characteristics. Rounding may cause slight discrepancies in calculating differences. A two-tailed t-test was applied to differences between the Academy and non-Academy groups. Statistical significance levels are indicated as: \*\*\* = 1 percent; \*\* = 5 percent; \* = 10 percent.

Percent change is defined as the impact divided by the non-Academy group average.

Impact per enrollee is defined as the impact divided by the difference in the percentage of Academy and non-Academy group members ever enrolled in a Career Academy. It is italicized because its calculation does not involve a direct comparison of Academy and non-Academy students.

Students were considered on-time graduates if they graduated in June or earlier of the year they were scheduled to graduate. Students were considered still in high school if they last attended high school in May or later of the year following scheduled graduation but had not graduated.

"Ever dropped out of high school" includes some students who eventually graduated late or earned a GED.

Students were considered enrolled in a post-secondary education degree program if they received a high school diploma or GED and were enrolled in a bachelor's degree program, associate's degree program, or skills training program leading to a certificate or license.

Primary job is defined as the job at which the student worked the greatest number of months during the 14-month followup period. Numbers in italics only include employed sample members. They do not represent experimental comparisons, and no tests of statistical significance were performed.

Table 3.6

	Academy	Non-Academy	• -	Percent	Impact per
Outcome	Group	Group	Impact	Change	Enrollee
Ever enrolled in a Career Academy during high school (%)	91.4	6.9	84.5 ***		
Was enrolled in a Career Academy at the end of scheduled grade 12 (%)	54.1	4.4	49.8 ***		
High school graduation status					
Earned high school diploma or GED (%) On-time graduate Late graduate Received a GED or other certificate	87.7 74.5 5.8 7.4	87.9 75.7 8.3 4.0	-0.2 -1.2 -2.5 3.5 **	-0.2 -1.6 -30.2 88.0	-0.2 -1.4 -3.0 4.1
Ever dropped out of high school (%)	19.9	17.3	2.6	15.0	3.1
Enrollment in education programs					
Enrolled in post-secondary education degree program (%) Bachelor's degree program Associate's degree program Skills training program	55.4 10.1 30.8 14.5	55.0 12.9 28.5 13.6	0.3 -2.8 2.3 0.9	0.6 -22.0 8.2 6.3	0.4 -3.4 2.8 1.0
Completed post-secondary skills training program (%)	8.3	6.8	1.5	22.7	1.8
Exited a post-secondary education degree program before completion (%)	8.7	10.3	-1.6	-15.8	-1.9
Employment status					
Ever employed (%) Ever employed full-time (%)	89.0 67.5	86.6 67.0	2.5 0.6	2.8 0.9	2.9 0.7
Characteristics of primary job					
Hours worked per week Hourly wage (\$) Earnings per week (\$) Number of months employed	33.7 7.33 243.34 9.6	32.1 7.17 229.49 9.8	1.5 * 0.16 13.86 -0.2	4.8 2.2 6.0 -2.4	1.8 0.19 16.41 -0.3
Combining education and employment					
Number of months working or attending an education program Number of months combining	8.7	8.9	-0.1	-1.5	-0.2
education and employment	3.9	3.7	0.2	5.5	0.2
Number of months attending an education program without working Number of months working without	1.7	1.8	-0.1	-5.6	-0.1
attending an education program	3.1	3.3	-0.2	-7.3	-0.3
Sample size (n=837)	457	380			

## Impacts on High School Completion, Post-secondary Education and Employment for the Hispanic Subgroup

NOTES: Unless otherwise indicated, statuses reflect a fourteen-month period ending in August of the year following scheduled graduation. Estimates are regression-adjusted using ordinary least squares, controlling for background characteristics. Rounding may cause slight discrepancies in calculating differences. A two-tailed t-test was applied to differences between the Academy and non-Academy groups. Statistical significance levels are indicated as: \*\*\* = 1 percent; \*\* = 5 percent; \* = 10 percent.

Percent change is defined as the impact divided by the non-Academy group average.

Impact per enrollee is defined as the impact divided by the difference in the percentage of Academy and non-Academy group members ever enrolled in a Career Academy. It is italicized because its calculation does not involve a direct comparison of Academy and non-Academy students.

Students were considered on-time graduates if they graduated in June or earlier of the year they were scheduled to graduate. Students were considered still in high school if they last attended high school in May or later of the year following scheduled graduation but had not graduated.

"Ever dropped out of high school" includes some students who eventually graduated late or earned a GED.

Students were considered enrolled in a post-secondary education degree program if they received a high school diploma or GED and were enrolled in a bachelor's degree program, associate's degree program, or skills training program leading to a certificate or license.

Primary job is defined as the job at which the student worked the greatest number of months during the 14-month followup period. Numbers in italics only include employed sample members. They do not represent experimental comparisons, and no tests of statistical significance were performed.

Table 3.7

Impacts on High School Completion, Post-secondary Ed	ucation
and Employment for the Black Subgroup	

Outcome	Academy Group	Non-Academy Group	Impact	Percent Change	Impact per Enrollee
Ever enrolled in a Career Academy during high school (%)	77.9	7.8	70.1 ***		
Was enrolled in a Career Academy at the end of scheduled grade 12 (%)	47.7	4.2	43.5 ***		
High school graduation status					
Earned high school diploma or GED (%) On-time graduate Late graduate Received a GED or other certificate	84.8 71.0 6.2 7.6	85.5 73.0 5.3 7.2	-0.7 -1.9 0.9 0.4	-0.8 -2.7 16.9 5.1	-1.0 -2.8 1.3 0.5
Ever dropped out of high school (%)	20.3	18.5	1.8	9.9	2.6
Enrollment in education programs					
Enrolled in post-secondary education degree program (%) Bachelor's degree program Associate's degree program Skills training program	52.6 21.4 19.3 11.8	52.6 18.7 23.1 10.8	0.0 2.7 -3.8 1.0	0.0 14.6 -16.3 9.5	0.0 3.9 -5.4 1.5
Completed post-secondary skills training program (%)	4.8	5.0	-0.3	-5.2	-0.4
Exited a post-secondary education degree program before completion (%)	12.4	10.1	2.3	23.3	3.3
Employment status					
Ever employed (%) Ever employed full-time (%)	87.6 68.3	87.2 70.7	0.4 -2.4	0.5 -3.4	0.6 -3.4
Characteristics of primary job					
Hours worked per week Hourly wage (\$) Earnings per week (\$) Number of months employed	31.8 7.25 230.16 8.6	33.1 7.01 231.71 8.8	-1.3 0.24 -1.55 -0.2	-3.8 3.5 -0.7 -1.9	-1.8 0.35 -2.21 -0.2
Combining education and employment					
Number of months working or attending an education program	8.4	8.4	0.0	-0.4	-0.1
education and employment	2.8	2.9	0.0	-1.1	0.0
Number of months attending an education program without working Number of months working without	1.9	2.0	-0.1	-4.8	-0.1
attending an education program	3.6	3.5	0.1	2.7	0.1
Sample size (n=430)	246	184			

NOTES: Unless otherwise indicated, statuses reflect a fourteen-month period ending in August of the year following scheduled graduation. Estimates are regression-adjusted using ordinary least squares, controlling for background characteristics. Rounding may cause slight discrepancies in calculating differences. A two-tailed t-test was applied to differences between the Academy and non-Academy groups. Statistical significance levels are indicated as: \*\*\* = 1 percent; \*\* = 5 percent; \* = 10 percent.

Percent change is defined as the impact divided by the non-Academy group average.

Impact per enrollee is defined as the impact divided by the difference in the percentage of Academy and non-Academy group members ever enrolled in a Career Academy. It is italicized because its calculation does not involve a direct comparison of Academy and non-Academy students.

Students were considered on-time graduates if they graduated in June or earlier of the year they were scheduled to graduate. Students were considered still in high school if they last attended high school in May or later of the year following scheduled graduation but had not graduated.

"Ever dropped out of high school" includes some students who eventually graduated late or earned a GED.

Students were considered enrolled in a post-secondary education degree program if they received a high school diploma or GED and were enrolled in a bachelor's degree program, associate's degree program, or skills training program leading to a certificate or license.

Primary job is defined as the job at which the student worked the greatest number of months during the 14-month followup period. Numbers in italics only include employed sample members. They do not represent experimental comparisons, and no tests of statistical significance were performed.

Table 3.8

## Impacts on High School Completion, Post-secondary Education and Employment for the Asian/Native American Subgroup

Outcome	Academy Group	Non-Academy Group	Impact	Percent Change	Impact per Enrollee
Ever enrolled in a Career Academy during high school (%)	88.0	2.2	85.8 ***		
Was enrolled in a Career Academy at the end of scheduled grade 12 (%)	57.5	3.6	53.9 ***		
High school graduation status					
Earned high school diploma or GED (%) On-time graduate Late graduate Received a GED or other certificate	85.6 79.1 4.2 2.4	87.4 73.6 10.2 3.6	-1.8 5.5 -6.0 -1.2	-2.0 7.4 -59.0 -34.5	-2.1 6.4 -7.0 -1.5
Ever dropped out of high school (%)	20.5	15.8	4.8	30.3	5.6
Enrollment in education programs					
Enrolled in post-secondary education degree program (%) Bachelor's degree program Associate's degree program Skills training program	56.8 21.0 30.8 4.9	60.2 19.5 35.9 4.7	-3.4 1.5 -5.1 0.2	-5.6 7.7 -14.2 4.6	-3.9 1.8 -5.9 0.3
Completed post-secondary skills training program (%)	3.3	2.5	0.8	33.2	0.9
Exited a post-secondary education degree program before completion (%)	13.9	6.6	7.3	111.9	8.5
Employment status					
Ever employed (%) Ever employed full-time (%)	84.3 59.0	86.9 59.5	-2.6 -0.4	-3.0 -0.7	-3.1 -0.5
Characteristics of primary job					
Hours worked per week Hourly wage (\$) Earnings per week (\$) Number of months employed	32.3 8.45 274.71 9.2	30.2 8.29 259.28 7.4	2.1 0.17 15.43 1.8 *	7.0 2.0 6.0 23.5	2.5 0.19 17.99 2.0
Combining education and employment					
Number of months working or attending an education program	8.4	8.9	-0.6	-6.2	-0.6
education and employment	3.9	4.6	-0.7	-14.7	-0.8
Number of months attending an education program without working Number of months working without	2.1	3.1	-1.0	-32.8	-1.2
attending an education program	2.4	1.3	1.1 *	88.6	1.3
Sample size (n=103)	58	45			

NOTES: Unless otherwise indicated, statuses reflect a fourteen-month period ending in August of the year following scheduled graduation. Estimates are regression-adjusted using ordinary least squares, controlling for background characteristics. Rounding may cause slight discrepancies in calculating differences. A two-tailed t-test was applied to differences between the Academy and non-Academy groups. Statistical significance levels are indicated as: \*\*\* = 1 percent; \*\* = 5 percent; \* = 10 percent.

Percent change is defined as the impact divided by the non-Academy group average.

Impact per enrollee is defined as the impact divided by the difference in the percentage of Academy and non-Academy group members ever enrolled in a Career Academy. It is italicized because its calculation does not involve a direct comparison of Academy and non-Academy students.

Students were considered on-time graduates if they graduated in June or earlier of the year they were scheduled to graduate. Students were considered still in high school if they last attended high school in May or later of the year following scheduled graduation but had not graduated.

"Ever dropped out of high school" includes some students who eventually graduated late or earned a GED.

Students were considered enrolled in a post-secondary education degree program if they received a high school diploma or GED and were enrolled in a bachelor's degree program, associate's degree program, or skills training program leading to a certificate or license.

Primary job is defined as the job at which the student worked the greatest number of months during the 14-month followup period. Numbers in italics only include employed sample members. They do not represent experimental comparisons, and no tests of statistical significance were performed.

Table 3.9

	Academy	Non-Academy	•	Percent	Impact per
Outcome	Group	Group	Impact	Change	Enrollee
Ever enrolled in a Career Academy during high school (%)	94.4	1.2	93.1 ***		
Was enrolled in a Career Academy at the end of scheduled grade 12 (%)	54.5	2.6	51.9 ***		
High school graduation status					
Earned high school diploma or GED (%) On-time graduate Late graduate Received a GED or other certificate	89.6 71.1 5.8 12.6	86.5 74.2 6.1 6.1	3.1 -3.1 -0.3 6.5	3.6 -4.2 -4.6 106.5	3.4 -3.3 -0.3 7.0
Ever dropped out of high school (%)	23.8	21.3	2.5	11.6	2.7
Enrollment in education programs					
Enrolled in post-secondary education degree program (%) Bachelor's degree program Associate's degree program Skills training program	53.3 11.3 29.7 12.3	63.8 17.6 39.8 6.4	-10.5 -6.4 -10.1 5.9	-16.5 -36.1 -25.3 91.7	-11.3 -6.8 -10.8 6.3
Completed post-secondary skills training program (%)	0.3	7.2	-6.8	-95.6	-7.3
Exited a post-secondary education degree program before completion (%)	20.1	10.4	9.7	93.7	10.4
Employment status					
Ever employed (%) Ever employed full-time (%)	95.3 66.8	87.7 59.0	7.6 7.8	8.7 13.1	8.2 8.3
Characteristics of primary job					
Hours worked per week Hourly wage (\$) Earnings per week (\$) Number of months employed	31.2 8.02 243.72 9.2	33.2 6.49 248.99 8.9	-2.0 1.53 -5.26 0.3	-6.0 23.6 -2.1 3.3	-2.1 1.64 -5.65 0.3
Combining education and employment					
Number of months working or attending an education program Number of months combining	9.1	8.3	0.8	9.9	0.9
education and employment	4.4	3.8	0.6	15.9	0.6
an education program without working Number of months working without	1.6	2.1	-0.5	-23.0	-0.5
attending an education program	3.1	2.4	0.7	29.8	0.8
Sample size (n=84)	44	40			

## Impacts on High School Completion, Post-secondary Education and Employment for the White Subgroup

NOTES: Unless otherwise indicated, statuses reflect a fourteen-month period ending in August of the year following scheduled graduation. Estimates are regression-adjusted using ordinary least squares, controlling for background characteristics. Rounding may cause slight discrepancies in calculating differences. A two-tailed t-test was applied to differences between the Academy and non-Academy groups. Statistical significance levels are indicated as: \*\*\* = 1 percent; \*\* = 5 percent; \* = 10 percent.

Percent change is defined as the impact divided by the non-Academy group average.

Impact per enrollee is defined as the impact divided by the difference in the percentage of Academy and non-Academy group members ever enrolled in a Career Academy. It is italicized because its calculation does not involve a direct comparison of Academy and non-Academy students.

Students were considered on-time graduates if they graduated in June or earlier of the year they were scheduled to graduate. Students were considered still in high school if they last attended high school in May or later of the year following scheduled graduation but had not graduated.

"Ever dropped out of high school" includes some students who eventually graduated late or earned a GED.

Students were considered enrolled in a post-secondary education degree program if they received a high school diploma or GED and were enrolled in a bachelor's degree program, associate's degree program, or skills training program leading to a certificate or license.

Primary job is defined as the job at which the student worked the greatest number of months during the 14-month followup period. Numbers in italics only include employed sample members. They do not represent experimental comparisons, and no tests of statistical significance were performed.

## Career Academies Evaluation Table 3.10

	Academv	Non-Academy	31	Percent	Impact per
Outcome	Group	Group	Impact	Change	Enrollee
Ever enrolled in a Career Academy during high school (%)	88.9	4.7	84.2 ***		
Was enrolled in a Career Academy at the end of scheduled grade 12 (%)	50.6	2.9	47.7 ***		
High school graduation status					
Earned high school diploma or GED (%) On-time graduate Late graduate Received a GED or other certificate	81.4 68.1 4.9 8.5	83.6 66.5 10.0 7.0	-2.1 1.5 -5.2 ** 1.5	-2.6 2.3 -51.4 21.2	-2.5 1.8 -6.1 1.8
Ever dropped out of high school (%)	26.5	24.5	2.0	8.1	2.4
Enrollment in education programs					
Enrolled in post-secondary education degree program (%) Bachelor's degree program Associate's degree program Skills training program	44.5 7.1 20.8 16.6	43.7 6.9 22.3 14.5	0.9 0.3 -1.4 2.0	2.0 3.7 -6.4 14.0	1.0 0.3 -1.7 2.4
Completed post-secondary skills training program (%)	6.5	6.8	-0.4	-5.5	-0.4
Exited a post-secondary education degree program before completion (%)	10.3	9.2	1.1	11.9	1.3
Employment status					
Ever employed (%) Ever employed full-time (%)	87.8 70.3	91.0 75.1	-3.2 -4.9	-3.5 -6.5	-3.8 -5.8
Characteristics of primary job					
Hours worked per week Hourly wage (\$) Earnings per week (\$) Number of months employed	34.2 7.49 254.83 9.7	33.3 7.35 245.99 9.3	0.8 0.14 8.84 0.3	2.5 1.8 3.6 3.5	1.0 0.16 10.50 0.4
Combining education and employment					
Number of months working or attending an education program Number of months combining	8.3	8.6	-0.3	-3.8	-0.4
education and employment	3.1	3.0	0.0	1.2	0.0
Number of months attending an education program without working Number of months working without	1.3	1.5	-0.2	-15.3	-0.3
attending an education program	4.0	4.1	-0.1	-3.2	-0.2
Sample size (n=512)	279	233			

## Impacts on High School Completion, Post-secondary Education and Employment for the Low Expectations Subgroup

NOTES: Unless otherwise indicated, statuses reflect a fourteen-month period ending in August of the year following scheduled graduation. Estimates are regression-adjusted using ordinary least squares, controlling for background characteristics. Rounding may cause slight discrepancies in calculating differences. A two-tailed t-test was applied to differences between the Academy and non-Academy groups. Statistical significance levels are indicated as: \*\*\* = 1 percent; \*\* = 5 percent; \* = 10 percent.

The low educational expectations subgroup included students who indicated at the time they applied for an Academy that they did not expect to graduate from college. Expectations for this group, representing 35% of those who answered the question, ranged from not finishing high school to attending some college; the majority, however, expected to attend some college.

Percent change is defined as the impact divided by the non-Academy group average.

Impact per enrollee is defined as the impact divided by the difference in the percentage of Academy and non-Academy group members ever enrolled in a Career Academy. It is italicized because its calculation does not involve a direct comparison of Academy and non-Academy students.

Students were considered on-time graduates if they graduated in June or earlier of the year they were scheduled to graduate. Students were considered still in high school if they last attended high school in May or later of the year following scheduled graduation but had not graduated.

"Ever dropped out of high school" includes some students who eventually graduated late or earned a GED.

Students were considered enrolled in a post-secondary education degree program if they received a high school diploma or GED and were enrolled in a bachelor's degree program, associate's degree program, or skills training program leading to a certificate or license.

Primary job is defined as the job at which the student worked the greatest number of months during the 14-month followup period. Numbers in italics only include employed sample members. They do not represent experimental comparisons, and no tests of statistical significance were performed.

Table 3.11

## Impacts on High School Completion, Post-secondary Education and Employment for the Average Expectations Subgroup

	Academy	Non-Academy		Percent	Impact per
Outcome	Group	Group	Impact	Change	Ênrollee
Ever enrolled in a Career Academy during high school (%)	87.0	8.0	79.0 ***		
Was enrolled in a Career Academy at the end of scheduled grade 12 (%)	50.0	5.5	44.5 ***		
High school graduation status					
Earned high school diploma or GED (%) On-time graduate Late graduate Received a GED or other certificate	88.8 74.8 6.5 7.5	88.5 76.7 6.6 5.2	0.3 -1.9 -0.1 2.3	0.3 -2.5 -0.9 44.2	0.4 -2.5 -0.1 2.9
Ever dropped out of high school (%)	18.0	15.0	3.0	20.1	3.8
Enrollment in education programs					
Enrolled in post-secondary education degree program (%) Bachelor's degree program Associate's degree program Skills training program	57.3 14.2 31.7 11.4	58.0 17.4 30.7 9.9	-0.7 -3.2 0.9 1.6	-1.2 -18.3 3.0 15.9	-0.9 -4.0 1.2 2.0
Completed post-secondary skills training program (%)	6.8	5.3	1.6	30.2	2.0
Exited a post-secondary education degree program before completion (%)	10.6	10.6	0.0	-0.5	-0.1
<u>Employment status</u>					
Ever employed (%) Ever employed full-time (%)	88.9 64.9	84.6 61.7	4.3 3.2	5.1 5.2	5.4 4.0
Characteristics of primary job					
Hours worked per week Hourly wage (\$) Earnings per week (\$) Number of months employed	32.5 7.42 238.35 9.1	32.0 6.99 229.30 9.5	0.6 0.43 9.06 -0.4	1.8 6.2 4.0 -3.9	0.7 0.55 11.46 -0.5
Combining education and employment					
Number of months working or attending an education program Number of months combining	8.8	8.8	0.0	0.3	0.0
education and employment	3.8	3.8	0.0	-0.1	0.0
Number of months attending an education program without working Number of months working without	2.0	2.0	0.0	0.8	0.0
attending an education program	3.0	3.0	0.0	0.5	0.0
Sample size (n=566)	330	236			

NOTES: Unless otherwise indicated, statuses reflect a fourteen-month period ending in August of the year following scheduled graduation. Estimates are regression-adjusted using ordinary least squares, controlling for background characteristics. Rounding may cause slight discrepancies in calculating differences. A two-tailed t-test was applied to differences between the Academy and non-Academy groups. Statistical significance levels are indicated as: \*\*\* = 1 percent; \*\* = 5 percent; \* = 10 percent.

The average educational expectations subgroup included students who indicated at the time they applied for an Academy that they expected to graduate from college but did not intend to pursue any schooling beyond college. This group represents approximately 40% of those answering the question.

Percent change is defined as the impact divided by the non-Academy group average.

Impact per enrollee is defined as the impact divided by the difference in the percentage of Academy and non-Academy group members ever enrolled in a Career Academy. It is italicized because its calculation does not involve a direct comparison of Academy and non-Academy students.

Students were considered on-time graduates if they graduated in June or earlier of the year they were scheduled to graduate. Students were considered still in high school if they last attended high school in May or later of the year following scheduled graduation but had not graduated.

"Ever dropped out of high school" includes some students who eventually graduated late or earned a GED.

Students were considered enrolled in a post-secondary education degree program if they received a high school diploma or GED and were enrolled in a bachelor's degree program, associate's degree program, or skills training program leading to a certificate or license.

Primary job is defined as the job at which the student worked the greatest number of months during the 14-month followup period. Numbers in italics only include employed sample members. They do not represent experimental comparisons, and no tests of statistical significance were performed.
## **Career Academies Evaluation**

**Table 3.12** 

## Impacts on High School Completion, Post-secondary Education and Employment for the High Expectations Subgroup

	Academy	Non-Academy		Percent	Impact per
Outcome	Group	Group	Impact	Change	Ênrollee
Ever enrolled in a Career Academy during high school (%)	84.7	7.5	77.2 ***		
Was enrolled in a Career Academy at the end of scheduled grade 12 (%)	60.2	4.1	56.1 ***		
High school graduation status					
Earned high school diploma or GED (%) On-time graduate Late graduate Received a GED or other certificate	93.6 81.7 5.7 6.2	89.5 82.0 5.4 2.1	4.1 -0.3 0.3 4.1 **	4.6 -0.4 5.0 194.2	5.3 -0.4 0.3 5.3
Ever dropped out of high school (%)	13.2	12.6	0.6	4.4	0.7
Enrollment in education programs					
Enrolled in post-secondary education degree program (%) Bachelor's degree program Associate's degree program Skills training program	65.1 24.2 29.6 11.3	64.4 24.2 31.0 9.2	0.7 0.0 -1.4 2.1	1.1 -0.2 -4.4 22.9	0.9 0.0 -1.8 2.7
Completed post-secondary skills training program (%)	6.7	4.8	1.9	39.4	2.5
Exited a post-secondary education degree program before completion (%)	12.7	9.9	2.8	28.6	3.7
<u>Employment status</u>					
Ever employed (%) Ever employed full-time (%)	89.7 66.3	85.4 62.6	4.3 3.7	5.0 6.0	5.6 4.8
Characteristics of primary job					
Hours worked per week Hourly wage (\$) Earnings per week (\$) Number of months employed	31.9 7.48 233.69 8.8	31.0 7.19 217.97 8.8	0.9 0.29 15.72 0.0	2.9 4.0 7.2 -0.1	1.2 0.37 20.38 0.0
Combining education and employment					
Number of months working or attending an education program Number of months combining	8.8	8.7	0.1	1.0	0.1
education and employment	4.1	3.8	0.3	8.0	0.4
an education program without working Number of months working without	2.1	2.6	-0.5	-19.9	-0.7
attending an education program	2.6	2.3	0.3	12.3	0.4
Sample size (n=380)	195	185			

(continued)

SOURCE: MDRC calculations from the Career Academies Evaluation Post-High School Follow-Up Survey Database.

NOTES: Unless otherwise indicated, statuses reflect a fourteen-month period ending in August of the year following scheduled graduation. Estimates are regression-adjusted using ordinary least squares, controlling for background characteristics. Rounding may cause slight discrepancies in calculating differences. A two-tailed t-test was applied to differences between the Academy and non-Academy groups. Statistical significance levels are indicated as: \*\*\* = 1 percent; \*\* = 5 percent; \* = 10 percent.

The high educational expectations subgroup included students who indicated at the time they applied for an Academy that they expected to attend a higher level of school after graduating from college. This group represents approximately 25% of those answering the question.

Percent change is defined as the impact divided by the non-Academy group average.

Impact per enrollee is defined as the impact divided by the difference in the percentage of Academy and non-Academy group members ever enrolled in a Career Academy. It is italicized because its calculation does not involve a direct comparison of Academy and non-Academy students.

Students were considered on-time graduates if they graduated in June or earlier of the year they were scheduled to graduate. Students were considered still in high school if they last attended high school in May or later of the year following scheduled graduation but had not graduated.

"Ever dropped out of high school" includes some students who eventually graduated late or earned a GED.

Students were considered enrolled in a post-secondary education degree program if they received a high school diploma or GED and were enrolled in a bachelor's degree program, associate's degree program, or skills training program leading to a certificate or license.

Primary job is defined as the job at which the student worked the greatest number of months during the 14-month followup period. Numbers in italics only include employed sample members. They do not represent experimental comparisons, and no tests of statistical significance were performed.

"Combining education and employment" measures refer to the average number of months spent in each education/work status during the ten-month school year (September through June) following scheduled graduation from high school.