A NEW VISION *for* ENGAGING TEENS:

YOUmedia Learning Labs Network

National Writing Project

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Walk into any of the 29 (and counting) Learning Labs around the country and you'll quickly realize that this is not your typical afterschool space. Since 2011, Learning Labs have been springing up as a new model for engaging youth that combines hands-on learning, mentoring, and technology. Look around a Learning Lab and you'll see teens creating a prototype of a new product on a 3D printer. You'll see teens scripting a video shoot about their community. You'll see teens laying down a track for a spoken word performance. You'll see teens recording a podcast for the latest episode of a video game review program. You'll also see mentors—professional artists, writers, and media makers—helping the teens find their voice.

Learning Labs are community spaces where kids explore, create, and express their interests. Often created in libraries, museums, or local community-based organizations, Learning Labs help teens connect their passions to real-world opportunities (see box). The Labs are places where teens can

Learning Labs are guided by the philosophy of Connected Learning

"Connected learning means bringing together [teens'] social worlds and the thing they want to get better at, and then connecting those two with something that has a payoff in the real world. When we bring those three spheres together, we have what we call connected learning." — Connie Yowell, director of education for the MacArthur Foundation's U.S. programs.

experiment with the new tools and learn to use technology to become makers, doers, and producers, not just consumers.

This focus on youth as producers and innovators has the potential to shift our understanding of learning institutions more broadly. As a librarian in St. Paul expressed it: "I think this [Learning Lab] is a catalyst for really transforming the way we deal with all of our patrons and the way we deliver service…. In a way, it's opened us up to thinking big." And the change can be equally profound for museums, youth-serving organizations, and even schools.

The YOUmedia Learning Labs network is growing, with more Labs on the way. If you're hoping to create a Learning Lab in your city or town, this toolkit is for you. In it, you'll find key features of the Labs, information about the critical role of partnerships, examples of effective programming, practical advice about how to set up a Lab, and more.

KEY FEATURES OF LEARNING LABS

Learning Labs come in many shapes and sizes, but they all share some common features:

- **Physical Space**: Learning Labs are places where youth of diverse backgrounds can connect with one another and with adult mentors to explore topics of personal interest and relevance. The space promotes exploration and discovery.

- **Digital Media and Maker Tools**: Learning Labs provide access to new media, with a mix of digital and traditional tools. They emphasize interest-driven and production-centered learning.

- **Programming**: Learning Labs provide new opportunities for youth to build skills and gain knowledge that connect them to future opportunities.

- **Partnerships and Collaboration among Organizations:** They capitalize on a community's rich set of resources by sparking collaboration among libraries, science centers,

museums, community organizations, and other centers of exploration.

And perhaps most important,

- **Mentors:** Learning Labs are built around **staff and mentors** who help teens make connections related to their interests that will spur deeper learning.

Learning Labs can be in spaces as diverse as science centers, libraries, children's museums, community centers, and schools. There is no one formula for creating a Learning Lab. Each is unique to its city, its community, and its own set of resources.

Teens at the Learning Lab in Allentown, Pennsylvania, for example, capitalize on the area's rich manufacturing history by storyboarding, shooting, and editing short videos about the state of high-tech manufacturing to inspire their peers to develop 21st century STEM skills. The Learning Lab at the New York Hall of Science focuses on the "maker" movement, while the lab in Lynn, Massachusetts, focuses on civic action and responsibility.

Inspiration Behind Learning Labs

Learning Labs are inspired by models first created at YOUmedia in Chicago's Harold Washington Library, ARTLAB+ at the Smithsonian's Hirshhorn Museum, DreamYard Art Center in the Bronx, and YOUmedia Miami at the North Dade Regional Library.

From 2011 through 2014, funding from the Institute of Museum and Library Services and the John D. and Catherine T. MacArthur Foundation supported the planning and development of 24 Learning Labs across the nation. In 2014, these Learning Labs formed the YOUmedia Learning Labs network.

The Physical Space

Learning Labs sites are safe, welcoming, and youth-centered places. They encourage teens to develop their imaginations and creativity using digital media and other tools both collaboratively and individually. Far from the traditional view of libraries or museums, Learning Labs are noisily active, social, collaborative spaces. In Learning Labs, teens work together to imagine and create, try and fail and try again, and ultimately showcase their accomplishments. A physical space that promotes this approach will look and feel different to teens and adults alike, so the choice of a space that can focus on production, collaboration, and social connection is key.

Ultimately, youth should have the sense that the Learning Lab is "their" space. That means involving teens deeply in the design, programming, and goals of the Lab. Teens in Nashville, for example, worked with architects to design their space using Minecraft and other digital tools to envision the layout. Teens in Lynn, Massachusetts, surveyed local youth about what the space should offer. Teens in Virginia are creating the marketing materials for their Lab with the help of a professional marketing firm.

However it happens, engaging young people in helping plan, name, and design the space is a first step toward creating a truly youth-centered Learning Lab, one where young people will promote the use of and engagement with the space through their peer networks.

Many Learning Labs also plan their space to accommodate the spectrum of activity called "HOMAGO"—an abbreviation for "hanging out, messing around, geeking out." HOMAGO reminds us that teens might "hang around" to experience an environment or program area before diving in. Then, they might "mess around" informally,

eventually developing an interest in something where they'd like to "geek out."

Designing for HOMAGO

- The **Hanging Out** space should be a relaxed, social area where youth can eat (yes—allowing food is encouraged), read, talk with friends, and check Instagram. As its name suggests, this area should serve as a pressure-free introduction to the culture of Learning Labs.

- **Messing Around** areas allow teens to tinker with digital media. The space should have a variety of equipment and opportunities so youth can explore their interests: laptops, gaming consoles, recording equipment, video and traditional cameras, drawing pads, 3D printers, and more. The goal is to spark an interest.

- **Geeking Out** areas should offer opportunities to collaborate, take workshops, and perform. This is where mentors are key and youth expand beyond their initial interests.

For more, see Hanging Out, Messing Around, and Geeking Out, *by Mizuko Ito*

However they are designed, Learning Labs should be flexible spaces that follow youth interests. They typically feature comfortable, sturdy, movable furniture. At the New York Hall of Science, for example, the tables have wheels so they can be moved around for different projects. The space also features pull-down extension cords hanging from the ceiling so drills and glue guns are never without power. The tools and gear for the maker space lock up in expandable cabinets. In other places, comfortable seating defines hanging out spaces and movable walls serve as display spaces.

There is no uniform rule about the size of Labs, although larger is better in many respects. ARTLAB+, the Learning Lab at the Hirshhorn Museum in Washington, DC, measures 1,872 square feet and is located in the museum's outdoor sculpture garden. The Lab in Chicago is housed on the ground floor of the Chicago Public Library's downtown branch and occupies about 5,500 square feet. Still others are simply spaces carved out of existing rooms, some no more than 200 square feet. There are even mobile Learning Labs, akin to book-mobiles. But across all these spaces, the same spirit prevails.

Other considerations:

- **Sound studios** are popular draws for teens. The Learning Lab staff at the Harold Washington Library turned a closet into a recording studio by adding soundproofing, a table, power, and data connections for computer hookups.

- **Lockers and storage**: Teens need to safely store their coats, books, and other personal items. Equipment will need to be secured overnight.

- **Food and noise?** Both are encouraged. This is a hands-on doing and making space.

- **Display and performance space**: Teens ideally should have a place to showcase their hard work, whether on an open-mic stage or on Instagram. Being heard is important. Students feel empowered when an audience interacts with their work—and online worlds offer many opportunities for students to hear from others.

Digital Media and Maker Tools

Learning Labs focus on digital media to spark creativity and develop 21st century skills. Therefore, digital equipment is key. Labs vary in

their stock. From geo-tracking and mapping tools, to illustration software, to circuitry and robotics, to digital drum sets—the possibilities are endless. Chicago, for example, has banks of computers, a sound studio, and a wide variety of software for everything from graphic design to video and sound editing. In New York, the Lab is a maker space and offers tools such as 3D printers and laser cutters, as well as duct tape and glue guns. Programming, staff, and mentor capacity all can help guide the initial selection of equipment.

One of the features of any Learning Lab is its online space, where teens showcase their own work, share and collaborate, and learn to critique others' work—a vital 21st century digital literacy skill. Some Learning Labs have developed their own websites, while others have used existing tools such as Google+ or Facebook.

In a three-year evaluation of the YOUmedia space in Chicago, one teen describes the distinction between online spaces at Learning Labs and other social networks:

"So Facebook … is, 'Alright, this is where I just kick it and talk to my friends. I might just put up anything randomly. Twitter, these are just my random thoughts. YOUmedia, this is the place where I'm going to get critiqued, feedback, and connect with students who are creative.'"

In addition to being a place to showcase teens' work, the online space can house their digital backpacks of open badges. Badges are a new form of credentialing that allow teens to display the skills and competencies they develop through activities, as well as their achievements. Like a badge earned in scouting, a digital badge recognizes and celebrates mastery of a new skill—but with a 21st century twist. Digital badges contain layers of in-depth information about what the badge holder has learned while pursuing an interest. A few clicks of the mouse can show where the learning took place, the skills learned,

what talents and knowledge were acquired, examples of creative work, and more.

Programming

Learning Labs' programming encourages youth to stretch their imaginations and abilities. While there are no set programming rules or guides for Learning Labs, programs should immerse youth in a culture of critical thinking about digital media, and offer multiple entryways—from music production to citizen science projects—for them to pursue their interests.

Most important, teens have a voice in the programming. Staff and mentors can design programs, but the most effective programming is youth-driven and based on their interests.

> *"It's about youth having a voice to decide what they want to do and how they want to do it and how it'll affect their lives." — Alicia, Learning Lab Participant*

In fact, at the Chicago Learning Lab, it was only after teens began to design the programs that attendance increased. Originally, staff had proposed a blog of video game reviews. But after one session, all but one teen had dropped out. It was too much writing after a day in school, they said. Instead, they said, they'd rather do a podcast. They brainstormed ideas for how it would work, what roles each would take, and other details. In other words, they took charge. The shift worked. The program has a steady group of podcasters who have not only expanded their knowledge of video games, but also their critical thinking and public speaking skills.

In the Learning Lab in Lynn, Massachusetts, youth were integral to designing the entire space. Youth worked collaboratively to create a budget, raised funding for the space, surveyed teens about what

programs they wanted to see, and presented their requests to the City Council. Not only did the process impart a sense of empowerment and civic engagement, but it also let council members hear what matters to teens—a win-win for everyone.

Many Learning Labs have adopted teen advisory councils to solicit input and ongoing programming ideas. This sense of agency in all the Learning Labs gives teen a true voice, and a new confidence that they can effect change.

As Alicia, a teen who's involved in the Pima County, Arizona, Learning Lab put it, "It's about youth having a voice to decide what they want to do and how they want to do it and how it'll affect their lives."

In addition to being interest-driven, programming should also feature these key elements:

- **Making and doing**: Programming centers on hands-on, active engagement. Youth don't simply consume media and information, they produce content and projects to be shared with a broader audience.

- **Collaboration**: Youth work regularly with others from different backgrounds and areas of interest and expertise. They also work collaboratively on projects within the Lab.

- **Reflection**: Youth review and critique their own work to hone their skills.

Programming should also focus on building skills at a pace that continually challenges teens. Like leveling up in video games, mastery unlocks the next experience. This cycle is reflected in the layout of the space—the HOMAGO stages. This interest-driven learning puts youth in charge, with the help and guidance of caring adults.

Much of the programming depends on the strengths of the partners involved, the community, and available mentors. For example, the team in Tuscaloosa, Alabama, is a partnership between the local public library and Alabama Museum of Natural History on the campus of the University of Alabama. Libraries excel in storytelling, and the museum is a federal and state repository of maps. Combine the two, along with the strengths of graduate students and staff at the university's geography department, and you get a story-mapping history project, in this case, a product of Tuscaloosa's location in "tornado alley." With the help of the mentors, teens used geospatial tools and urbexing—urban exploration of man-made buildings, often abandoned or decaying—to map the "urban renewal" wrought by tornadoes, a new way of discovering the city's history.

Teens at the Learning Lab in Virginia, housed in a science center, have created how-to videos for middle-school students at summer science camp. In one video, for example, they explained the physics of a roller coaster. The teens at the Lab came up with the idea, mapped out the science instruction they would need to convey, managed the video and sound production—the ultimate in project-based learning.

"We're trying to give the tweens that near-peer experience," said the Lab's director. "They can realize that those teens are not that much older than me, so I can do it too."

This program guide offers additional ideas.

Partnerships and Collaboration Among Organizations

Collaboration among youth-serving organizations is one feature that sets Learning Labs apart from other out-of-school activities and programs. A museum might partner with a library, or a science

center might partner with a youth media program. While organizations may have worked together before on a single program or event, Learning Lab collaborations are longer term and more deeply integrated. Although the partnering organizations may have co-existed in the same community for decades, this is often the first time that a library or museum has worked with community partners under the same funding, toward the same goals.

These partnerships in turn create new opportunities to link the expertise and talents of different organizations.

- The Learning Lab in Dallas combines the art expertise of the Dallas Museum of Art with the science know-how of the Perot Museum of Nature and Science to create programs in which youth explore science content through art.

- In Columbus, Ohio, the Columbus Art Museum, Wexner Center for the Arts, COSI (the Center of Science and Industry), a library, and WOSU Public Media station all work together to coordinate programming. The organizations have developed a shared vision of outcomes for the network and are developing tracking and data systems to understand how youth move across these learning spaces.

- In San Francisco, the city's public library, the California Academy of Sciences, Bay Area Video Coalition, and KQED, a local public media broadcasting station, partner to bring a wide range of digital storytelling expertise to science and environmental issues. In a joint "Save the Earth" project, youth created environmental solutions to pressing local problems using digital tools. The Academy of Sciences and the public library contributed the environmental problem-solving skills and KQED and the video coalition helped the teens tell their story.

These partnerships create synergy between the organizations, resulting in creative mash-ups that merge diverse disciplines and lead to new ideas and fresh approaches to teen programming.

The partnerships have also begun to transform how institutions see their role in supporting youth education.

Morgan Anderson, coordinator of teen programs for the Columbus Museum of Art, said of the transformation, "Our institutions have never before worked together and tried to identify learning pathways for youth across the city. Instead of competing for an 'audience,' we are working together to serve youth in our community. This is a fundamentally different mindset for our organizations—placing us as collaborators and not competitors."

Staffing and Mentors

The programming and staffing recognize that teens are at a stage in life when they are seeking more independence and autonomy. They are also looking to their futures and seeking new interests and opportunities to build skills and develop talents. Staff and mentors at Learning Labs recognize this juncture and with input from youth, they build programming around autonomy and youth voice.

At the heart of the Learning Lab model are mentors. Experience has shown that they are critical to the Labs' success. Often experts in their own fields, mentors include artists, engineers, environmentalists, documentary filmmakers, and geographers,

"They're the ones who are responsible for getting kids to articulate their own interests. Mentors have insight into kids' mental processes. They have to pick up on cues, and make something productive out of it." – K-Fai Steele, National Writing Project

among others. They help teens identify new interests, encourage them to expand their horizons, and offer them access to new people and resources. K-Fai Steele, program associate at the National Writing Project and former teen programming specialist at the Free Library of Philadelphia, a Learning Lab, says that because mentors are on the front lines of programming, "They're the ones who are responsible for getting kids to articulate their own interests. Mentors have insight into kids' mental processes. They have to pick up on cues, and make something productive out of it."

As the three-year evaluation report of Chicago's YOUmedia found, relatable mentors are linchpins in teen engagement. Not only do they cultivate teens' interests, but they address teens' various social and emotional needs. The whole package is what makes mentors critical, as this teen told the researchers:

"[Mentors] have extensive knowledge…they're all college-educated professionals. They can help you with it…intellectually, technologically, and all that. It's the environment and the mentors that foster creativity and…it reinforces your interests. It makes you feel good about yourself."

Mentors share the following qualities:

- **Leadership and relational skills:** Youth must be able to relate to mentors and feel comfortable with their leadership. Mentors must have the twin traits of motivating young people to venture out of their comfort zones and empowering them to be self-directed learners. They must also be able to provide helpful critiques in online forums and in workshops.

- **Personal portfolios:** Youth crave an opportunity to learn from mentors who really understand the craft, process, or industry they want to learn. Mentors' personal portfolios of work in high-interest fields like sound engineering, digital filmmaking, computer coding, or STEM fields provide credibility and a source of inspiration for young people.

- **Pedagogical knowledge:** Mentors must not only excel in their fields, but they must be able to teach. Mentors with a firm grasp of pedagogy will likely meet with more success in helping youth develop digital media skills.

- **New media and/or craft skills:** Mentors must be technically fluent enough to lead new media workshops and demonstrate tools and media. The more digital skills, the better.

Mentors are in the community already; they just need to be tapped. In Thornton, Colorado, The Studio at Anythink Wright Farms (one of the Rangeview Library District's Anythink Libraries) uses an artist-in-residence model to attract highly talented mentors without the benefit of a large budget or available mentor partners. Artists are recruited for a six-month commitment with a stipend. Some Labs have felt daunted by the prospect of finding "professional artists" in their small communities, until they realized that communities of all sizes have experts and people who are passionate about something.

Training and professional development are important facets of staffing because staff will inevitably take on new roles in Learning Labs. Staff must be adept in balancing oversight with creative reign. Roles can include training, supporting, and providing feedback to staff working directly with youth; overseeing workshops; recruiting youth; and acting as a community liaison. Staff will also oversee day-to-day management and operations, build community partnerships, develop resources, and handle marketing and program evaluation.

All staff, be they mentors, administrators, or resource guides should have access to a thoughtful supervisory and professional learning community to continue to expand their skills.

COSTS AND BUDGETS

Budgets are important to sustainability. Creating a three-year budget is a good starting point. It should include costs related to personnel, equipment, the build-out of the space, programming, operations, supplies, contracts, staff development, travel, evaluation, marketing, and indirect costs (rent, furniture, repairs and maintenance, legal fees, utilities, etc.). It's also vital to budget enough for upgrades and replacement of equipment, as well as for books and computer software.

Devoting enough money to staffing a Learning Labs site is crucial because adults are key to making the space work.

RESEARCH BEHIND LEARNING LABS

Learning Labs are more than "cool afterschool." They emerged from—and continue to influence—a rich body of research, beginning with cultural anthropologist Mizuko (Mimi) Ito's three-year study of young people's media practices in everyday settings. Ito found that digital media and online networks allowed young people to approach learning in new, more unfettered and engaging ways. No longer driven by a grade, and with fewer consequences if they stumbled, young people online could begin from their own interests, whether that meant reading blogs about fashion or finding musicians to follow on Twitter. Often the "hanging out" led to more involved learning, from learning to use GarageBand to create their own mix-tapes to creating video tutorials on fashion and makeup. While the learning began with interest, it was the digital tools and online opportunities that allowed teens to flourish.

This theory of learning would guide the creation of Learning Labs, first in Chicago in a test case for the research, and later with evolving iterations of the theory at the 29 Learning Labs nationwide. The work continues to evolve and expand.

In many respects, Learning Labs are truly places of scientific

exploration. Researchers are watching and learning from the experiences there, and Labs are an integral part of advancing our understanding of how learning happens in informal spaces.

You can find more research about Learning Labs and the theories behind them here.

JOIN US!

Learning Labs are an exciting undertaking for any organization. They can be transformative spaces, for both youth and the organizations that host them. We hope you'll join the network.

The YOUMedia.org site is a great resource for news and information on Learning Labs and a place to engage with members of the YOUmedia Network. We hope to see you there.

http://www.youmedia.org