EARLY LEARNINGS FROM NYCETC TECH BRIDGE GRANTEES

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ACKNOWLEDGMENTS AND CREDITS

Stacy Woodruff, The Woodruff Group, Ltd researched and authored this report.

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INTRODUCTION

EXPANDING ACCESS TO CAREER OPPORTUNITIES IN TECH—A CONTINUOUSLY GROWING

industry with a relatively large proportion of jobs that pay higher than average wages and do not require a post-secondary degree—is the focus of numerous training organizations, foundation portfolios, corporate diversity and hiring efforts, and policy initiatives. The benefits to individual job seekers, tech companies, consumers, and society as a whole of proactively identifying, training, and connecting individuals from diverse racial, gender, socioeconomic, and life experience backgrounds are well documented, and yet progress on this front moves slowly. Investment in population-specific interventions that test and refine program and employer engagement models remains a key strategy for diversifying the industry.

In October 2022, through its NYC Tech Opportunity Fund, Google committed \$1 million to the New York City Employment and Training Coalition (NYCETC), the largest city-based workforce development association in the country, to help New Yorkers access the education and skills to begin and sustain well-paying careers in the technology sector. In partnership with Google, NYCETC developed and administered a funding opportunity for organizations that help underrepresented New Yorkers seek new careers to grow their technology skills and connect to professional opportunities. The NYC Tech Bridge Grant Request for Proposal encouraged applicants to demonstrate how strategic partnerships between tech skills training organizations and agencies with expertise in serving specific populations or providing essential wraparound services can effectively prepare job seekers for careers in the tech industry. New York City's workforce development and training community was receptive to this call, with nearly 50 proposals submitted for review.

The NYC Tech Bridge Grant awardees were selected in Fall of 2023, and their planned grant efforts will continue through 2025. This brief introduces readers to the initiative and the grantees, shares the array of strategies pursued with the flexible resources, and highlights early progress, challenges, and learnings.



NEW YORK CITY'S TECH INDUSTRY

NEW YORK CITY'S TECH INDUSTRY HAS GROWN RAPIDLY DURING THE PAST SEVERAL

years, comprising an increasing proportion of the city's jobs and positioning the city as the second-largest tech hub in the world.¹ Today, more than 330,000 of the city's jobs fall within the tech sector, seven percent of the city's total job count. The rapid growth of tech jobs began prior to the COVID-19 pandemic, accounting for 17 percent of the city's job growth between 2010 and 2021.² This ongoing growth requires a continual need for talent to fill the new and evolving roles, many of which pay wages above the city's median earnings.³ Additionally, tech stands out as an industry with several entry-level and career path opportunities that do not require a college degree, making tech an attractive focus for workforce training programs; a 2022 survey of 143 workforce development organizations identified 114 tech-focused skills training programs that lead to certification located throughout New York City.⁴

TECH OCCUPATIONS THAT DO NOT REQUIRE A COLLEGE DEGREE

In 2022, NYCETC, in partnership with Workforce Professionals Training Institute and the Center for New York City Affairs at The New School, produced New York City's Workforce Landscape, a report and guide documenting the City's skills training ecosystem. The most common tech certifications and skills training programs included Comp TIA A+, Certified Microsoft Office, Network+, Amazon Web Services, and Google IT Support Professional. Tech occupations accessible to individuals without a college degree who earn these certifications include IT Support Specialist, Help Desk Technician, Network Technician, Network Analyst, and Cloud Practitioner.

As has been well documented, however, for all of the growth in the industry and opportunities for a broader array of skill and educational levels, tech employment remains predominantly male and unreflective of the city's racial and ethnic diversity. While 47 percent of New York City's population is female, only 24 percent of tech employees in the city are female.⁵ And while 51 percent of the city's population identifies as Black or Latino, only 20 percent of the city's tech employees identify as such.⁶ As noted in a recent report on the tech ecosystem, "over the last decade, there have been slight improvements in non-white and female representation within the tech ecosystem, but it is still not reflective of the city's racial and gender diversity, despite numerous equity-driven workforce initiatives."

GOOGLE NYC TECH OPPORTUNITY FUND

ADDRESSING THE ENTRENCHED DISPARITIES IN OPPORTUNITY AND ACCESS TO TECH

employment across New York City's residents shaped the ultimate goals of the **Google NYC Tech Opportunity Fund.** Awarded in 2022 to NYCETC, the \$1 million grant from Google is intended to "connect New Yorkers with the best organizations that can help them springboard into their tech careers." Throughout late 2022 and the first half of 2023, NYCETC sought input from its membership and stakeholders throughout the city's tech industry to define the focus of the funding opportunity better. The resulting Request for Proposal (RFP) was released in July 2023, with grantees selected and announced in early Fall 2023.

NYCETC received nearly 50 proposals from nonprofit workforce and training organizations and local colleges. Applicants ranged from well-established tech training programs to multiservice agencies to organizations with deep connections to a specific population or geographic area of the city. The five grantees and their partners selected reflect this diversity of applicants, including newer entrants to the workforce ecosystem alongside organizations with long histories of preparing New Yorkers for employment.

CALLING ON THE WORKFORCE AND TECH COMMUNITIES TO SHAPE THE NYC TECH BRIDGE GRANT RFP

Drawing on its vast membership and relationships with stakeholders throughout the city's tech, government, philanthropic, and business communities, NYCETC took a participatory approach to shaping the objectives and goals of the NYC Tech Bridge Grant RFP. In late June 2023, NYCETC hosted the Tech Bridge Summit with the goals of 1) identifying promising tech industry training and job placement efforts that attempt to increase diversity in the tech sector and 2) developing shared approaches and strategies to advance and sustain promising practices. More than 50 leaders participated in the Summit, with a subset joining the NYC Tech Training Roundtable advisory group. The advisory group worked with NYCETC leadership to inform the criteria for awarding grants to RFP respondents and reviewing proposals.

Following the selection of grantees, NYCETC hosted the **Building the NYC Tech Bridge** convening in October 2023. Attended by 72 workforce and tech stakeholders, the event acknowledged the five grant recipients, provided a forum for all grant applicants to network and build community, and shared ideas for diversifying tech training and employment opportunities for New Yorkers.

2023 TECH BRIDGE GRANTEES

Center for Employment Opportunities -

Mission: Provide immediate, effective, and comprehensive employment services exclusively to people recently released from incarceration

Tech Grant Project: Advanced Tech Training for Justice-Impacted New Yorkers

Grant Objectives: Offer IT training and tech employment opportunities to justice-involved job seekers

Targeted Tech Occupations or Pathways: Program completers are eligible to enroll in Monroe College's Computer Technology Associate's Degree program

Partner: Monroe College

KindWork (an initiative of Brooklyn Workforce Innovations) \rightarrow

Mission: Help talented young adults from overlooked communities transform their economic outlook and launch a new career in the innovation economy

Tech Grant Project: Customized Curriculum for Tech Subsectors — Healthcare and FinTech

Grant Objectives: Convene employers from fintech and healthcare/wellness tech companies, respectively, to inform custom curriculum modules available to participants in the KindWork Customer Experience Fellowship

Targeted Tech Occupations or Pathways:Customer-facing roles in the tech sector that do not require advanced STEM skills (i.e., Customer Experience Associate, Operations Associate)

The Marcy Lab School \rightarrow

Mission: Provide an exceptional post-secondary education experience that propels underestimated young adults into financially rewarding and purposedriven careers in the tech sector

Tech Grant Project: Innovations in Career and Technical Education Teaching Pathways

Grant Objectives: Launch the STEM Teaching Apprenticeship program for Marcy Lab School graduates in partnership with career-focused charter schools in New York City

Targeted Tech Occupations or Pathways:Computer Science educators in high school settings

Partners: Comp Sci.High School: Math, Engineering, and Science Academy (MESA) Charter High School

Tech Kids Unlimited \rightarrow

Mission: Empower neurodiverse students' lives through computer science principles and technology skills

Tech Grant Project: Transforming the Work Pipeline for the Mid-Level Neurodiverse Techie

Grant Objectives: Develop and implement a digital marketing training and internship program customized for neurodiverse young adults

Targeted Tech Occupations or Pathways:Digital Marketing Specialist, E-Commerce Associate

Partners: AHRC; Bridges to Work

Youth Action YouthBuild \rightarrow

Mission: Building a community of young people and adults across New York City who are committed to taking responsibility for their own lives

Tech Grant Project: Next Gen Digital Workforce/ Wireless Network Technician Training Program

Grant Objectives: Enhance the wireless network technician training program with additional modules

and hands-on training and expand access to 18-30-year-old residents of East Harlem, Northern Manhattan, and the South Bronx

Targeted Tech Occupations or Pathways: Network management, fiber installation and maintenance

Partners: SayCel Technologies;

Social Capital Builders

GRANTEE PROGRESS TO DATE

THE FIVE GRANTEES BEGAN WORK ON THEIR RESPECTIVE INITIATIVES IN LATE 2023 AND

responded to requests in July 2024 to share details and reflections on these projects. Each grantee reported progress toward proposed milestones and goals. Given the diversity in project objectives and the interim timing of this brief, the accomplishments shared below are mainly specific to individual grantees.

KindWork set out to develop customized curriculum modules in two tech subsectors—fintech and healthcare/wellness—as elective offerings to students in the Customer Experience Fellowship. Staff and a consultant assembled working groups of employers to map out key competencies, basic terminology, and other qualifications that would make hiring managers in each subsector feel confident in hiring a candidate. This feedback informed the development of 10-hour, self-paced, customized curriculum modules for each subsector. Pilot rounds of the healthcare/wellness, followed by fintech modules launched during the first half of 2024; staff used these initial offerings to refine the curriculum for future use and to reflect on the overall process.

KindWork learned that having banking experience—for example, as a bank teller—is advantageous for individuals interested in fintech jobs, as it demonstrates some knowledge of and interest in current events or recent news impacting the industry.

"AFTER THE FIRST YEAR
WE COULD COMMIT TO FUNDING
THE APPRENTICE POSITION BECAUSE
IT IS A VALUE ADD FOR US."

DAVID NOAH, EXECUTIVE DIRECTOR
OF COMP SCI.HIGH SCHOOL

Marcy Lab School placed eight program graduates in teaching apprenticeships at partner charter high schools across the city. All apprentices stayed on for the entire duration of the apprenticeship. In mid-July, Marcy Lab was preparing to place a new cohort of apprentices for the 2024-25 school year. Administrators from two charter schools, Comp Sci.High School and MESA High School recommitted to the program by building the salary for at least one apprentice into their annual budgets; the NYC Tech Bridge

Grant partially or fully subsidized apprentice salaries during the 2023-24 school year. Marcy Lab staff are working with NYC Public Schools to make apprenticeship placements in these schools possible eventually.

Tech Kids Unlimited (TKU) adapted existing Grow with Google digital marketing classes for neurodiverse students, for example, augmenting didactic training with interactive opportunities to practice new skills. TKU piloted its social media management course with 11 students in Spring 2024 and used that cohort's experiences to refine and enhance the curriculum further. At the time of the interview, TKU was preparing to launch the program with its new partners, AHRC and Bridges to Work, in Fall 2024. AHRC will work with students to qualify for

vocational rehabilitation services through ACCES-VR, which will support wages paid during each student's three to four-month internship, and Bridges to Work will assist with identifying employment opportunities for program graduates.

Youth Action YouthBuild (YAYB) expanded its wireless network technician training program—initially developed with funding from the New York State Department of Labor Workforce Development Initiative—from a program serving exclusively out-of-school, out-of-work youth to one targeting 18-30-year-olds from East Harlem, Northern Manhattan, and the South Bronx. The new iteration of the program includes training on fiber optics, incorporates social capital development modules and applied learning labs (i.e., installing mesh internet networks in and around East Harlem), and allows for enhanced student stipends. Bronx Community College provides classroom space for training, access to career services, and college credits for completing coursework.

Center for Employment Opportunities (CEO) embarked on a new partnership with Monroe College to develop and teach an introduction to tech training, roughly equivalent to the college's for-credit introductory IT course. CEO provides students with a stipend during training and continues to offer wraparound supportive services; grant funding covers the cost of instruction at Monroe College. While identifying a cohort of individuals who were a good fit for the training and able to commit to the multi-week Saturday schedule proved challenging, CEO and Monroe College were pleased with the low attrition rate and high level of performance on the part of most students.

GRANTEE CHALLENGES

THE NYC TECH BRIDGE GRANT RFP ENCOURAGED APPLICANTS TO PROPOSE NEW OR

enhanced partnerships and innovative approaches to addressing diversity and access issues in tech. While all grantees reported progress on these fronts, the work has not proceeded challenge-free. Even with the range of projects taking place under the NYC Tech Bridge Grant, grantees shared a couple of challenges in common.

Employer Engagement: As the Google NYC Tech Opportunity Fund supports workforce development programs, grantees are ultimately responsible for ensuring that participants have a chance of securing employment in the tech industry following training. Given the interim timing of this brief, most grantees were not yet at the job placement stage in their program cycles at the time of the interviews. However, most grantees either noted difficulty getting employer representatives involved in efforts to inform curriculum or anticipated future hurdles moving program graduates into tech-related positions.

YAYB program staff, for example, noted that demand on the part of large corporations, which are increasingly subcontracting out installation work, has decreased over the past year, leaving the organization to search for a broader set of businesses to target as students get closer to graduation. The program's instructor, Edwin Reed-Sanchez, noted, "Now our strategy is to look for smaller companies that do installations and get subcontracted by the larger companies." CEO has offered tech trainings to participants in various locations nationwide and has found

several tech employers amenable to hiring justice-involved candidates. However, they have found that some companies want to work with the justice-involved "only behind the scenes," limiting their employment possibilities.

"EMPLOYERS ARE BUSY AND WANT TO BE HELPFUL. BUT THEY'RE ONLY AVAILABLE 'THREE MONTHS FROM NOW ON TUESDAY AT 2PM'— WE ARE OFTEN CHALLENGED WITH ACCOMMODATING EVERYONE ELSE'S SCHEDULE."

KATE DOYLE, FOUNDER, KINDWORK

At Marcy Lab School, high schools serve as both partners and employers, hosting apprentices in year one and ideally hiring them as full-time staff. While charter schools have successfully played this role, efforts to establish a similar arrangement with NYC Public Schools, treating apprentices as employees rather than contractors, have yet to succeed. This remains a key barrier to hiring individuals without a bachelor's degree, though stakeholders are actively working toward a solution.

Closing the Gap for Participants:

Initiative grantees work with various populations that experience challenges securing, retaining, and advancing in

employment either in general or specifically in tech, including the neurodiverse, out-of-school, out-of-work young adults, the justice-involved, and BIPOC individuals. Even when a tech training program identifies individuals who are a good match for training in terms of existing skills and competencies, aspirations, and ability to commit, it is not uncommon to identify a need for additional support to ensure success.

TKU was created to address the dearth of training programs and opportunities for neurodiverse young adults who struggle to persist in traditional educational environments and workforce programs. Adapting the existing curriculum to develop a social media management program for neurodiverse individuals consumed more time during the first half of the grant period than anticipated, a necessary investment to ensure a comprehensive and supportive student experience. The partnership between three complementary organizations with unique expertise and areas of strength—including curriculum development, internship placement, and benefits navigation, and support job placement—will be tested in the coming months.

Multiple grantees recognize the need to provide financial support to participants in the form of stipends or wages as a way of making continued participation in training possible. Dean Mubita of Monroe College, CEO's training partner, observed, "These students generally do not have a lot of resources. They depend on phones and public libraries for computers. Some of them live in shelters." Access to computer equipment and stipends make participation, and hopefully a transition into employment, possible.

GRANTEE LEARNINGS

REFLECTING MID-GRANT ON PROGRESS, CHALLENGES, AND LESSONS, GRANTEES POINTED to some of the following learnings to date.

KindWork, TKU, and Marcy Lab School each developed new programming to **build or refine a model or methodology for other applications**. To date, all three organizations feel optimistic about applying what they have learned or developed in different contexts, for example, in additional schools or tech subsectors. TKU's Founder and Executive Director, Beth Rosenberg, noted the need to build in time to test, reflect on, and refine program models, a critical component of the organization's NYC Tech Bridge Grant.

KindWork documented its process of engaging employer partners to inform curriculum development in a white paper, <u>Customizing Curriculum for Sub-Sector Success</u> (November 2024).

"THESE BUILDINGS ARE SET IN
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INTERNET SERVICE—A WIN - WIN FOR
THE STUDENTS AND THE COMMUNITY."

ROBERT TAYLOR, EXECUTIVE DIRECTOR, YAYB

CEO and YAYB increasingly view their respective initiatives as connected to larger community building and social justice efforts. YAYB's Executive Director, Robert Taylor, reflected, "This is a workforce program but also includes elements of community change and impacting the community for the positive. YAYB owns a number of buildings in East Harlem, giving the organization access to the rooftops for students to practice their skills by installing wireless mesh networks. These buildings are set in an internet desert, so strengthening the wireless mesh network expands access for residents to low- or no-cost internet service—a win-win for the students and the community." For CEO's partner, Monroe College, working explicitly

with a justice-involved population required guidance from CEO to understand and meet the needs of these individuals. The Monroe College stakeholders are now exploring additional ways to align with the school's more extensive restorative justice efforts.

Marcy Lab School and KindWork find **building student agency and confidence** as valuable as teaching technical skills. Shani Watler, KindWork's Program Director, shared, "We are finding that it's a big part of confidence building for learners to participate in the modules. They build confidence in teaching themselves new things and knowing what to anticipate in an interview." For Marcy Lab School, learning that some of the apprentices outperformed full-time teachers prompted brainstorming around ways to encourage mutually beneficial mentorship relationships between teachers and apprentices. In this setting, apprentices can learn skills such as classroom management from experienced teachers and have a format for sharing some of their up-to-date tech sector knowledge with the teacher partner.

In sharing these preliminary learnings, grantees look forward to the opportunity to reflect individually and as a group on takeaways from the NYC Tech Bridge Grant when the initiative nears its conclusion in 2025.



THE NYC TECH BRIDGE GRANTEES WILL CONTINUE TO WORK TOWARD THEIR ESTABLISHED

goals over the next several months, including the transition of training graduates into the workforce. NYCETC is developing future convenings to bring together workforce and tech leaders to examine the long-term implications of grantee-led innovations, AI integration, and emerging technologies—creating a platform to share lessons learned, scale effective models, and shape a more equitable and forward-looking tech workforce strategy for New York City.

ENDNOTES

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ABOUT NEW YORK CITY EMPLOYMENT AND TRAINING COALITION (NYCETC)

The New York City Employment and Training Coalition (NYCETC), the largest city-based workforce development association in the U.S., works to ensure that every New Yorker can access the skills, training, and education necessary to thrive in the post-pandemic economy, and that every business can maintain a highly skilled workforce. NYCETC aims to expand access to quality jobs and wages by shaping an effective, sustainable workforce development ecosystem in NYC.

NYCETC's work centers on two main goals:

- Serving as an intermediary between training providers and employers to streamline connections between job seekers and employment opportunities, especially in high-growth sectors.
- 2. Advancing budgetary, legislative, and compliance initiatives that strengthen partnerships between employers and training providers, reduce workforce barriers for underserved populations, and support local economies.

To achieve these goals, NYCETC fosters collaboration among networks of education, training, and employment providers, partners on research and policy briefs, and regularly engages members through briefings, conferences, and communications to highlight successful practices.

For nearly 30 years, NYCETC has increased access to investments and support for underserved New Yorkers—primarily people of color, low- and moderate-income individuals, and those facing systemic barriers to employment—positioning them for workforce success. Today, NYCETC's membership includes over 200 organizations operating at more than 400 locations across New York City, each dedicated to expanding access to education and employment opportunities and preparing New Yorkers for sustainable careers in growing industries.

CONTACT US

Gregory J MorrisChief Executive Officer gmorris@nycetc.org

Stephanie BirminghamDirector of Community and Operations

sbirmingham@nycetc.org

nycetc.org