My Brother's Keeper Digital Literacy Collaborative Case Studies

The My Brother's Keeper (MBK) Pittsburgh Digital Literacy Collaborative (DLC) is focused on enhancing organizational capacity to integrate 21st century skills into established out-of-school-time programs for a primary audience of youth, particularly young men of color ages 16-24 in the City of Pittsburgh and Allegheny County.

With support from The Sprout Fund, each of the 5 Digital Literacy Collaborative resource organizations developed a case study about an existing program they offer that provides youth with the opportunity to acquire technological, social, and academic skills that will enhance their quality of life and ability to secure future employment. Resource organizations were encouraged to select a program that incorporates peer-supported mentorship and/or workforce development, and excellence in digital literacy training.

Case Study Topics

Coding Club: An Allegheny Intermediate Unit Alternative Education teacher pilots a free coding club for youth by utilizing Code.org's high-quality, freely available resources. The volunteer-driven program partners with abn out-of-school-time community program provider to ensure accessible and consistent programming.

Pathway to a Technology Career: The CCAC Homewood-Brushton program enables youth interested in music technology and transitioning into college to take an entry level course through the community college. The program focuses on a subject matter that is of high interest to the target audience while offering college credit.

Technology Explorer: The Computer Reach program partners with the Boy Scouts to bring high school students together twice a month to learn computer skills, go on field trips to explore tech-related career opportunities, and bring access to technology and Wi-Fi in their neighborhoods.

JA Company Program: The Junior Achievement Company Program utilizes a blended learning format to help students explore the principles of entrepreneurship, financial literacy, and business success. This longstanding program has recently been retooled in a digital format.

Manufacturing 2000 Machinist Training: The New Century Careers program integrates theoretical knowledge with project-based, hands-on machining competency development using equipment prevalent within the region's machining industry. This program has a proven track record of job placement in the machining industry.

Case Study Components

Each case study includes the following information about their program:

The **Narrative** section provides an in-depth understanding of the subject program and how it exemplifies a quality digital literacy program.

The **Lessons Learned** section provides a behind-the-scenes look at the actual operation of the program and what it takes to successfully operate such a program.

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The **Attributes** section of the case study demonstrates how the subject program exhibits some of the Best Practices & Attributes of programmatic activities that achieve the stated goals of My Brother's Keeper as described in the MBK Community & Stakeholder report by UrbanKind Institute. For reference, the *Best Practices & Attributes* are:

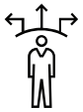
Partnerships with schoolsb Schools often offer secure spaces and transportation options, which are desirable elements in program design. However, many high-quality programs also exist outside of the traditional school context.

Consistency and care: Relationships between youth and program staff are critical but take time to build. Programs that retain participants are spaces where youth feel loved and listened to, and where they feel a sense of belonging and stability.

Clear expectations: Youth should know what is expected of them in terms of attendance and participation as well as the skills and experiences a program can (and cannot) offer so that youth can make informed decisions about participation.

Peer and near-peer mentoring: When youth relate to a mentor socially and culturally, and are made responsible for a peer's success, they learn valuable lessons in leadership and other beneficial social and professional skills.

Accessibility: Barriers to participation must be reduced or eliminated. Accessibility considerations include proximity to programs, public transportation, participation and registration costs, perception of promotional materials, and ADA compliance.



Continuum of program services: Programs should offer a continuous sequence of activities to choose from, go between, or grow into to expose youth to relevant opportunities and encourage interest in digital technology fields.

Year-round programming: Year-round programs build stronger peer and staff relationships with youth, offer more in-depth learning experiences, and provide consistent safe spaces for participants not supported at home or in-school.

Opportunities to stay connected: Providers should allow participants to stay involved even after youth finish high school and "age out." Such youth build deeper relationships, serve as peer mentors, and help to shape future programming.

Hands-on activities with real world applications: Attractive programs engage participants in hands-on, experiential learning focused on life skills and/or college and career preparation, which often includes digital literacy.

Youth input: More personalized goal-setting, meeting youth where they are, and making participants part of the assessment process at the beginning of a new program are critical when setting the program's goals and outcomes.

The **People, Time, & Money** section establishes the scope and scale of the resources required to implement the program.

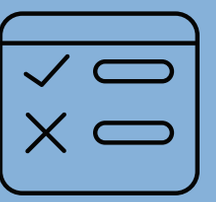
Coding Club at Father Ryan Arts Center with Allegheny Intermediate Unit

Brokering community connections to provide coding opportunities for young people

MBK Pittsburgh-Allegheny County

Overview

Although there is no certification or State-backed curriculum framework for teaching computer science in Pennsylvania, Code.org provides top-notch professional development offerings to educators along with a computer science curriculum. Utilizing these high-quality and freely available resources, an Allegheny Intermediate Unit educator partnered with a reputable community organization to start a free coding club. By building on existing community partnerships, the pilot program has grown into a volunteer-driven, out-of-school-time program for youth that helps fill gaps in digital literacy education until a computer science curriculum is made readily accessible to all students by the State.



Attributes

Partnerships with schoolsb This program is a partnership between Allegheny Intermediate Unit and the Father Ryan Arts Center.

Consistency and care: Piloted as a weekly summer program, it transitioned and expanded into an after-school program.

Clear expectations: A focus on learning to code in an environment of mutual respect was set forth from the beginning of the program.

Accessibility: In-kind donations of time, technology, and space allow the programming to be free to participants, helping to eliminate a common barrier to participation for low-income families.

Hands-on activities with real world applications: Students learn 21st Century skills, including coding.

Lessons Learned

- Code.org provides free promotional materials and sponsored trainings, helping support educators working to close the digital divide in a way that the State does not.
- Partnering with a reputable community organization allows new programs to more easily connect with funders, volunteers, and youth participants.
- Setting clear expectations is not only important for the youth participants but also for the educators. Clearly defining roles and avenues for strong communication among volunteer educators helps promote success from the beginning of the program.
- Youth appreciate when everyone participates by choice, including the educators. Having a volunteer-driven program encourages everyone to collaboratively grow the program.

Average Cost Per Student: $280

College Tech Connect Program at Community College of Allegheny County

Enabling youth participation in community college music technology classes

MBK Pittsburgh-Allegheny County

Overview

After Community College of Allegheny County piloted the Pathway to a Technology Career Program, several areas of improvement were identified through a thorough evaluation process. Updates to the program are now being incorporated through the College Tech Connect Program in partnership with YMCA Lighthouse Project. The program enables youth ages 16-24 who are interested in music technology and transitioning into college to take an entry level course through CCAC at YMCA Lighthouse. The program focuses on a subject matter that is of high interest to the target audience and is free to participants outside of a small book fee.

Attributes

Partnerships with schools: Students are either fully enrolled CCAC students or a dual enrollment CCAC student, if still in high school.

Clear expectations: Participants attend an orientation session, which their parents are also encouraged to attend.

Accessibility: A nominal $25 book fee helps to combat the cost barrier encountered with most college courses. The class also takes place on Saturdays to work around busy student schedules.

Continuum of program services: This course serves as a transition to college, providing credit that can be applied to associate degree programs both in and out of the music technology field.

Lessons Learned

- After piloting a program, use careful evaluation to make adjustments and implement solutions to issues before they arise in future iterations.
- Clearly communicate expectations and responsibilities to both participants and educators to help make the program run smoothly.
- Tailor the meeting times that fit the needs and schedules of the students.
- Ensure that youth participants are proficient in the necessary skills to be successful in the program and provide a prerequisite program for those that are not yet proficient to ensure high levels of success and continued engagement.
- Promote the opportunity through local organizations and programs that focus on the subject matter, creating a learning pathway where youth can level-up their skills.

Average Cost Per Student: $650

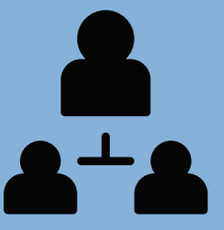
Technology Explorer Post 8816 at Computer Reach

Exploring career options through technology outreach missions and on-the-job access to industry professionals

MBK Pittsburgh-Allegheny County

Overview

Computer Reach turns local electronic waste into affordable technology resources to help bridge the digital divide. For the past two years, Computer Reach has partnered with the Boy Scouts to run an Explorer Club for both boys and girls. This club brings high school students together twice a month to learn computer skills, go on field trips to explore tech-related career opportunities, and create access to technology and Wi-Fi in their neighborhoods. The program trains participants in career and life skills, providing hands-on experiences that are relevant for 21st Century jobs.



Attributes

Consistency and care: Relationships are built through quality time spent together, such as traveling to computer camps on weekends.

Peer and near-peer mentoring: Teens that had tech experience through previous classes lead workshops for other youth participants.

Accessibility: Grant funds were raised to cover costs such as insurance, fees, food, and transportation.

Opportunities to stay connected: Graduates of the program are asked to come back at college breaks to speak with current participants.

Hands-on activities with real world applications: Students learn both hard and soft technology, life, and career skills.

Lessons Learned

- Adult preparation, such as transportation and getting the necessary permissions, is key to logistical success. It is often challenging to schedule activities with businesses and companies that work in the subject area during regular business hours due to the students' busy sports, club, and academic schedules but the trips are key to encouraging students to consider careers in technology-related fields.
- Highlighting community service and technology experience on college applications often results in scholarships and on-campus jobs, making them valuable components of youth programming.

Average Cost Per Student: $750

JA Company Program at Junior Achievement

Inspiring our young people to dream big and hone entrepreneurial skills

MBK Pittsburgh-Allegheny County

Overview

The JA Company Program utilizes a blended learning format to help students fill a need or solve a problem in their community by launching a business venture – unleashing their entrepreneurial spirit. The program consists of 13 modular experiences, taught by a volunteer, that offer youth the opportunity to experience the process of launching a business while learning the principles of entrepreneurship, financial literacy, and business success. This longstanding program has recently been retooled in a digital format using the CrossKnowledge learning management system.

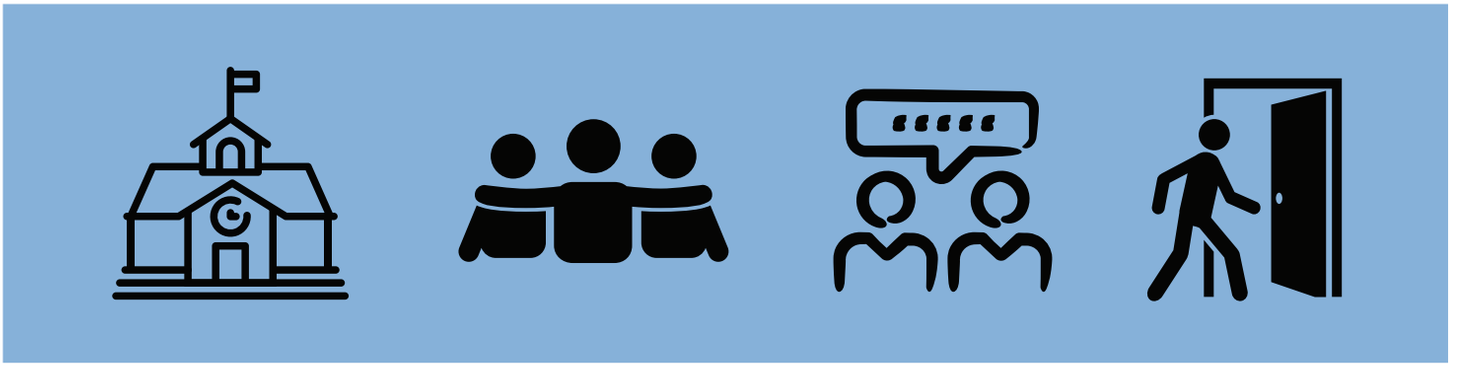
Attributes

Partnerships with schools: This in-school program partners with a variety of school districts in the Greater Pittsburgh region.

Peer and near-peer mentoring: Volunteers are recruited to teach the program and serve as mentors and role models for the students.

Youth input: Participants provide input throughout the program in groups based on their skills and interests, deciding on everything from the products created to the marketing and business plans.

Accessibility: Junior Achievement works with the schools to determine the day and time that works best with student schedules and find the technology needed to implement the program.



Lessons Learned

- The program has recently experienced new obstacles after transferring to a digital format. Switching to a different learning management system has helped to eliminate some of the issues, but thorough trainings are needed for the volunteers to learn not only how to use the system but also how to train the students to use the platform.
- When a program requires technology, it is important to either ensure that students have easy access to the required technology or provide alternative ways to participate in the programming with limited technology.
- It can be challenging for both students and volunteers to commit to programs with long timelines. For this reason, strategic scheduling and flexibility is often required to successfully implement the program.

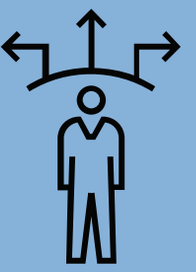
Average Cost Per Student: $56

MANUFACTURING 2000 Machinist Training Program at New Century Careers

Hands-on machinist training provides career pathways for unemployed and underemployed individuals

Overview

The MANUFACTURING 2000 (M2K Machinist Training Program integrates theoretical knowledge with project-based hands-on machining competency development using equipment prevalent within the region's machining industry. The teaching and learning model emphasizes hands-on learning, with blended instruction techniques that include shop training on industrial machines, online coursework, instructor-led classroom training, National Institute of Metalworking Skills (NIMS credentialing, career development through seminars and one-on-one resume assistance, and field trips to local manufacturers. M2K has a proven track record of job placement in the machining industry.



Attributes

Accessibility: The training center is easily accessible by public transportation, is ADA complaint, and the program is free of charge for students. The program also provides accommodations for students with non-job-related disabilities.

Continuum of program services: This program serves as a next step for high school students that participate in the SWPA BotsIQ program. Additionally, through a partnership with the NTMA Apprenticeship Program and the Westmoreland County Community College, apprentices can earn college credits toward an Associate of Applied Science degree.

Hands-on activities with real world applications: Graduates typically undergo a total 280 to 380 hours of hands-on training in NCC's machine shop.

Lessons Learned

- Creating a standard level of preparedness helps to efficiently and effectively provide participants of varying skills levels and educational backgrounds the tools to be successful from the start of the program.
- Holding students accountable during training is important in order to encourage behaviors that are key to job retention but educators also need to provide some flexibility as students work to overcome barriers to consistent participation.
- Finding a balance between staff support and student initiative in the job search process helps to transition from the training program to job placement.

Average Cost Per Student: $6,370