Title
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Career Academy Impacts for Students at High Risk of Dropping Out

By

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Career Academies have existed for more than 30 years and have been implemented in more than 1,500 high schools across the country. The durability and broad appeal of the Academy approach can be attributed, in part, to the fact that its core features offer direct responses to a number of problems that have been identified in large comprehensive high schools. Career Academies attempt to create more supportive and personalized learning environments through a school-within-a-school structure. Their curricula combine academic and occupation-related course requirements that aim both to promote applied learning and to satisfy college entrance requirements. Academies establish partnerships with local employers to build sequences of career awareness and work-based learning opportunities for their students.

While the basic organizational features of the approach have remained the same since the inception of Career Academy model, the goals and target population have changed. The original Academies were designed primarily to prevent dropping out of high school and to increase preparation for work among students who began high school at high risk of school failure. There is now widespread agreement that Career Academies should seek to prepare students for both work and college, and that they should include a broad cross-section of students, including those who are highly engaged in school.

This paper focuses on the effectiveness of contemporary Career Academies as dropout prevention programs for students who enter high school at high risk of dropping out. It is based on findings from an ongoing, longitudinal evaluation of Career Academies being conducted by
the Manpower Demonstration Research Corporation (MDRC). The evaluation uses a random assignment research design in which Career Academy applicants were randomly assigned to enroll in an Academy program or to a non-Academy control group that was not invited to enroll. The results discussed in this paper follow student through the end of their scheduled 12th grade year and capture the impact Academies had on dropout status and measures of student engagement and performance during high school.

The findings indicate that Career Academies substantially improved high school outcomes among students at high risk of dropping out. For this group, the Academies reduced dropout rates, improved attendance, increased academic course-taking, and enhanced other indicators of school engagement. These benefits for students at high risk of dropping out did not come at the expense of lower expectations or outcomes for students who entered the program highly engaged in school or who were only at moderate risk for dropping out. While the Academies did not substantially improve educational outcomes for these groups of students, they enabled them to keep pace with their peers in other high school programs. They also provided low and medium risk students with greater access to career and work-related experiences both in and outside the classroom. The paper concludes with a discussion of several implications the findings may have for policies and practices aimed at improving the education of students at risk for dropping out.

**The Career Academy Approach**

The Career Academy approach is distinguished by three core features that offer direct responses to several problems that have been identified in high schools, particularly those serv-

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1The empirical findings discussed in this paper are drawn from James J. Kemple and Jason C. Snipes, *Career Academies: Impacts on Students’ Engagement and Performance in High School*, (New York: MDRC, 2000).
ing low-income communities and students at risk of school failure. First, a Career Academy is organized as a *school-within-a-school* in which students stay with a group of teachers over three or four years in high school. Such arrangements are often referred to as “small learning communities.” The aim is to create a more personalized and supportive learning environment for students and teachers. Second, a Career Academy offers students a combination of *academic and vocational curricula* and uses a career theme to integrate the two. Third, a Career Academy establishes *partnerships with local employers* in an effort to build connections between school and work and to provide students with a range of career development and work-based learning opportunities. This definition of an Academy is now commonly accepted and was reviewed by a broad range of researchers, policymakers, and practitioners who have worked closely with Career Academies.

The initial Career Academies of the 1970s and 1980s were primarily vocational education programs targeted at students who appeared to be at high risk of dropping out of high school. The central goals of these early programs were to keep students engaged in school, provide them with work-related learning experiences both in the classroom and on the job, and establish clearer pathways between high school and post-secondary employment.

Since the late 1980s, there has been a shift in the primary goals and target population of most Career Academies. In particular, there is now wide agreement that the Career Academy approach should be explicitly distinct from traditional vocational education by seeking to prepare students for both work and college. The 1990s have seen extraordinary growth in the number of Career Academies around the country. There are estimated to be more than 1,500 Career Academies nationwide, representing nearly a 15-fold increase in approximately 10 years; many more Academies are in the planning stages.
The expansion of Career Academy target populations and goals and the rapid growth in the number of Academies have raised several questions about how the Academy approach may be affecting students’ performance in high school. How well does it meet the needs of a much broader range of students than it was initially designed to serve? Is the Academy approach more effective under some conditions than under others? Which features of the Academy model make the most difference for students? MDRC’s Career Academies Evaluation is intended to shed light on these and other questions.

The Career Academies Evaluation

In 1993, MDRC began an evaluation of the Career Academy approach as it had been defined in previous research and implemented in a broad range of settings across the country. The findings discussed in this paper are based on information collected over a six-year period and focus on the nine high schools and their Career Academies participating in the evaluation. These Academies were selected to include school districts and high schools reflecting the typical conditions (large urban centers and small cities) under which Career Academies have been implemented across the country. MDRC was specifically interested in Academies serving a broad range of students, including those who were perceived to be at risk of not succeeding in the regular high school environment. Most of the school districts in the evaluation are large and enroll substantially higher percentages of African-American and Hispanic students than school districts nationally. On average, these school districts have higher dropout rates, higher unemployment rates, and higher percentages of low-income families.

2For a more detailed description of the random assignment research design and of the criteria and process used to select sites for this study, see James J. Kemple and JoAnn Leah Rock, Career Academies: Early Implementation Lessons from a 10-Site Evaluation (New York: MDRC, 1996).
The Career Academies Evaluation is a rarity in the field of education research in that it has demonstrated the feasibility and benefits of implementing a large-scale, multi-site random assignment research design within an ongoing high school program. This was made possible because each of the Career Academies in the study received applications from approximately twice as many students as it was able to serve. The full sample for the evaluation in comprised of 1,764 students who applied for one of the Career Academies selected for the study. Of these, 959 students were randomly assigned to the program group (referred to in this paper as the *Academy group*) and were accepted for admission to the Academies. The remaining 805 students were randomly assigned to a control group (referred to in this paper as the *non-Academy group*) and were not invited to participate in the Academies, although they could choose other options in the high school or school district.

The random assignment process ensured that there were no systematic differences between the two groups of students in terms of their observable and unobservable background characteristics, prior school experiences, and initial motivation and attitudes toward school. Any systematic differences that subsequently emerged between the groups can be attributed with confidence to differences in their access and exposure to the Career Academies. Students in the study sample were identified at the end of 8th or 9th grade. The school administrative records and survey data used in this paper follows them for three or four years through the end of their scheduled 12th-grade year, until just before they would have graduated from high school.
The Impact of Career Academies for Students at High Risk of Dropping Out of High School

A central theme that has emerged from the Career Academies Evaluation thus far is that the Academies are more effective, on average, for students who were likely to drop out of high school than they were for other students. To assess this variation in impacts systematically, the study sample was divided into three subgroups based on background characteristics and prior school experiences. These characteristics were chosen as indicators of students’ engagement in school at the time they applied for an Academy and as factors associated with the likelihood of their eventually dropping out of school\(^3\). Just over one-quarter of the students were classified as being in the *high-risk subgroup* and reflected the combination of characteristics associated with the highest probability of dropping out among those in the non-Academy group. Approximately one-quarter of the students in the sample were classified as being in the *low-risk subgroup* and reflected the combination of characteristics associated with the lowest probability of dropping out among those in the non-Academy group. The remaining students (approximately half the sample) were defined as being in the *medium-risk subgroup*.

Because each of the characteristics used to define the subgroups was measured before students were randomly assigned to the two main study groups, there are no systematic differences in observed background characteristics between Academy and non-Academy groups within each of the three risk subgroups.

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\(^3\) See Kemple and Snipes, pp.116-133, for a detailed description of the strategy used to define these subgroups.
Students in the high-risk subgroup entered the study with background characteristics and prior school experiences indicating that they were disengaged from school. More than half had failed courses during the 9th grade, and about one-third could be classified as chronic absentees (having attendance rates lower than 85 percent). Over 60 percent of these students had low grade point averages (2.0 or lower), and over 40 percent had been held back in a previous grade (as indicated by being overage for their current grade).

Figure 1 provides a summary of the impact findings for students in the high-risk subgroup. It shows first that, without access to an Academy, a high percentage of non-Academy students in the high-risk subgroup had become even more disengaged from school. In all, 32 percent of these students dropped out of high school, and only 26 percent had earned sufficient credits to meet the district’s graduation requirements by the end of their scheduled 12th-grade year.

The difference between the bars representing the non-Academy group and those representing the Academy group reflect the impact of the Career Academies. Figure 1 shows that the Career Academies produced substantial improvements in many educational outcomes for students in the high-risk subgroup. In particular, while 32 percent of the non-Academy students in the high-risk subgroup dropped out of high school, 21 percent of the Academy students did so. This 11 percentage point difference represents a one-third reduction in the dropout rate for the non-Academy group. This can be classified as a particularly large reduction in dropout rates. Reductions of this magnitude are rare for school-based interventions.

The Academies also increased average attendance throughout high school for students in the high-risk subgroup (not shown in Figure 1). Average attendance rates throughout high school were approximately 76 percent for students in the non-Academy group, compared with 82 per-
recent for students in the Academy group. This amounts to an additional 11 days of school per year over four years.

Figure 1
Career Academy Impacts on High School Outcomes in the High-Risk Subgroup

![High School Outcomes]

SOURCES: MDRC calculations from the Career Academies Evaluation Student School Records and 12th Grade Survey Databases.

NOTE: A two-tailed t-test was applied to differences between Academy and non-Academy groups. Statistical significance levels are indicated as: *** = 1 percent; ** = 5 percent; * = 10 percent.

Moreover, while 26 percent of the high-risk non-Academy group had earned enough credits to meet district graduation requirements, 40 percent of the students in the Academy group did so (an increase of over 50 percent beyond the non-Academy group average). This suggests that, besides improving attendance and preventing students from dropping out, the Academies helped a significant portion of the high-risk subgroup to make up enough of the initial gap in credits earned to meet the district’s graduation requirements three year later.  

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4 It should be noted that this indicator does not necessarily reflect students’ actual high school graduation status. For example some students earned enough total credits to meet the district’s graduation requirement but did not
Also, as indicated by the third set of bars in Figure 1, the Academies doubled the percentage of students in the high-risk subgroup who completed a basic core academic curriculum (four English courses, three social studies courses, two math courses, and two science courses). At the same time, students in the Academy group were significantly more likely than their non-Academy counterparts to complete three or more career-related or vocational courses.

The fifth set of bars in Figure 1 indicates that the Academies increased the percentage of students in the high-risk subgroup who reported that they had submitted an application to a two-year or four-year college by the end of their 12th-grade year. In particular, 35 percent of students in the high-risk non-Academy group reported submitting a college application, compared with 51 percent in the Academy group. Academy students in the high-risk subgroup were also more likely to report taking the SATs or ACTs (not shown in the figure).

Finally, the last two sets of bars in Figure 1 indicate that Academies did not produce a systematic change in involvement in positive youth development activities or in negative risk-taking behaviors. Positive youth development activities included participation in community volunteer work, receiving recognition for participation in academic or extracurricular activities, and receiving an academic award. Negative risk-taking behaviors included coming to school on drugs, becoming a parent, being expelled from school, and being arrested. Although the differences between the groups shown in Figure 1 were not statistically significant, they indicate trends in a positive direction.

complete the required number of courses in particular subject areas. On the other hand, some school records may not include a complete listing of course credits earned during summer school, which may have enabled students to meet graduation requirements. The school records data used to construct this measure did not provide a reliable indicator of high school graduation status. Information on high school graduation will be derived from surveys administered to students in the study sample over several years of additional follow-up.
Although not shown in the figure, the Career Academies had no impact, positive or negative, on standardized math and reading test scores for students in the high-risk subgroup (nor for any other subgroup).\textsuperscript{5} Although test score differences between Academy and non-Academy students in the high-risk subgroup followed the trends exhibited in Figure 1, the differences were not statistically significant. These findings are based on only a small subset of the Academy and non-Academy groups in the full study sample. The lack of systematic differences in test scores between the Academy and non-Academy groups, therefore, may be due sampling variation. In general, however, qualitative field research collected for the evaluation indicated that the academic curricula and instruction in most of the Career Academies did not differ substantially from those of typical high school classes. Nor were Academy teachers typically provided with professional development opportunities aimed at improving student performance on standardized tests. In short, in terms of academic course content, instructional practice, and preparation for standardized tests, there was very little difference between Academy and non-Academy school environments. Thus, it should not be too surprising that the evaluation found no change in test scores.

The Impact of Career Academies for Students at Low or Moderate Risk of Dropping Out of High School

As noted earlier, Career Academies purposefully seek to serve a broad range of students including those who are highly engaged in school as well as those may be at risk of dropping out. From this perspective, Career Academies are not “tracked” in the sense that they are not reserved exclusively for students with particular characteristics or aspirations. Some have ex-

\textsuperscript{5} See Kemple and Sineps, pp. 51-53, for a more detailed discussion of the standardized test score analyses and findings.
pressed the concern that, in such situations, the success of some students may come at the expense of neglect or even failure of other students. For example, some vocational education programs have been criticized for helping lower achieving student “succeed” by lowering expectations and thereby limiting opportunities for them as well for those who would perform well in other contexts. By the same token, some college preparatory programs may meet the needs of highly engaged students while leaving those who are less well prepared behind. In short, the success of one group may come at the expense of another.

Findings from this evaluation suggest that, in general, such tradeoffs did not occur among the Career Academies in the study. In short, students who entered the Academies at low or only moderate risk of dropping out performed at least as well, on average, as their non-Academy counterparts. Although the impacts were not as strong or pervasive as those for the high-risk subgroup, the Career Academies did manage to increase exposure to career and work-related learning activities without reducing academic course-taking for those in the medium- and low-risk subgroups.

Figure 2 presents a summary of the impact findings for students in the low-risk subgroup (the 25 percent of students in the study sample who were least likely to drop out of high school, as measured by the non-Academy group dropout rate). The results for the non-Academy group indicate that, even without access to the Academy intervention, these students appear to be unlikely to disengage from school. For example, as the first set of bars in Figure 2 illustrates, only 3 percent of the non-Academy students in the low-risk subgroup dropped out of high school before the end of 12th grade. Almost the same percentage of Academy students (2 percent) dropped out.
The second set of bars in Figure 2 indicates that the Academies increased the percentage of students in the low-risk subgroup who earned sufficient total credits to meet their district’s graduation requirement. The figure shows that 86 percent of the Academy students met their districts’ graduation requirement, compared with 75 percent of the students in the non-Academy group.

It is important to note, however, that further analysis indicates that most of the increase in total credits was concentrated in career-related or vocational courses. For example, while approximately equal percentages of Academy and non-Academy students in the low-risk subgroup completed a basic core academic curriculum, the Academies significantly increased the percentage that completed at least three career-related or vocational courses. It should be noted than
many students in the low-risk non-Academy group were likely to be enrolled in their high school’s college preparatory programs and courses. Thus, the Academies increased vocational course-taking for the low-risk subgroup while enabling students to complete as many core academic courses as their non-Academy peers.

The fifth set of bars in Figure 2 indicates that the Academies appear to have reduced the percentage of the low-risk subgroup who reported that they had submitted an application to a two-year or four-year college by the end of their 12th-grade year. Among these students, 79 percent of the non-Academy group reported submitting a college application, compared with 71 percent of the Academy group. Although not shown in the figure, this occurred despite the fact that Academy and non-Academy students were equally likely to have taken the SATs and ACTs. In addition, over 85 percent of students in both low-risk groups reported that they had conducted at least a modest amount of research on college options during their 12th-grade year.

Figure 2 also shows that Academy and non-Academy students in the low-risk subgroup were equally likely to pursue post-secondary employment opportunities. Further analyses indicated that the Academies do not appear to have induced students to pursue post-secondary employment opportunities instead of either a two-year or four-year college. Further follow-up is needed to determine the effects that the Career Academies may have had on actual college enrollment and employment during the years following high school graduation. This will be explored further in subsequent analyses from the Career Academies Evaluation.

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6 Further data collection and analyses indicates that the “applied to college” indicator listed in Figure 2 may not be an accurate indicator of students’ intentions or actual rates of attending college.
The Career Academies produced little or no change in outcomes for students at moderate risk of dropping out (the 50 percent of students in the medium-risk subgroup). Among students in the medium-risk subgroup, however, there was substantial variation in impacts associated with the degree to which their Career Academy provided significant enhancements to the interpersonal supports that were available in the regular high school environment.⁷ A sample of these results is presented in Figure 3. In these sites (labeled high contrast sites in Figure 3), the Academies produced reductions in dropout rates and increases in student engagement for both the medium and high-risk subgroup (75 percent of the students served. In sites where the Academies did not enhance interpersonal supports (labeled low-contrast sites in Figure 3), the Academies actually increased dropout rates and increased the likelihood that medium risk students substituted vocational courses for academic courses.

**Policy Implications and Lessons for Practice**

During the past five years, education policymakers and practitioners have been pursuing a number of far-reaching strategies aimed specifically at improving high schools. Almost universally, each of these school reform initiatives have included a special, if not a primary focus on schools serving students at high risk of leaving school without the credentials and skills needed to make successful transitions to further education and the labor market. Many of these strategies include principles embedded in the Career Academy approach, while others include the Career

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⁷ For the purposes of this analysis, sites with the largest difference between Academy and non-Academy school environments, as defined by student ratings of the interpersonal support the received from teachers and peers, are referred to as “high-contrast Academies.” In the remaining sites, there was little difference in the level of support reported by Academy and non-Academy students; these are referred to as “low-contrast Academies.”
Academy model as an explicit component. The findings from this evaluation highlight some of the strengths and limitations that Academies may hold for these reforms.

**Figure 3**

*Career Academy Impacts on High School Outcomes for Students in the Medium-Risk Subgroup, by High-Contrast and Low-Contrast Academies*

**Figure 1: Dropped Out of High School**

<table>
<thead>
<tr>
<th></th>
<th>High Contrast</th>
<th>Low Contrast</th>
</tr>
</thead>
<tbody>
<tr>
<td>Academy</td>
<td>5%</td>
<td>11%</td>
</tr>
<tr>
<td>Non-Academy</td>
<td>13%</td>
<td>5%</td>
</tr>
</tbody>
</table>

**Figure 2: Completed Credits to Graduate**

<table>
<thead>
<tr>
<th></th>
<th>High Contrast</th>
<th>Low Contrast</th>
</tr>
</thead>
<tbody>
<tr>
<td>Academy</td>
<td>68%</td>
<td>62%</td>
</tr>
<tr>
<td>Non-Academy</td>
<td>62%</td>
<td>69%</td>
</tr>
</tbody>
</table>

**Figure 3: Completed Academic Core Courses**

<table>
<thead>
<tr>
<th></th>
<th>High Contrast</th>
<th>Low Contrast</th>
</tr>
</thead>
<tbody>
<tr>
<td>Academy</td>
<td>58%</td>
<td>49%</td>
</tr>
<tr>
<td>Non-Academy</td>
<td>37%</td>
<td>54%</td>
</tr>
</tbody>
</table>

**Figure 4: Earned 3+ Career/Vocational Credits**

<table>
<thead>
<tr>
<th></th>
<th>High Contrast</th>
<th>Low Contrast</th>
</tr>
</thead>
<tbody>
<tr>
<td>Academy</td>
<td>62%</td>
<td>50%</td>
</tr>
<tr>
<td>Non-Academy</td>
<td>72%</td>
<td>46%</td>
</tr>
</tbody>
</table>

**SOURCE:** MDRC calculations from the Career Academies Evaluation Student Database

**NOTE:** A two-tailed t-test was applied to differences between Academy and non-Academy. Statistical significance levels are indicated as: *** = 1 percent; ** = 5 percent;

- **What lessons do Career Academies offer to those seeking to implement policies and principles associated with the school to work and comprehensive school reform movements?**

States, school districts, and employers have been looking for strategies and approaches that can build on the foundation established by the School-to-Work Opportunities Act (STWOA)
of 1994. STWOA was aimed at enhancing the relevance and rigor of school- and work-based learning and at creating clearer pathways between high school and post-secondary education and careers. This was to be done primarily through partnerships between schools and local employers. STWOA specifically identifies Career Academies as a “preferred approach” to creating such partnerships and implementing the principles embedded in the legislation. STWOA is scheduled to sunset in 2001 — adding urgency to these efforts and heightening interest in concrete evidence of the potential payoff of Career Academies.

The U.S. Department of Education has committed itself to several initiatives aimed specifically at addressing problems that are unique to high schools. Many of these initiatives are being supported under the Comprehensive School Reform Demonstration developed within the Office of Educational Research and Improvement (OERI) and the New American High Schools established by the Office of Vocational and Adult Education (OVAE). Although most of the strategies that are being developed involve comprehensive reforms of entire high schools, many include key elements of the Academy approach, including the creation of a small school-within-a-school, integration of academic and vocational curricula, and the establishment of partnerships with employers and other organizations in the community.

In short, the Career Academies in this study demonstrate the feasibility of implementing a well-defined and effective approach to creating a more supportive high school environment and increasing students’ exposure to career awareness and work-based learning activities. These dimensions of the programs are consistent with the goals of comprehensive school reform and the school-to-work movements. For the most part, however, Career Academies have been implemented as “pocket program” that are self-contained units within a high school. More recently,
there have been efforts to convert entire high schools into “wall-to-wall” Academies. Little is known about the feasibility of implementing this type of reform or about its effectiveness.

- **Should Career Academies continue to serve a heterogeneous student population?**

  Because the largest and most pervasive positive effects in this evaluation were found among students in the high-risk subgroup, it might be argued that the Career Academies should serve only such students. This approach is likely to be problematic for the programs along several dimensions. First, Career Academies have explicitly attempted to move away from targeting students exclusively on the basis of characteristics believed to indicate trajectories for school success. Even among Academies that seek to include students who make be at risk for school failure (such as those funded by the California State Department of Education), schools make efforts to be as inclusive as possible to avoid the tracking and stigma that have been associated with vocational and career-related programs.

  Second, and perhaps more important, it is likely that exposure to a broad cross-section of students — particularly those who enter the programs highly engaged in school — is an important factor driving the positive effects of Career Academies for the high-risk subgroup. The presence of highly engaged students in their classrooms, as well as those who are struggling, may help increase teachers’ attention to and expectations for all students. Excluding engaged students, therefore, would dramatically change the nature of the Academy experience for students at high risk of dropping out.

- **What aspects of the Career Academy model appear to contribute most to their effectiveness?**
Although it is not possible to answer this question with the same confidence as the evidence on the overall impact of the approach, the findings indicate that enhancing interpersonal supports is at least necessary condition for maximizing the positive effects Career Academies have on students’ engagement during high school. These enhancements are most closely associated with the school-within-a-school organization or small learning community component of the Academy approach. The qualities of the career-related curriculum and employer partnerships were not strongly associated with differences in impacts on dropout rates and school engagement.

In sites where the Career Academies produced particularly dramatic enhancements in the interpersonal supports that students received from teachers and peers, the programs reduced dropout rates and improved school engagement for both high-risk and moderate-risk students (about 75 percent of the students served). A highly structured school-within-a-school organization created the conditions for promoting such supports as personalized attention and high expectations from teachers, high levels of peer engagement, and opportunities for teachers and students to work collaboratively. In fact, Career Academies that did not complement their career awareness and work-based learning activities with these types of enhanced interpersonal supports actually increased dropout rates and increased the rates at which students increased vocational course-taking at the expense of reducing academic course-taking.

- Can Career Academies meet the needs of state and district performance standards and high-stakes assessments while providing high-quality career awareness and work-based learning opportunities?
The primary added value of Career Academies, at least in terms of reducing dropout rates in increasing school engagement, appears to rest on their enhanced interpersonal supports. Although these factors may be necessary to keep many students engaged in school, they do not appear to have been sufficient to improve student achievement. The findings from this evaluation indicate that the Career Academies were quite similar to regular school environments in terms of their academic curricula and typical instructional strategies. From this standpoint, it should not be too surprising that the Academies did not improve student achievement as measured by the standardized math and reading tests used in the evaluation. Academies face many of the same challenges that most high schools do in providing teachers and students with appropriate incentives and supports to ensure that they focus on clearly specified learning objectives and that they have the capacity to meet those objectives. One would hope that the personalized and collaborative nature of the Career Academy’s school-within-a-school organization can serve as a solid foundation on which to build these enhancements, but more systematic efforts would be needed to meet the needs of new standards and high stakes tests.

Career Academies are likely to face two important, and potentially conflicting challenges in their efforts to meet the demands of the standards movement. On the one hand, Career Academy students and teachers will not be exempt from performance standards and high stakes test. Like their non-Academy colleagues, Academy teachers will be called upon to align curricula and instructional strategies with the standards and to invest in preparing students to meet them. On the other hand, Academies will be to enhance the quality of their applied curriculum. Field research conducted for this evaluation indicated that the quality of both work-based learning activities and cross discipline integration varied tremendously across the sites and over time. Doing this well requires substantial investments in teacher professional development and the ongoing availability of shared planning time. It also includes reasonably intensive investments
availability of shared planning time. It also includes reasonably intensive investments on the part of employer partners.

While there is some evidence that applied teaching and learning strategies can enhance academic achievement, there are few examples where such strategies have been put into practice on a large scale. More importantly, professional development the aims to equip teachers with strategies for helping student meet the standards are not typically focused on curriculum integration and high quality work-based learning activities. This may set up a zero-sum choice for Academies, particularly if their students do not perform well on the high stakes tests for which they are held accountable.

Finally, advocates for the school-to-work programs, and Career Academies, in particular, have argued that current assessment instruments (including the achievement tests used in this evaluation) do not adequately capture the distinctive learning gains that Academy students may attain. Such skills may include, for example, the type of work-related competencies outlined in the Secretary’s Commission on Achieving Necessary Skills (SCANS) or the presentation and organizational skills often exhibited in student portfolio assessments. In order to measure such potential benefits of a Career Academy, school officials may want to consider incorporating alternative forms of student and teacher assessment. They may also want to develop forums that recognize efforts by teachers to integrate academic course content with the applied learning and problem-solving approaches of high-quality vocational curricula. Few examples of such assessments and incentives currently exist.
• Do the reductions in dropout rates and increases in school engagement for high-risk students translate into higher graduation rates and more successful transitions to post-secondary education and the labor market?

The results discussed in this paper focus on the effects that the Career Academies have had on students through the end of the year they were scheduled to be in 12th grade. The data do not include complete information about actual high school graduation rates or about the critical transition between high school and post-secondary education and work. Further follow-up is needed in order to get a more complete picture of the Academies’ effectiveness and limitations. For example, it will be important to determine whether the reduction in dropout rates among students in the high-risk subgroup translates into higher levels of educational attainment or whether these students simply remain in school longer without earning a diploma or do not go beyond high school when they do graduate. It will also be important to determine whether the Career Academy experience helped or hindered students in the low-risk subgroup, particularly regarding their actual rates of college enrollment and completion. Ultimately, measures of success for Career Academies are likely to depend, in part, on whether the students they attempted to serve are better attached and more successful in the labor market than their non-Academy counterparts.

In order to examine these issues, MDRC’s Career Academies Evaluation will continue through 2003, following the students in the study sample for up to four years after their scheduled graduation from high school. As part of this second phase of the evaluation, MDRC will be administering follow-up surveys to students in the study sample at one year and four years following their scheduled graduation. These surveys will provide information about whether the students’ actually graduated from high school (or received an alternative credential) and about
their enrollment and progress through post-secondary education, their labor market experiences,
their preparation and planning for the future, and a range of youth development experiences.