

COMMUNITIES IN SCHOOLS OF PHILADELPHIA: URBAN TECHNOLOGY PROJECT



BACKGROUND

The origin of this initiative was an extracurricular IT-oriented club at Edison High School where students learned computer repair as a way to build their skills and serve their north Philadelphia community. The club was first called the Latino Tech Collective and was later renamed the Urban Technology Project (UTP).⁴⁵

In 2002, the School District of Philadelphia started a Digital Service Fellows (DSF) program, which became affiliated with AmeriCorps, in which participants provide a year of IT-related service and shadow district computer technicians. Schools soon displayed interest in hosting DSF IT technicians who could provide support for computer needs. Elizabeth St. Clair, manager of technical support in the school district's Office of Educational Technology and director of the RA program, said that the DSF AmeriCorps program is an informal type of pre-apprenticeship that will be more formally linked to the RA program in the next year.

In 2005, the Pennsylvania Apprenticeship and Training Council approved an RA application from Communities In Schools of Philadelphia (CISP),⁴⁶ a local affiliate of a national nonprofit focused on dropout

⁴⁵ See <http://utp-philly.org/>.

⁴⁶ See www.cisphl.org/.

prevention, in partnership with the School District of Philadelphia to create an apprenticeship for “internet-working technicians.” The technicians have since become known as community support specialists (CSS).

The program meets a real need in the school district, which only has seven IT technicians to support over 200 schools, according to St. Clair. The school district receives about 42,000 requests for assistance with 120,000 desktops, laptops, and other IT equipment during the school year.

Philadelphia high school graduates provide one year of service as DSF fellows and AmeriCorps members to assist schools with IT needs.⁴⁷ The high school graduates strengthen their IT skills, are mentored by school IT technicians, and receive supportive services as needed in such areas as child care and housing. They receive paid public transportation for the year, laptop computers, access to certification software, industry-level soft-skill and technical training, free vouchers for certification exams, hands-on learning, and mentoring.

UTP recruits for the apprenticeship program from DSF AmeriCorps members, high school students who have interest or experience in IT, STEM [science, technology, engineering, and mathematics] club participants, career and technical education program graduates, high school guidance counselors, and Philadelphia Housing Authority sites.

The apprentices work in schools or in the school district’s headquarters. They are mentored by a school technology teacher-leader and/or a regional technology support specialist in the school district. Those apprentices who have appropriate skill sets are encouraged to apply for full-time IT positions that become available in the school district. UTP provides assistance in interviewing and resume preparation.

PROGRAM MANAGEMENT

CISP is the employer of record for the program and oversees financial accounting and documentation. The School District of Philadelphia selects the schools in which the apprentices will work on computer needs and learn customer service skills, and identifies the technology teacher-leaders at each school who will serve as mentors. The district also solicits IT equipment and in-kind training from IT firms.

ON-THE-JOB LEARNING

Apprentices receive OJL totaling 5,115 hours during the three-year apprenticeship.

At the end of the apprenticeship, apprentices get a DOL certificate of completion and receive assistance in finding employment.

RELATED TECHNICAL INSTRUCTION

The curriculum for the RA consists of online software and reading modules. Instruction consists of online computer courses to prepare for certifications and a summer IT course at the Community College

⁴⁷ See www.nationalservice.gov/programs/ameri-corps.

of Philadelphia. Apprentices earn eight to 12 college credits through the apprenticeship program. CSS apprentices are encouraged to take courses and obtain industry certifications. The apprentices are given access to online training for IT certifications and payment of fees for certification tests.

During the three-year apprenticeship, apprentices receive 463 hours of in-person and online instruction in technical support techniques, workplace expectations, vendor-specific hardware and support, and certification preparation. This includes 70 hours of formal in-person training every year.

RESULTS/IMPACT

UTP is one of the longest-running IT apprenticeship programs in the U.S. and one of the only programs that has an affiliation with AmeriCorps. It is one of a limited number of RA programs that focuses on youth. The DOL selected the program as an ApprenticeshipUSA Leader of Excellence in Apprenticeship Development, Education, and Research (LEADER).⁴⁸

Of the 115 apprentices who started the program, 42 percent received a certificate of completion from the DOL.

Some graduates of the apprenticeship program work for the school district, while others work for IT companies, universities, nonprofits, and companies that have IT needs throughout Philadelphia. UTP has cultivated relationships with about 30 firms. Some firms have hired apprentices part-time prior to completion of the apprenticeships. While some UTP alumni have obtained entry-level technical support positions, others have become cybersecurity specialists. Other positions include network systems administrator, webmaster, software engineer, director of operations, owner of a retail technology products company, and owner of an IT solutions firm.

PROGRAM COSTS AND RETURN ON INVESTMENT

The cost of a CSS apprentice will be \$44,000 per year in 2017–2018. This cost consists of the apprentice salary of \$23,660, a 32 percent benefits package, certification software and fees for certification tests, training and related materials, salary increases for certification attainment, tuition for one college course, apprenticeship management, and STEM club materials. Over 85 percent of the cost for a CSS position supports the apprentice in his or her apprenticeship. Program costs are funded from the budgets of the individual schools that participate in the program.

The School District of Philadelphia does not calculate a strict ROI, but it believes that UTP provides a kind of societal ROI in that its students build upon their IT skills and interests through work and learning experiences and are prepared for employment in an expanding industry. The apprentices are also encouraged through their year of service to be involved in their communities. UTP has an overall focus on the students' personal development. Many are low-income and are assisted with their needs in a supportive environment that values diversity.

⁴⁸ See www.dol.gov/apprenticeship/leaderslist.htm.

FUTURE PLANS

CISP plans to change the program standards and reduce the length of the RA from three years to two. Also, the school district wants to expand the number of apprentice positions at district schools and to develop an IT project management apprenticeship with corresponding positions in schools. It hopes to provide CSS apprentices with monthly evening workshops in which industry experts will provide instruction on coding, server support, cloud computing, and other technical topics. It also wants to formalize its partnership with one employer who has hired many of its apprentices.

INSIGHTS

Dawn L. McCray, president and chief executive officer of CISP, said: “Building an apprenticeship program requires a significant amount of commitment and buy-in from all partners. It is especially essential to find the right partnership so the relationship is mutually beneficial. As all partners explore the possibility of partnership, a few essential questions must be answered to determine and ensure the benefit for moving forward: What are the goals of each partner? What is the current capacity level of each partner? What are the skills and knowledge depth of each partner? What are the risks associated with developing the partnership?”

CONTACT INFORMATION

For program-related inquiries, contact Elizabeth St. Clair, Manager, Technical Support, Office of Educational Technology, School District of Philadelphia, 440 North Broad Street, Suite 402, Philadelphia, PA 19130; 215-495-3209 or estclair@philasd.org; <http://utp-philly.org/>.

For employer-related inquiries, contact Dawn L. McCray, President and Chief Executive Officer, Communities In Schools of Philadelphia, 2000 Hamilton Street, Suite C-100A, Philadelphia, PA 19130; 215-498-6384 or dmccray@cisphl.org; www.cisphl.org.

**COMMUNITIES IN SCHOOLS OF PHILADELPHIA:
URBAN TECHNOLOGY PROJECT REGISTERED APPRENTICESHIP PROGRAM**

Historical Program Data (from date started to April 28, 2017)

Program start date	November 2015
Number of apprentices who started program since inception	115
Percentage of apprentices who completed program (completers)	42%
Percentage of completers who are new hires vs. incumbents*	8% new hires 9% incumbents
Percentage of completers who are still working for apprenticeship employer	12%

Current Data as of April 28, 2017

Number of apprentices enrolled in program	9
Average age	22
Gender	78% male 22% female
Race/Ethnicity	78% African American (not Hispanic or Latino) 22% White (not Hispanic or Latino) 0% Asian (not Hispanic or Latino) 0% Other race/Two or more races (not Hispanic or Latino) 0% Hispanic or Latino (any race)

* Incumbent workers were already employed by the employer when they started the RA program.