MDRC's Career and Technical Education Projects

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The past decade has seen a resurgence of interest in career and technical education (CTE) as a way to engage students, help people build the skills necessary to succeed in a technologically advanced economy, and meet employer demand for workers. MDRC—which has a three-decade history of developing and evaluating CTE programs, including a landmark study of **Career Academies**—is partnering with over a dozen CTE programs to build evidence and inform policy and practice. MDRC's Center for Effective CTE seeks to synthesize lessons learned from CTE projects (with middle and high schools, community colleges, and workforce organizations) and illuminate big-picture issues including those related to equity in access and outcomes, employer engagement, advising, and choices and decision-making. It also examines how the future of work will shape the evolution of CTE.

MIDDLE AND HIGH SCHOOL STUDENTS

For the Kauffman Foundation Partnership, MDRC is evaluating and providing technical assistance to the Kauffman Foundation's Real World Learning initiative, which is intended to improve workforce development in the Kansas City metropolitan area. The Kauffman Foundation is working with 25 local school districts (urban, suburban, and rural) and employers in Kansas City to develop and expand programs that provide high school students with real-world learning experiences to better prepare them for postsecondary education and employment. MDRC provides technical assistance on data and performance measurement, recommendations based on interim observations, and research and evaluation expertise. MDRC collecting data to observe the evolution of the initiative after its initial pilot test.

Career Technical Education Innovation: New York City as a Laboratory for Learning is studying the impact of CTE programs on a variety of student outcomes: social competencies, high school graduation, postsecondary enrollment and completion, employment, and earnings. The study is also looking at variation in the more than 200 CTE programs across New York City to determine what program components contribute to improved student outcomes. The study is being conducted in partnership with the Research Alliance for New York City Schools and Vanderbilt University.

Next Generation California Partnership Academies is a replication of MDRC's study of career academies—small learning communities within larger high schools that combine academic and technical curricula related to a career theme and provide students with work-based learning experiences. MDRC's original study found long-term impacts on earnings for students who participated in career academies. This study, centered on career academies that receive enhanced



technical assistance from the California Department of Education, will follow students for 12 years and measure impacts on educational attainment, employment, and earnings.

<u>P-TECH 9-14</u> is a six-year high school model that was created by IBM, the New York City Department of Education, and the City University of New York (CUNY). Students participate in work-based learning experiences and graduate with both a high school diploma and a free associate's degree from CUNY. There are now nine P-TECH schools in New York City, seven of which are in the MDRC study, and each has a different industry partner. The model has also proliferated across New York State and the nation. MDRC is conducting implementation, impact, and cost studies of New York City's P-TECH 9-14 schools.

CTE Advise: Advising Tools in Secondary Education aims to rigorously test two technology-based advising tools, Xello and YouScience, to determine how they influence students' thinking about career options, choices of relevant CTE courses and work-based learning options, and decisions about what pathways and programs of study they should follow. This study will partly focus on gauging whether these tools contribute to more equitable student outcomes. MDRC's study will use a rigorous, school-level random assignment research design, combined with an implementation study and a cost-effectiveness analysis.

YouthForce NOLA is an initiative designed to connect New Orleans high school students to career pathways in highwage, high-demand industries such as health sciences, digital media/IT, business, and skilled crafts. The program provides technical support to schools to develop CTE programs that lead to industry-recognized credentials and collaborates with employers to offer a robust paid internship program. MDRC is conducting an implementation and impact study of YouthForce NOLA's Soft Skills in Computer Science Pathways program. In this project, MDRC and YouthForce NOLA will test and refine a model of integrating instruction in "soft skills" (the general habits and competencies that make for a good employee) into computer science courses for high school students. MDRC will conduct an impact study to examine the effect of the program on students' academic success and on their readiness for careers in science, technology, engineering, mathematics, and computer science. The goal of the study is to determine whether industry-specific CTE, paired with soft skills training, can help prepare New Orleans students for high-paying jobs.

COLLEGE STUDENTS

The CTE at the City Colleges of Chicago study explores the Centers of Excellence model for postsecondary CTE in the City Colleges of Chicago system. The model incorporates many aspects of sector-focused training usually offered outside of the community college setting, including a deep focus on a single industry sector per college, employer-guided curricula, and industry partnerships. MDRC is conducting qualitative research to answer questions about the model's lessons and potential for adaptation at other community college systems.

The Exploring Noncredit CTE Program Factors that Strengthen Workforce Pipelines project with the Virginia Community College System (VCCS) explores the associations between features of noncredit CTE programs (for example, those related to instructional characteristics, advising, and financial aid) and three sets of student outcomes: noncredit CTE program completion and credential attainment, subsequent enrollment and success in programs that offer college credit, and earnings in the labor market. Findings from this project will enable VCCS administrators to learn more about what attracts students to noncredit CTE programs and what facilitates their academic progress and transition into the labor market, which can help VCCS build more effective programs and student support across its 23 colleges. It will also inform policies to improve noncredit CTE programs at other broad-access institutions (those that have open or minimally selective admissions policies). This program is run in partnership with VCCS and the University of California, Irvine.

New World of Work (NWoW) is designed to help students learn the twenty-first-century skills (another name for soft skills) that are important for success in the workplace. The program, which is currently being pilot tested at community colleges in California, incorporates a twenty-first-century skills curriculum for the classroom, workbased learning experiences, and credentials designed to demonstrate mastery in these skills. MDRC is working with the developers of NWoW to adapt it for use in CTE programs and assess its promise for improving students' educational outcomes.

YOUNG PEOPLE AND ADULTS

MDRC is evaluating <u>Google's Career Certificates Initiative</u>, a \$100 million program that aims to empower more than 20,000 learners to realize more than \$1 billion in aggregate wage gains over the next decade. Google Career Certificates are industry-recognized credentials that prepare people for in-demand, entry-level jobs in data analytics, IT support, project management, and user-experience design. MDRC is evaluating the effectiveness of the program in promoting economic mobility for learners who have been historically underrepresented in the technology sector. MDRC is partnering with Social Finance, which is designing and managing the investment program.

The **New York City Green Jobs Case Study** is exploring how CTE programs in K-12 education, postsecondary education, and workforce training adapt to prepare students for the expected growth of green jobs in the New York City region in infrastructure (building design and retrofitting), renewable energy, clean water, and agriculture and land management. The case study will focus on how underserved populations gain access to higher-paying jobs in this area of growth.

The <u>Career Impact Bond Project</u> studies whether income share agreements (ISAs) are a viable way for students to pay for college or career training. With ISAs, students receive financial support to help cover the cost of their education and agree to pay a fixed percentage of their future incomes over a predetermined period. MDRC is collaborating with the Partnership for Education Advancement, the Student Freedom Initiative, and Social Finance on a series of technical assistance and evidence-building projects. The goals are to determine whether these programs increase affordability and access for students of color and students from low-income backgrounds, whether the students involved in them understand their financial obligations, and whether the programs improve graduation rates and earnings. MDRC is (1) developing an ISA Playbook to help guide colleges and universities implementing ISA programs, (2) providing technical assistance to nine historically Black colleges and universities, and (3) and launching a research agenda for ISA-based programs at career training providers in multiple sectors across the country.

MDRC is evaluating the **Pay for Success Clean Energy Training Project**, which provides training in energy-efficiency jobs to people in New York State who work for low wages, people who have been unemployed for a long time, and young people ages 16 to 24. The New York State Energy Research and Development Authority has received funding through the federal Social Impact Partnership to Pay for Results Act program, which makes funding available for state and local governments for pay-for-results partnerships.

<u>GED Bridge</u> is testing whether a career-focused GED program at Northeast Wisconsin Technical College can help more students pass the high school equivalency exam and go on to college and careers. The program includes a curriculum that integrates material from the fields of health care and business and helps students identify the courses of study that are right for them. GED Bridge builds on the lessons of LaGuardia Community College's <u>Bridge to College and Careers program</u>, which was found to increase high school equivalency exam pass rates and improve college enrollment and persistence.

The <u>Families Forward Demonstration (FFD)</u> is testing new approaches to improve the earnings and financial knowledge of noncustodial parents who owe child support but are unable to fully pay because of low earnings. FFD builds on previous research on employment programs for noncustodial parents and recent evidence on sectoral partnerships to develop ways to help parents obtain higher-paying jobs in their local labor markets.

The <u>TechHire and Strengthening Working Families Initiative (SWFI)</u> grant programs emphasize short-term, accelerated, demand-driven training aimed at preparing young adults and parents for middle-skill jobs in high-growth industries. The 53 grantees are pilot testing a variety of approaches to training in technical skills. In addition, SWFI programs aim to make it easier for parents to participate in and complete training by helping them obtain child care. The evaluation is led by Westat in partnership with MDRC.

<u>WorkAdvance</u> is a sector-focused advancement program that offers training and industry-recognized certifications in local high-growth sectors such as IT, advanced manufacturing, and health care. The program has several components: screening, preemployment services, skills training, job placement, and postemployment advancement services. MDRC's evaluation found that WorkAdvance increased average earnings by nearly \$2,000 two years after program entry, increased employment in the targeted sector, and improved job quality. The most successful WorkAdvance provider (Per Scholas in New York City) increased earnings by \$3,700.

The Job Corps Evidence Building Project has two main components. The first is to develop a research and evaluation framework for Job Corps to guide it in a strategic, continual learning process that is responsive to its legislative requirement of an effectiveness evaluation every five years. The second is to conduct implementation studies of two Job Corps pilot programs that are testing alternatives to the traditional Job Corps programs, which provide education and technical training to young people ages 16 to 24, often in a residential setting. These two pilot programs—Idaho Job Corps and Job Corps Scholars—seek to adapt aspects of traditional Job Corps by modifying the program operator and other aspects of service delivery: In Idaho, the program is being operated by the State of Idaho rather than by private contractors, as is the case in the traditional program. In Job Corps Scholars, colleges—mostly community colleges—are providing education and training to young people who are eligible for Job Corps. Both Idaho Job Corps and Job Corps Scholars are operating mostly as nonresidential programs.

MDRC's evaluation of the <u>Cascades Job Corps College and Career Academy</u> is studying the implementation of a Department of Labor pilot effort that aims to provide several years of career pathways programs in two industries, health care and information technology. The programs combine academics, career training, and training in social skills, with the goal of providing industry-recognized credentials and advances into community college, and ultimately of helping participants obtain secure jobs. MDRC is partnering with Abt Associates on this initiative.

In the **Hilton Opportunity Youth Developmental Evaluation**, MDRC is partnering with the Conrad Hilton Foundation to develop and implement a five-year evaluation of the Opportunity Youth Initiative in Los Angeles, which aims to improve the lives of people ages 16 to 24 who are disconnected from career and education pathways.