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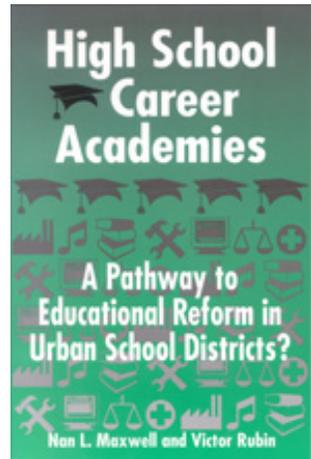
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## Introduction

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**High School Career Academies: A Pathway to Education Reform in Urban School Districts?**

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# Introduction

The current educational reform movement known as school-to-work calls for restructuring America's high schools to become "high performance" arenas of achievement. Programs developed under this rubric have at their core a curriculum that integrates academic and vocational courses to provide a labor market context for learning. These school-to-work reforms are designed to increase students' motivation to achieve academically and to better prepare them for employment or for higher education. Such reforms necessitate a restructuring of schools that encompasses virtually every operational aspect. The creation of "schools within schools" and the adoption of techniques for contextualized learning are often merely starting points for a total revamping of schools in order to increase student achievement.

It is too soon to fully assess how much long-term impact school-to-work reforms will have. Certainly, proponents of school-to-work approaches are making a sincere effort to radically change and improve an educational system whose basic design was set in an era in which high schools were attended only by a select few. Of course, critics argue that school-to-work reforms are not the solution to current problems. This book represents one small effort at examining one school-to-work program—career academies—to determine the potential of this approach for achieving significant educational reform.

## PURPOSE

This book grew out of our experiences in evaluating, researching, and providing consultation for a particular form of educational change, the high school career academy. Career academies represent a type of school-to-work educational reform that has been implemented widely. As they are poised to move from pilot projects and small innovations to broader acceptance and implementation in many cities, a study of the structure and impacts is timely.

Career academies exhibited early evidence of success. As evaluators, we saw, beginning in 1990, how career academies motivated students who were previously disengaged from schooling. These students often blossomed after entering the program. We also observed the enthusiasm that teachers had for the program, how patiently they worked through daily challenges, and how much pride they showed as they relayed stories about their students. Concomitantly, we saw the bureaucratic and financial obstacles to innovation faced in a large, urban school district with an economically disadvantaged student body. As researchers in economics and urban planning, we understood the context in which these academies were growing. Local, regional, and national labor markets were demanding higher levels of academic skills. The long-term trend of declining basic skills in students from urban public schools was continuing, and the disparities in employment and wages were growing. It was not surprising that the academies engendered lofty expectations, not only for improving high schools, but also for making a noticeable difference in the employment outcomes of former students.

We hope that this book will help public education address the inequities and inefficiencies that follow from inadequate preparation of urban students. It was written for labor and education policymakers and for educational practitioners, including principals, assistant principals, department heads, teachers, district office staff, consultants, local school board members, employers, citizens, and parents, who work diligently to improve our schools. It is our sincere hope that this research will help inform policy decisions so that more effective, equitable, and successful educational reforms are pursued. We also hope that our study helps to identify the ingredients necessary for the current round of educational reforms to reach their potential for success.

This book examines the capacity of the career academy to address academic reform in terms of increased education and workplace skills. We do this at two levels. First, we assess the academies' capability to develop and to be implemented within an urban public school environment. For this, we use qualitative data that were collected as part of the seven-year local evaluation of career academies. These data include extensive information about the characteristics of academy programs, the process of institutionalizing the academy model, and the manage-

ment and administration of such programs. In the analysis, we seek to answer three specific questions about career academies:

- Can the career academy model develop fully within a district to become the primary tool for educational reform?
- Which factors inhibit and which factors facilitate development and implementation of career academies in urban, public high schools?
- How do the structure and resources of the career academy affect its impact?

Second, we assess the academies' potential to facilitate postsecondary success. For this, we analyze a detailed data set that combines complete transcript data on a population of three cohorts of public high school students with a survey of the students about their activities after high school. Our research addresses four specific questions:

- Do career academies in urban high schools increase postsecondary educational opportunities and workplace skills for students?
- If so, how does this increase come about?
- What aspect of the academy improves postsecondary outcomes?
- Are career academies effective for all students and in all school environments?

## **STRUCTURE**

In Chapter 1, we discuss the historical trends and social conditions that led to the emergence of school-to-work educational reforms. As American high schools changed from elite to comprehensive institutions for all, efficiency principles led to their being organized around curriculum tracks with teacher-centered pedagogies (i.e., lecture-discussion format). Although these practices were criticized for their inequitable distribution of students between tracks and for their failure to motivate all students, the general structure was workable as long as the labor market provided jobs to those who did not leave high school with strong academic skills. As such jobs have dwindled, the founda-

tion principles of the organizational structure have become suspect, especially in inner-city schools with large “minority” populations. Current school-to-work reform efforts are an attempt to reorganize school bureaucracies, to blend academic and vocational curriculum tracks, and to make students more active participants in the classroom. It is hoped that these reforms will better prepare students for both postsecondary education and success in the labor market.

Chapter 2 outlines the methods used to answer the preceding questions. Our approach is grounded in the belief that analyzing programs whose goal is academic reform must be done in a “real world” setting, by placing program outcomes within the context of educational bureaucracies and competing political pressures. Our study is grounded in the belief that program development and implementation are inexorably influential on program outcomes. Thus, the environment in which school-to-work programs are implemented must be studied. We use a qualitative analysis of a single district to examine the development and implementation of one such program, the career academy, and a quantitative analysis of its outcomes to assess the potential to facilitate postsecondary success.

The location from which we draw data epitomizes the challenges and difficulties faced by large, inner-city school districts throughout the nation. Of course, research guidelines and respect for privacy preclude revealing the name of the district. In many respects, however, obfuscation only serves to exemplify the typicality of its challenges. The context, trials, tribulations, and frustrations portrayed here are all too similar for any teacher, student, administrator, or school board member in a large, urban public school district.

In an effort to improve educational outcomes, this district adopted the career academy model for educational reform in the high school. During most of this study (1990–1997), nine career academies operated within the district’s six comprehensive high schools. We followed the development and implementation of these programs over a seven-year period, five of which overlapped with the years that the students in our quantitative analysis were in school. We obtained transcript and survey data from high school students who were sophomores at comprehensive high schools between 1990 and 1993. We followed this cohort of about 10,000 students through high school and through their first several years after high school. Because about 14 percent of these

students were enrolled in career academies, our case study is a rare opportunity to describe the inputs to, output from, and processes associated with this program. By combining the quantitative analysis of individuals with a qualitative study of the nine career academy programs, our research provides insights into academy operations and outcomes. The book, therefore, is organized to capture two broad levels of analysis: development and implementation of career academy programs, and outcomes of academy students as compared to nonacademy students. The two approaches give us a better understanding of how the programs affect students' transition from school to work than if we examined only the individuals or only the institutions.

Chapter 3 shows how the economic and education-related problems in the city led to adopting the career academy model as the primary focus of high school reform. While the district developed a relatively comprehensive model of its school-to-work programs and its career academy programs, important distinctions arose in its implementation from site to site. Many of the differences were created by variations in school environments and in level of funding.

Multivariate findings from the quantitative analysis are presented in the next chapters. First, we assess the overall impact of the career academy on postsecondary education and labor market outcomes (Chapter 4). We find that career academies increase the knowledge and skills that students take from high school. In fact, even though they were not fully implemented in any school, the career academies had a number of positive, measurable effects. Most specifically, academic skills provided by a career academy increase the probability of a student pursuing postsecondary education. In turn, this rise in educational attainment should facilitate labor market success as former students continue to move from school to work. We also found that career academies may improve the potential for lifelong learning. Career academy students were much more likely than were other students to state that their high school program helped them build educational and workplace skills that facilitate learning throughout their productive life. However, as this chapter shows, these positive postsecondary program outcomes are created by the increase in knowledge and skills that students take from high school. We found little evidence that career academy programs, per se, changed educational outcomes or labor market experiences, compared to other high school curricula.

Chapter 5 combines the quantitative and qualitative analyses to assess the impact of the career academy as it unfolds in distinct school environments, with different students, and under varying levels of program implementation. The discussion addresses some of the issues that policymakers must answer before successful programs can be designed and implemented. Can career academies really serve well the interests of a wide range of students? If not, which students are helped most by the program and which students are not helped? What features of the school environment, the academy program, and the student's experience in the academy contribute to the program's ability to increase the academic skills taken from high school?

We show that the various academies generated different levels and types of benefits. Two of the underdeveloped programs showed no evidence of building participants' knowledge and skills in high school, of stimulating postsecondary educational attendance, or of increasing the potential for lifelong learning (Chapter 4). In contrast, two of the more developed academies improved students' skills in high school, increased the probability of postsecondary educational attendance, directly and indirectly through building skills, and elevated the potential for lifelong learning (Chapter 4). The differences in the various career academies' success suggest that student benefits may depend on ensuring that the programs are well conceived and fully implemented.

We found that the academies' environment, resources, and participants varied in systematic ways. Specifically, differences existed among the academies along several lines. First, there were variations in the relative preparedness of academy students as compared to the balance of the student body of the school that housed the academy. Second, programs developed at distinct paces and in different ways. Academies at schools with students in the middle of the socioeconomic spectrum were the most completely developed, especially as compared to those at the high-status schools. Finally, school environments in which the academy operated varied substantially.

As a result of the developmental circumstances, variations existed in how much exposure students of the academy had to its curriculum or work experiences. Because of the range of school environments, academies occupied several niches in the various high schools. These and other differences among academies and schools reflected a system in

transition that we were able to portray by combining our quantitative and qualitative approaches.

We conclude with a summary and with the policy implications of the research (Chapter 6). In a nutshell, our study shows that career academies can be quite effective at facilitating postsecondary educational success for their students. However, we also issue two cautions to policymakers and administrators. First, the career academy must build academic knowledge and skills in high school. There is no getting around this, and no shortcut to achieving this. Simple exposure to careers, for example, is not sufficient, nor should it become an end in itself. Without building scholastic and skill achievements above levels of traditional high school programs, the additional cost of academy programs may not be warranted. Second, the career academy strategy may not be appropriate in all high schools or for all students. All environments may not be hospitable to academy development, and academies may evolve distinctly within the same environment. The reasons for these variations lie beyond the data presented in this study and suggest that further research is needed on both student achievement and institutional development. However, our findings raise important questions about the circumstances under which these ambitious programs can flourish and about which students are most motivated and enhanced by this approach to teaching and learning.

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