Bank of America Jobs Initiative
Narrative Sections

Top Five Sources of Funding (500 characters)

New program, no prior funding.

Detailed Grant Description (1,999 of 2,000 characters)

Harold Washington College (HWC), in partnership with Catalyte, seeks funding to support TechQuity Chicago. HWC provides career and technical education and support services for pathways that enable people of color to gain workforce skills and advance careers. The Catalyte Training Program equips individuals with no prior computer programming experience with the necessary skills to become junior full stack developers. TechQuity Chicago will combine HWC's wrap-around services for college education and Catalyte's one-of-a-kind workforce development platform to launch the careers of exceptional technology talent among the college's student body.

In Illinois, Black and Hispanic/Latino unemployment rates are consistently higher than the population as a whole. The COVID-19 pandemic amplified the unemployment gap. Between Q1 and Q2 2020, Unemployment rates for Blacks (+14.0%) and Hispanics/Latinos (+17.8%) increased by far more than whites (+10.0%) and Asians (+7.9%) (Economic Policy Institute, State Unemployment by Race and Ethnicity, August 2020).

TechQuity Chicago will create a strong jobs pipeline for Black and Latino students that will enhance economic mobility for future generations. The grant will enable HWC to adopt Catalyte's workforce training model to develop students' skills and enhance other industry partnerships for the cybersecurity, software development, and business curriculum. The grant will also realign the curriculum to meet industrial standards, embed industrial credentials, recruit minority students, develop students' essential skills, build work-based learning opportunities, provide wrap-around services, and advise them to find jobs in related fields.

The program will launch in spring 2021, with the first of four cohorts recruited for the Catalyte Training Program. In total, 47 students will earn a certificate and be prepared for technology careers with four years of grant funding, ending winter 2024.

Additional Information (4,785 of 5000 characters)

Career and technical training programs are critical pillars to advance racial equality and economic opportunity for Black and Latino individuals in Chicago, Illinois, and the nation. HWC takes its responsibility seriously to prepare Black and Latino students to have the job readiness skills for high-salary, family-sustaining jobs across Chicago. Catalyte creates new opportunities for sustainable and diverse technology talent that powers transformational software engineering

and accelerates business outcomes. The grant will allow HWC and Catalyte to collaborate to develop a curriculum aligned with work-based learning (WBL) opportunities for Black and Latino students who seek entry into high-wage, in-demand careers in cybersecurity, software development, and business.

HWC will work with Catalyte to recruit and screen students to participate in the Catalyte Training Program. For those who are not eligible for the Catalyte cohort, HWC will guide students to participate in existing workforce pathways and placement services offered through the Center of Excellence in Business. As an enhanced career pathway for the technology sector, the goal of TechQuity Chicago goal is to recruit and prepare 4 Catalyte cohorts (47 students) over four years. The grant will allow HWC to provide each Catalyte cohort compensation during the intensive training phase of the program. HWC will also be able to hire a coordinator, advisor, and WBL coach to build sustainable infrastructure and augment hiring partnerships.

Catalyte, a software development company with a proprietary and highly successful training model, takes people with no prior experience and trains and hires them as software developers within 6-7 months. The HWC students who successfully complete an assessment enter a 26-week training program. Catalyte's training program comprises a series of modules on foundational topics for work as a junior full stack developer. The modules and related technologies include development basics and front-end web development (Git, HTML, CSS and JavaScript), intermediate programming (Java), databases (Postrgres), web servers (RESTful), front end frameworks (React and Redux), and group project (Agile/Scrum practices). The modules are delivered primarily through an interactive lecture format with trainers explaining new concepts and TA’s who continually give students feedback on progress through code reviews, weekly one-on-one meetings, quizzes, etc. Each module has at least two summative projects that students complete.

At all stages, hands-on programming is a major focus of the training. Students are given constant opportunities to practice what they have learned with programming projects of increasing complexity. Students typically complete over 35 different programming projects or exercises. In addition, students learn and practice various soft skills such as communication, self-awareness, giving and receiving feedback, and teamwork. At the conclusion of the training, students complete a capstone project that leverages everything learned to build a full-stack web application. The application must provide a full front end, back end server (including the design and development of a RESTful API) and database. Students are required to provide appropriate data validation, use proper HTTP status codes and provide multiple views of patient and appointment data.

In each year of the TechQuity Chicago jobs initiative, HWC will secure the commitment of industry partners to review and revise curriculum to align with industry-recognized credentials and to explore new career pathway opportunities for students of color. Beginning in spring 2021, HWC recruit and screen 7 students for Catalyte Cohort 1. In year 2, HWC will graduate Catalyte Cohort 1 into job placements. In addition, HWC will recruit and screen 11 students for Catalyte cohort 2. In year 3, HWC will graduate Catalyte Cohort 2 into job placements. HWC will also

recruit 13 students for Catalyte cohort 3. In year 4, Catalyte cohort 3 will graduate into job placements. HWC will recruit 16 students for Catalyte Cohort 4.

A panel of individuals drawn from the HWC faculty, Catalyte technical leadership, and industry partners will review and grade the capstone project using a common rubric for TechQuity Chicago. Each student participates in a final interview with the panel to demonstrate and explain the capstone project and answer a series of both technical and non-technical skills-related questions. The panel then renders a decision if the student successfully completed the training program. All individuals who successfully complete the training program are hired as junior developers (full-time salary + benefits) by the primary industry partner.

Population Served (3,796 of 4,000 characters)

As a member of the City Colleges of Chicago, HWC's service area includes all Chicago residents. Located downtown, the college draws a diverse student body from every neighborhood in the city. In the 2020 fiscal year, HWC's students reported Hispanic/Latino (44%) or Black (28%) origins. In fall 2019, most students were female (57%) and age 24 or younger (77%). Over half (53%) attended college full-time. In addition, the majority (58%) of its first-time, full-time students received Pell grants. HWC also has a large population of working adults attending college to build skills and career opportunities in business and information technology.

TechQuity Chicago seeks to address directly the gap in workforce equity for Black and Hispanic/Latino technology talent. As of 2019, Black and African Americans are 13.4% and Hispanics/Latinos are 18.5% of the U.S. population (U.S. Census Bureau, Quick Facts, United States, July 1, 2019). For key information technology occupations, their share is often much less than the population as a whole. Black or African Americans are only 8.5% of computer programmers, 5.8% of software developers, and 6.7% of web developers. Hispanic/Latino Americans are 8.7% of computer programmers, 5.1% of software developers, and 4.6% of web developers (U.S. Bureau of Labor Statistics, Labor Force Statistics from the Current Population Survey, 2019). The disparities between occupational and population representation suggest that workforce inequity in information technology has greatly diminished economic opportunities for peoples of color in general.

HWC also serves the region's employers and by preparing its career and technical students for high-demand, high-salary occupations in Cook County. Regional employment projections for cybersecurity suggest the number of jobs will increases by 11.8% between 2020 and 2025. Software development jobs are expected to increase by 8.8% over the same period. Business occupations are anticipated to increase by 2.3% in the next five years. In total, over 6,500 new job positions will be created in the three target occupations of TechQuity Chicago. More concretely, HWC maintains a number of partnerships with the Chicago area's largest employers to develop apprenticeships, WBL experiences, and place recent graduates in jobs. For TechQuity Chicago, HWC secured letters of support from current partners Accenture, SDI, and onShore Security.

The partnership between and Catalyte will enhance the pipeline for communities of color to high demand occupations in the software and business sectors. Catalyte was founded on the theory that underserved urban populations contain just as many people with talent to succeed in the emerging field of software development as any other. They are just overlooked by a system that values pedigree rather than innate ability. Using a big data engine, Catalyte removes biases from hiring and objectively selects candidates who have the potential to become great software engineers. With 20 years of data proving that great software developers can come from anywhere, Catalyte continues to create local, cost-effective, predictable, diverse and sustainable technology workforces aligned with workforce priorities. Catalyte's software developers are 3X more diverse in ethnicity and gender than the average Silicon Valley tech company. More than 30% have no college degree. The vast majority (85%) of trainees successfully complete the six-month program and are offered two-year contracts at $35-40K/year plus benefits. 100% of those offered jobs are still employed at their six-month mark.

With grant funding, HWC and Catalyte from an effective partnership to help move Black and Latino Chicagoans from unemployment or underemployment into careers providing a living wage.

Structure of Career Pathways (1,522 of 2,000 characters)

HWC offers career pathways to earn college credit toward a certificate or degree with the support of career services, WBL coaches, and transfer advisors. Each step on a career pathway is designed to prepare students for the next level of education and employment. The current career pathways include Accounting, Architecture, Banking, Business Finance, Early Childhood Education Careers, CPA Prep, Digital Marketing and Social Media, Interactive Design & Development, Human Resources, Music Business/Technology, Paralegal, Web Development and Cybersecurity. Besides career-specific coursework, HWC provides workshops and instruction in job search strategies, developing essential skills, technology skills and college success skills, and preparing students' WBL experiences through internship and apprenticeship.

HWC provides a total of 13 Applied Associate Degree programs, 13 Advanced Certificate programs, and 10 Basic Certificate programs, serving a total of 606 Career and Technical Education (CTE) students in fall 2020. HWC provides embedded tutoring to support CTE students, provide internship, apprenticeship, and practicum opportunities through career service and workforce coaches, host workforce skills workshops, and engage industry partners. For example, AON supports students by providing curriculum review, tuition support, career development workshops, recruitment, and work with students to sign up for career programs and provide career opportunities. Each AON cohort has approximately 40 students.

Evaluating and Measuring Impact (1,488 of 2,000 characters)

Catalyte has a proven model for evaluating and measuring the impact of its training program. The screening process routinely results in a 10%-15% selection rate. The effectiveness of its

assessment is then evident in the 70%-75% completion rate for the 26-week training program. Once placed in work-based opportunity, 97% of program participants complete the two-year apprenticeship. Five years after starting the Catalyte program, participants' average salary increases fourfold from $24K to $98K.

In addition to the above metrics to measure Catalyte cohorts' success, HWC will track the total number of students recruited for screening and the number of students who complete the screening assessment. For those students who are not accepted into TechQuity Chicago, HWC will track the number of students recruited for HWC pathway programs. For enrolled students, HWC monitors academic learning performance, completion rate, certificate exam pass rates, industry certification or credential, internship/apprenticeship placements, internship/apprenticeship completion, and utilization of career development workshops. For program completers, HWC will record the student career readiness assessment, employer interviews, the number of students who find part-time and full-time positions, and average salary at placement.

Lastly, HWC will administer graduate exit interviews and alumni surveys to gauge satisfaction with the programs and measure long-term outcomes for participants.

Institution's Most Pressing Needs (1, 996 of 2,000 characters)

Directly to support the Catalyte model and coordinate TechQuity Chicago, HWC needs to provide stipends to students to compensate time spent in full-time training programs. Under the supervision of the Principal Investigator, HWC will hire a part-time project coordinator to perform administrative responsibilities, supports recruitment, screening, and marketing. HWC will also hire a PT advisor and WBL coach to support the Catalyte cohorts.

With the Aspen Institute's support, HWC envisions adopting a spectrum of programmatic and support service enhancements for Catalyte Cohorts' success. In general, HWC endeavors to build sustainable infrastructure to support industry partnerships, WBL experience, and job placements.

Funding will help HWC address the need to expand its industry partnerships. HWC will work with the industry partners to review and realign the curriculum in order to embed industry credential into the curriculum, provide resources to support students obtain the industry credentials, expand embedded tutoring services, and expand the WBL opportunities. Partners offer valuable support such as identifying CTE advisors, industry experts to provide workshops for students, and culturally responsive professional development for faculty. Participation in the grant program also will enable HWC to create necessary recruitment materials to help students learn the career pathways and opportunities.

Training and professional consultancy from the Aspen Institute will also serve students directly. Due to the pandemic, HWC had to convert all curriculum to online format and introduce resources to support students to complete courses via an online format. HWC also needed to enhance wrap-services, provide tuition support for minority students, and upgrade/obtain industrial standardized equipment/software for faculty and students. Networking will provide

personnel a chance to learn new approaches and best practices pursued by other institutions during the public health crisis.

Intervention or Additional Supports Provided (946 of 1,000 characters)

HWC has found embedded tutoring to be an effective approach to provide students additional academic support. In embedded tutoring, the tutor works in the classroom under the instructor's guidance to assist students to master course concept. Wrap-around services directly support students to complete the program, including regular meeting with the career coach, tuition support (e.g. AON program), books/materials support, and transportation support. The industry-driven partnerships are critical to expand students' work-based experience.

A key component of TechQuity Chicago is the stipend offered to participants. The 26-week training programs demands the full-time participation and attention of enrollees. Stipends for the technology talent identified by Catalyte's rigorous assessment process will ensure that the greatest number of participants progress and complete the program with a full-time job placement at industry-standard salaries.