

Creating a Learning City: Connecting Teens Across Multiple Learning Labs

The proposed project requests funding not to plan a single Learning Lab but instead to facilitate the planning and development of a system of Learning Labs across the city of Columbus, Ohio that use 21st century digital media tools to enhance learning and create a collaborative community of teens across our city. The partners on the grant are a unique collaboration of community organizations including the Columbus Metropolitan Library (CML), Wexner Center for the Arts (WCA), Columbus Museum of Art (CMA), WOSU Public Media (with television production facilities located in the COSI building) and the Center of Science and Industry (COSI). If awarded, this grant will allow the partner organizations, guided by a teen design group, to create a connected system of opportunities for teens across the city, utilizing existing or planned learning lab spaces at each of the partner organizations. These organizations have already begun collaborating on a Learning City project designed to support “an environment rich with learning opportunities, committed to enabling all individuals to achieve their fullest potential.” (Sheppard, 2010) The proposed grant will allow us to extend this work by utilizing the individual assets of each organization to build a connected system of programming that occurs across the city, bringing teens from all parts of our community into collaboration around a variety of programs and initiatives. This grant will **maximize our collective return on investment** by funding a planning process that will better position the partner organizations, individually as well as collectively, to positively influence thousands of teens and, ultimately, benefit the entire community.

Assessment of Need

In Columbus, teens make up about 7% of the total population. Across Ohio, we are dealing with how to best serve the teen population in ways that both develop them as individuals and encourage them to stay in school, pursue higher education, and remain in Ohio. Together, the partner institutions already serve thousands of teens through a wide variety of programs, but the need for spaces for teens to gather remains an issue for our city. We know from research that the hours between 3 and 6 p.m. are the peak hours for juvenile crime as well as for experimenting with drugs, alcohol, cigarettes and sex (Fight Crime: Invest in Kids, 2002). We also know that teens who have nothing to do after school are nearly three times more likely to skip classes, three times more likely to use marijuana or other drugs, and are more likely to drink, smoke and engage in sexual activity than teens who participate in organized after school programming (YMCA of the USA, March 2001). Paralleling the national research, a recent COSI study of the Miracle Gro Capital Scholars program—serving 41 low income students after school and during the summers since they were in 6th grade—revealed that participation in the program was directly correlated with improvements in confidence in their own ability to succeed, their ability to make good choices in friends, their willingness and ability to know when and how to ask for help, and in their ability to stay on track toward their goals. All of these students will be entering college this fall, with 85% of them being first-generation college students.

CMA’s teen programs are designed to foster and advance the 21st century skills of creativity, critical thinking, collaboration and communication. Under the guided direction of CMA educators and classroom teachers, programs are developed using an emergent curriculum that allows participating teens to guide and shape the program focus, utilizing the Museum as an informal learning environment. In CMA’s Art Lab program, for example, Columbus area high school students undergo an intensive, school-year long internship in which they experiment with technology to create videos for use as educational resources. The videos, based on the interns’ in-depth research on selected themes, genre, or artwork from CMA’s collection are widely distributed through CMA’s YouTube channel, iTunes, and also are made available to CMA visitors on iPods. More recently, the interns made the decision to expand their involvement and become CMA teen ambassadors in the community. This added role has greatly impacted their community in myriad ways, including designing and facilitating tour experiences for teens, hosting a screening of their videos at a local movie theater, holding Skype pizza parties with teen interns from California and Connecticut, providing a docent training on how to work with teens, and by organizing and hosting a citywide teen showcase in which teen interns from Wexner Center, COSI, and OSU’s Urban Arts Space presented on their respective intern experiences. Art Lab would like to continue on the path of getting these teen organizations together for “Geek Out” workshops.

The Geek Out workshops will be hosted by Art Lab interns. Workshop events will take place in CMA’s Innovation Lab, a new hub for experimentation and technology located in CMA’s 18,000 square foot Center for

Creativity. The Innovation Lab is equipped with a state-of-the-art recording studio, 30 Mac laptops, HD video cameras, green screen capabilities, wireless internet and a bevy of current software for teens to experiment and create. Geek Out sessions will be geared toward a different audience for each of its sessions, targeting teen and pre-teen groups including New Media Middle School, King Arts Complex, Wexner Center /Kaleidoscope, and an open night for all teens regardless of organization affiliation.

Columbus Metropolitan Library, named the #1 Library in the country, has teen areas in all branches. Teen programming is designed to establish relationships between staff and teen customers and provide other caring adults in teen's lives to assist with their growth and development. Examples of current teen programs and services include Homework Help Centers, Summer Reading Club Programs, Volunteens, and Book Discussion Groups. Gaming programs provides staff the opportunity to build relationships and promote literacy with teens in a casual atmosphere. CML also holds Teen Lock Ins; fun, after hours events at the library featuring a variety of activities: scavenger hunts, booktalking, food and gaming. Lock Ins have an appeal that often attracts reluctant teens and provides staff the opportunity to build relationships. CML also has a Teen Advisory Council at 6-8 locations that meet on a monthly basis, to seek teen's involvement and input into decisions affecting them.

The Wexner Center for the Arts' many teen programs provide unique opportunities for career exploration, preparation, and development. Much more than simple art projects or one-time gallery tours, these activities are profoundly relevant, timely and, in some cases, life-altering. Programs include *TeenArts Fusion* workshops, providing the equipment, space, and expertise that teens need to strengthen their voices and deepen their participation within their own social and political worlds; free *WexLab* workshops, giving teens the rare opportunity to pursue a variety of studio experiences—including shooting and editing digital videos and digital manipulation of photographs—with professional contemporary artists; the Youth Division of *Ohio Shorts*, an annual juried showcase, finding the best work by young Ohio filmmakers and presents it “on the big screen” to the public; *Art this Week* after-school programs, allowing teens to experience contemporary art in all disciplines, meet visiting artists, and talk about their experiences over pizza; and *The Other Prom*, presented each spring in partnership with Kaleidoscope Youth Center, giving LGBTQ teens the opportunity to express themselves in an environment that may be more supportive of their evolving identities than their home high schools. As part of The Ohio State University, the WCA can leverage unique university assets such as the Billy Ireland Cartoon Library & Museum in developing and implementing its many teen programs.

WOSU engages teens in a variety of ways from giving tours for school groups curious to observe work at a broadcast facility to providing full blown, hands-on experience in multimedia production including a summer social media camp that gave students experience in video production roles, storyboarding, shot selection, audio recording, and editing styles. Using flip video camcorders and free editing tools students were transformed into producers resulting in *The Shadow Knows*, a series of seven half-hour programs for teens exploring career options. Each program included a student-produced segment and a discussion of the featured career with a professional from the host company fielding questions from a group of high school students about the preparation and skills required for the job. In a second project, history became personal for teens who recorded interviews of World War II veterans in conjunction with the national television series, *The War*. WOSU provided equipment; coordination with the host company and prospective interviewees; and orientation for and supervision of the student producers. The interviews are archived on www.ohiowarstories.org.

Beyond the MGCS program, COSI also serves teens through a variety of programs. COSI's volunteer and Career Ladder program includes teens starting at 12 years of age working in all parts of the building and across all divisions of the organization. These teens start first as volunteers and at 16 years of age have the opportunity to move into the Career Ladder program and into paid positions across the building. COSI Academy introduces teens to people and places they would have no access to otherwise, showing them a wide variety of career alternatives and building a community of teens who are extending their learning opportunities. COSI has also recently begun hosting teen nights once a quarter, planned and organized by COSI's Teen Advisory committee, with teens representing a mix of gender, ethnicity and income level attending.

This project seeks to begin to answer a key question put forth in *Living and Learning with New Media: Summary of Findings from the Digital Youth Project*: “What would it mean to really exploit the potential of the

learning opportunities available through online resources and networks? What would it mean to reach beyond traditional education and civic institutions and enlist the help of others in young people's learning?" But these labs will be more than just places to use technology and engage in programs with new content. They will be places that meet the needs of teens--places that are designed by teens and perhaps, in some cases, even run by them. Richard Halpern, of the Erickson Institute for Graduate Study in Child Development, has stated that the best programs for teens give students not only the chance to explore and learn, but time to "dawdle and daydream" as well. These labs will be places that not only meet these needs but also the needs of teens outlined by a recent publication of the Digital Youth Project: *Hanging Out, Messing Around and Geeking Out*. Some of the characteristics found to be important and that will become part of the design process for our connected labs include: creating space that supports spontaneity and feels like "neutral" territory; programs that are perceived as low-risk and non-judgmental; flexible boundaries to allow coming and going; collaborative activity that is actively supported, rewarded, and fostered; easily accessible ways of tinkering, making and doing, and experimenting; technology that youth are interested in; opportunities and spaces for conversation; mentoring from adults and older peers; and a sense of ownership for the teens.

While each partner organization already has its own set of teen program offerings, funding from this grant will provide Columbus teens with a more coordinated system of programming, one that gives them access to a wider variety of experiences, enables them to collaborate across programs and neighborhoods in ways they might never have the chance to otherwise, and helps to build a sense of community among the young people in Columbus. This grant will not only provide teens with a mix of programming that allows each individual teen to explore the topics and have the experiences that are of most of interest to him or her, but will provide physical spaces and other ways to connect teens with each other. Vital to each lab will be the opportunity to engage in activities that develop and enhance 21st century learning skills with the thread that connects each site being technology—its uses and its possibilities. Currently, teen resources in Columbus exist more as a kind of "crazy quilt," beautiful but without system or organization. This grant seeks to bring those unique pieces together to provide a more organized and more easily accessible system for teens in our community. Technology, in both its current manifestations and in ways yet to be created, will be the thread that sews this "quilt" together. The learning from this planning grant will allow the partner organizations to go beyond the status quo of current programming to create new and unique teen driven opportunities.

Project Design

The partners in the proposed project have already begun collaborative work around a project entitled The Learning City. This project asserts that "a city's greatness can be measured both by the excellence of its formal educational institutions – schools and universities – and by the active presence of a continuum of lifelong learning opportunities." The partners are working to organize the collective power of these resources as a connected learning industry. In addition to already collaborating programmatically, each partner site already has a physical space that could be used as a Learning Lab for teens in place or is in the process of planning such space.

A youth design team will be formed drawn from the youth each organization already works with. These youth will come from a wide variety of neighborhoods, ethnicities and income levels and will work together in a facilitated process to design these multiple lab programs and spaces. Christian Long (Vice President / Education for [Cannon Design](#) + The Third Teacher [site](#) / [book](#)) will facilitate this evolving process for the team using his [Prototype Design Camp](#) as a model. This model is currently being used by youth around the country and locally here in Columbus to help design the [TEDxYouth@Columbus](#) event to be held at COSI on November 10, 2011 in conjunction with [TEDxColumbus](#) to be held the following day.

Phase 1: Understanding and Observing

During this phase, the teens and project team members will immerse themselves in learning about our community and the needs of the teens in this community. Organizations will begin to meet to assess our individual and collective assets. Each organization will bring to the table their programs and connections to teens. These vary widely across organizations--some are connected to particular schools, some are connected to neighborhoods and some are connected across the city. The differences will become the strengths of this project as we use the year of planning to create a collaborative effort to enhance the lives of teens in our town.

The goal of this phase will be to develop a strong set of background knowledge about potential experiences and needs of the teens in the community. These understandings and observations will serve as a springboard to begin to address the design challenges related to these learning labs. During this phase potential obstacles will be identified, examples of other learning labs will be examined, teens will be interviewed, and physical spaces and places will be visited and critically examined. In addition, observations of ways teens behave and interact inside this kind of space will be completed and teens will interview their peers about their activities and desires for this kind of space. Research will be conducted on the best mentoring practices and technology interfaces and practices.

Phase 2: Define the Issues and Develop Ideas

In phase 2, the project team will turn its focus to becoming aware of the methods and challenges in meeting the needs of the teens in our community and to developing insights about how the various organizations might develop our learning lab spaces in ways that both complement each other and provide unique learning experiences. During this phase the team will focus on questions such as “How could we...”, “What might it look like if...”, and “Why don’t we...” in order to determine the best ways to meet the needs and desires of the teens, integrate the mentors and design the spaces and the use of various technologies. In many ways, our spaces will become physical catalysts for an emerging teen design team that will seek to serve their peers and the larger Columbus community over time. To support this long-term vision, the project team will be challenged to brainstorm as many ideas for these learning labs and the virtual collaborative space as possible and to suspend judgment about whether the ideas are possible or not. In this phase, no idea is too far-fetched, no ideas are rejected and quantity is valued. This is the phase where wishful thinking and dreaming is both encouraged and expected. This is the key to the design thinking methodology which values empathy to fuel the discovery of previously undiscovered “what is possible” ideas rather than the confirmation of existing assumptions.

Phase 3: Prototype and test some ideas in existing spaces

An important piece of planning is to prototype some of the ideas quickly. Using spaces already existing in several of the sites, the team will implement some of the ideas both for programming and for collaboration. These prototypes will allow the team to combine, expand, and refine ideas so that the full implementation phase following the end of this grant will be based on best practices. The purpose of phase 3 will be to learn what works and what doesn’t work, to go back to the prototypes and modify them based on feedback and then to try again. The resulting product will be a selection of ideas that can be implemented as appropriate in each community learning lab site.

Over time, the teen designers will publically share their prototypes (and the context which sparked their innovative solutions) with the city. Key to this is a blend of digital storytelling and offering the community (teens and otherwise) opportunities to get involved to support the deployment of various design solutions. To support this, project teams will develop a virtual and location-specific gallery of prototypes that can spark long-term conversation and action within Columbus.

Three project partners—COSI, WOSU and CMA—already have space identified and available for immediate use. The other two partners, CML and WCA, are in the planning stages of creating what they want their space to be, where it will be located, and what it will contain. The process outlined in this proposal will allow the teens in the Prototype Design Camp to guide the partners in developing ways to maximize our current spaces and design the new spaces to best meet the needs of the teens. Each of the existing spaces already houses technology and the ability to incorporate digital media; however, these capabilities are not yet being used to their maximum benefit for teens. This grant will allow those partners with existing spaces to learn more about and to plan how to better use these spaces to meet the needs of teens in our community. The partners who have not yet created designated spaces will be informed in their design processes by the proceedings of this project. In addition, the project will create a joint web portal based on work already being done by WOSU around a local neighborhoods project (<http://www.columbusneighborhoods.org>). While each partner will have its own portal, ultimately the sites will come together to allow for collaboration and shared content.

Each partner organization has or is developing a staffing plan for its proposed space. This grant will allow us to work across organizations to maximize these staffing plans to avoid redundancy and to best utilize

resources. Mentors and volunteers can be trained to work across sites and planning together will allow us to determine ways to best share our resources and receive the highest return for the students.

Project Goals and Impact

Across all the partner organizations, we share four goals for our learning labs: 1) To foster 21st century skills (especially the 4 C's) by utilizing new media to build ideas and to take action; 2) To help teens connect with and find value in the cultural institutions/partner organizations and to make them their home(s); 3) To provide spaces that allow teens to live the potential of the learning available through technology, mentoring and experiential opportunities; and 4) To create a system that connects teens across all of our spaces in tangible ways and allows them to have a role in our community.

At the conclusion of the planning year, Columbus will have in place a plan for a coordinated system of Learning Lab programs that allow teens to work both individually and in collaboration on a variety of projects that, collectively, will enhance both their own lives and the life of our community. In addition, we will also have a blueprint for designing additional labs throughout the country.

The evaluation for *Creating a Learning City* is focused on answering the overarching evaluation question: to what degree and in what ways was the planning process effective? To answer that question, three evaluation questions will guide the evaluation process:

- Did the planning process result in a 'plan' in which all parties have a stake?
- In what ways did the planning process involve the stakeholders?
- In what ways does the plan itself reflect both the distinct and the blended voices of the participants in the planning process?

Program evaluation will be built on the philosophy of the project and thus will be co-designed evaluation, to be led by the Institute for Learning Innovation (ILI). Columbus-based personnel of ILI will facilitate the process of co-designing the evaluation using a team representing the youth and the various partners in the project, formed during early discussions around the project. The evaluation will follow the standard program evaluation structure: 1) The logic model of the program will be critically considered by the evaluation team. 2) The team will then begin to frame and contextualize questions for each target audience. 3) These questions will then be organized across activities and audiences, creating a matrix for planning. 4) The team will identify specific interventions for data gathering and determine the appropriate tools. 5) Using a capacity-building approach, the team will construct appropriate measures and data-gathering tools with the close guidance of the ILI facilitators. Data gathering, entry, analysis, and reporting will be guided by ILI but conducted by the team itself. As much as possible, data will be triangulated to include at least one quantitative and one qualitative data source—with the overall goal of describing specifically and deeply the efficacy of the planning process in this co-designed manner for the various audiences *and* tying it to the effectiveness of the product.

A secondary purpose for the co-design is to ensure that evaluative thinking is incorporated into all elements of the planning process and documents. By using ILI staff as mentors to youth and partner representatives, the co-designed evaluation process will be incorporated into the plan itself. The collaborative construction of the logic model for the implementation project will also facilitate the incorporation of measurable outcomes into the full project being planned.

By using ILI as a facilitator as we work toward the evaluation outcome, we will reduce the cost of instrument development, testing, data gathering, data entry, and report construction significantly. This cost savings will allow the project resources to fund the facilitation, oversight, guidance, mentoring and, ultimately, the construction of the report to the MacArthur Foundation regarding the efficacy of the project in meeting the goals.

Project Resources: Budget, Personnel, and Management

Each partner organization will designate a lead person to participate in the overall management of the project with the Principle Investigator on the grant serving as the overall program organizer. A timeline for all activity will be set out at the start of the grant with benchmarks and measurables determined in advance of

starting the project. The project leads will work side by side with the teen design team throughout the entire project.

Each partner organization will contribute staff time to manage the work of this grant and the planning for their individual organization. The consultant, Christian Long, will serve as coordinator of the teen design group. Meetings space will be provided by all partnering organizations as the planning meetings move around all the sites. Funding from the grant will be used to purchase supplies and materials, and to provide incentives for the teen advisory group.

The leadership team will be comprised of one team member from each organization and the consultant working with the teens as follows:

- Chris Taylor is Deputy Director Public Services at the Columbus Metropolitan Library. Chris will serve as the lead team member from CML and as overall project lead. Chris has worked in libraries off and on for over 30 years. Since 2007 she has been the Deputy Director with responsibility for the Public Services Department (20 branches, the Main Library and Outreach Services).
- Shelly Casto, Director of Education, joined the Wexner Center in 2002. She and her staff have created pioneering new programs specifically targeted to teenagers. Shelly serves as adjunct faculty in art education at Ohio State and serves on the Ohio Department of Education's Committee on Arts and Innovative Thinking.
- Cindy Meyers Foley is Director of Education at the Columbus Museum of Art. She has refocused the institution on its role to provide, foster and champion Creativity with an emphasis on Imagination, Critical Thinking, and Innovation. This effort culminated with the opening of a new 18,000-square-foot Center for Creativity on January 1, 2011.
- Thomas Rieland has been General Manager of WOSU Public Media in Columbus since 2002 and has over 30 years of broadcast experience. Tom created the WOSU@COSI studios in an innovative partnership with COSI. The facility includes studios, production suites, community engagement space, and a media lab.
- Dr. Kimberlee Kiehl, Senior Vice President and Chief Strategy and Operations Officer, will serve as the lead person from COSI. Dr. Kiehl has been at COSI for 11 years and has experience designing and operating programs for all ages. Dr. Kiehl has just completed the management of an IMLS Leadership grant to build a set of exhibits linking researchers to the public. She has served as adjunct professor in Education at The Ohio State University for the past 11 years after leaving her tenured faculty position there to move to her position at COSI.
- Christian Long is an educator, school planner and passionate advocate for innovative learning communities. He holds a master's in education from Harvard and speaks internationally about trends in education and innovative education practices. He is the founder and CEO of Be Playful, a collaborative design studio focused on changing the way we learn and the thought leader for Prototype, a program where young creatives use the mindset and methodology of design to solve real world problems.
- Dr. Joe Heimlich will serve as lead for the project evaluation. Dr. Heimlich is a professor at The Ohio State University and a research associate at ILI. He has extensive experience evaluating programs in informal learning settings.

Funding from this grant, as detailed in the accompanying budget narrative, will be used to cover costs associated with the overall design process, prototyping the first set of recommendations, evaluation of the overall project and project-related travel. Funds will also be used to offset each partner organization's cost of staff time, space, and prototyping, to ensure that the team has the staff release time needed to successfully complete this project. All decision-making will be shared through sessions facilitated by Christian Long and communication will be ongoing using tools such as DropBox (used to prepare this proposal), email communication, in-person meetings and longer decision-making "retreats." The co-designed evaluation process will also serve to ensure that all partners are represented in both decision-making and communication strategies.

BUDGET FORM: Section B, Summary Budget

	\$ IMLS	\$ Cost Share	\$ TOTAL COSTS
1. Salaries and Wages	\$0.00	\$114,506.00	\$114,506.00
2. Fringe Benefits	\$0.00	\$32,106.00	\$32,106.00
3. Consultant Fees	\$0.00	\$0.00	\$0.00
4. Travel	\$12,000.00	\$0.00	\$12,000.00
5. Supplies and Materials	\$12,500.00	\$0.00	\$12,500.00
6. Services	\$62,000.00	\$0.00	\$62,000.00
7. Student Support	\$0.00	\$0.00	\$0.00
8. Other Costs	\$0.00	\$0.00	\$0.00
TOTAL DIRECT COSTS (1-8)	\$86,500.00	\$146,522.00	\$233,022.00
9. Indirect Costs	\$12,975.00	\$0.00	\$12,975.00
TOTAL COSTS (Direct and Indirect)	\$99,475.00	\$146,522.00	\$245,997.00

Project Funding for the Entire Grant Period

1. Grant Funds Requested from IMLS	\$99,475.00
2. Cost Sharing:	
a. Applicant's Contribution	\$146,522.00
b. Kind Contribution	\$0.00
c. Other Federal Agencies*	\$0.00
d. TOTAL COST SHARING	\$146,522.00
3. TOTAL PROJECT FUNDING (1+2d)	\$245,997.00
Percentage of total project costs requested from IMLS	40 %

*If funding has been requested from another federal agency, indicate the agency's name: