

A project of:
children's
museum
PITTSBURGH

Crowdfunding to Support Making in Schools

A TOOLKIT



In partnership with:
MakerEd

MAKING AS A LEARNING INNOVATION

“Making” may be thought of as building or adapting objects using real tools and real materials and engaging learners in the process of using these tools and materials.

Schools, museums, libraries and other community learning centers are integrating making as an approach to learning through the creation of programs and dedicated makerspaces. As the making movement matures by leaps and bounds, and as educational organizations begin to make greater investments in making, experience has proven that the fields of informal and formal learning continue to need high quality professional development in order to not only initiate, but to grow and sustainably integrate making as a learning process into their educational contexts. In particular, K-12 schools and affiliated sites of learning such as afterschool programs and community centers are expressing great interest and turning to informal learning institutions such as museums and libraries for guidance and professional development in support of making. Thoughtful integration of maker education into K-12 learning environments may enable many more young people across the country access to learning experiences at the intersection of science, technology, engineering, art and math.



Photo credit: Renee Rosensteel

ABOUT THE PROJECTS

In 2015, Children’s Museum of Pittsburgh collaborated with Kickstarter, the online crowdfunding platform, to develop and pilot a model that uses crowdfunding as a way to raise community awareness, support, and funding to sustainably integrate making as a learning innovation into schools.

Crowdfunding is a process of collecting small amounts of money for a single project from a large number of people. Often, crowdfunding is done through a website such as Kickstarter, Donors Choose, and IOBY, to name a few. Since crowdfunding uses the Internet to spread and rally support for a project, it has also been shown to be a great way to build community understanding and interest about an initiative.



Photo credit: courtesy of the Sprout Fund

A group of 10 geographically and population diverse Pittsburgh area schools, from an inner city public school to a rural elementary school, were selected to participate in the initial pilot phase called **Kickstarting Making in Schools**. Experts from the Children’s Museum and Kickstarter worked closely with the schools to design month-long Kickstarter campaigns, which launched in late September 2015.

Funds raised were targeted for professional development, makerspace design services, and equipment, materials and furniture. The aim was for each school to reach their fundraising goal and to move forward with a partnership with the Children’s Museum, including curricular design sessions and

professional development workshops, allowing more schools in the region access to high-quality maker education and the Museum an opportunity to scale its work with schools. Ultimately, seven of the schools successfully met their goals and raised a total of \$108,000 from 500 donors to spur the creation of seven new school-based makerspaces throughout the region.



Photo credit: courtesy of the Sprout Fund

Building on this success of this pilot program, Children’s Museum of Pittsburgh is now partnering with Maker Education Initiative (Maker Ed) and Google to scale this model nationwide. **Making Spaces: Expanding Making in Schools Across the Nation** aims to develop a national strategy to sustainably integrate making into schools across the country. The program scales the model piloted in Pittsburgh, pairing participating schools with a nearby regional hub, such as a museum, library or community organization.

During the 2016-2017 academic year, a cohort of 10 hubs from across the country are each working with 5-10 regional schools to raise community awareness, funding, and capacity for integrating making in ways that meaningfully fit within each school and that leverage the unique expertise of each hub. The Children’s Museum and Maker Ed are providing support, training, and affiliation for participating hubs as they, in turn, support, train, and connect schools, creating a national resource network. It is anticipated that this network will grow as more hubs and schools are added each year, bringing making to hundreds of schools across the country.

ABOUT MAKESHOP® AT CHILDREN'S MUSEUM OF PITTSBURGH

Since opening in 2011, Children's Museum of Pittsburgh's permanent exhibit, MAKESHOP, has blossomed beyond the Museum's walls to become a national model for the research and practice of making as a learning process.

Developed in partnership with Carnegie Mellon University's Entertainment Technology Center (ETC) and the University of Pittsburgh's Center for Learning in Out of School Environments (UPCLOSE), MAKESHOP is a permanent, 1,800 square foot exhibit space dedicated to nurturing informal learning opportunities and research-based understanding at the intersection of the digital and the physical. This partnership model has enabled the Children's Museum to conduct vital learning research about how making supports learning, and how to translate making across learning environments from schools to libraries.

To date, the Museum has helped to establish multiple makerspaces across the region in schools, museums, community centers, universities and libraries. As a part of this work, hundreds of formal and informal educators now take part in the Museum's annual Maker Educator Boot Camps, to learn basic to advanced training in skills such as sewing, woodworking, and digital-based making and engage in critical discussions about the pedagogy of making. The Museum is also the producer of Maker Faire Pittsburgh.

The Museum's Learning & Research department is conducting groundbreaking learning research that informs our practice and partnerships and contributes to the field's understanding of making and its impact on learning. These projects have included partnerships to determine how best to implement and sustain making in formal and informal learning environments, tool development and theory building about making as a learning process.



Photo credit: Anthony Musmanno

ABOUT THE TOOLKIT

Based on the experience with the pilot program in Pittsburgh, the Children’s Museum, in collaboration with Kickstarter and Maker Ed, has created a toolkit of resources for hubs and schools to use when planning, creating, and implementing making, as well as when developing a successful crowdfunding campaign.

This Toolkit is composed of three types of tools:

VISIONING & GOAL ALIGNMENT TOOLS

These tools can be used to guide conversations between hubs and partner schools before the campaign development process begins in order to create common understanding about the intentions, expectations, and funding goals for integrating making into the school environment.

CAMPAIGN DEVELOPMENT TOOLS

These tools can be used to guide the campaign development process for schools.

PROGRAM PLANNING & PROMOTIONAL TOOLS

These tools can be used for reference and to help structure expectations and communications about the project and partnership.



Photo credit: ArtLab+ at the Hirshhorn Museum & Sculpture Garden

TOOLS

VISIONING & GOAL ALIGNMENT TOOLS

Toolkit Trajectory for Hubs: Identifies key steps in the process, aligned to affiliated tools.

Hub Implementation Approach: Assists hubs in determining factors and level of engagement with schools.

Vision Statement: Introduction & Tool: Scaffolds discussion between hubs and schools to determine goals for the integration of making that are both achievable and aligned with school's strengths, needs and priorities.**

Pieces & Parts: Introduction & Tool: Scaffolds discussion between hubs and school to determine a common language about making to inform its integration and promotion within and across the school community.**

Learning & Instruction: Scaffolds discussion between hubs and schools to determine relationship between a school's goals for making and educational objectives.**

CAMPAIGN DEVELOPMENT TOOLS

Audience Identification & Outreach Planning Introduction & Tool*: Helps schools determine audience and outreach strategies for those audiences.

Platform Comparison: Basic questions and tips to aid hubs and schools choose the most appropriate platform for their campaign.

Campaign Comparison: Exercise for Hubs or Schools to use in preparation for creating a campaign; introduces some of the core features of a successful campaign.

Determining Your Budget: Worksheet to help schools to determine fundraising goals; Helps schools calculate the projected amount of money to be raised by scenario.

Determining Rewards*: Guide to help schools determine appropriate rewards for their intended backer audience.

Setting Up Your Account: Tips for setting up an account with a crowdfunding website.

Creating a Project Page*: Guide to help schools compose their campaign project page.

Creating a Project Video: Introduction & Tool*: Guide to help schools plan and shoot their campaign video.

PROGRAM PLANNING AND PROMOTIONAL TOOLS

Please visit makeshoppgh.com/resources/making-spaces or makered.org/making-spaces to access the following tools and for more information about the Making Spaces: Expanding Making in Schools Across the Nation project and partnership.

FAQ for Hubs: Frequently asked questions about the project for hubs.

FAQ for Schools: Frequently asked questions about the project for schools.

Sample Request for Partners: Request for Proposal/Partnership for hubs to use to find school partners.

Sample MOU: Sample Memorandum of Understanding between hubs and schools.

Sample Press Release: Sample press release for hubs and schools.

Sample Photo Release: Example of a photo release for hubs and schools.

* These tools were created in collaboration between Children's Museum of Pittsburgh and Kickstarter.

** These tools were created, in part, through a collaborative project between Children's Museum of Pittsburgh and the Institute of Museum and Library Services. For more information, visit www.makingandlearning.org.

TOOLKIT TRAJECTORY FOR HUBS

This tool provides a suggested overview of the school-partnership and crowdfunding process, and which tools should be most useful at each step along the way.



HUB IMPLEMENTATION APPROACH

Use this tool to determine your capacity as a Hub and your general approach to working with schools. Every partnership is different, so the following are simply suggestions for approaches you can take.

TYPE	PARNERSHIP STRATEGY	PARTNERSHIP STRATEGY + VISIONING	SPECIAL INITIATIVE
USE	Use this strategy on a case-by-case basis to partner with schools who lack funding. This strategy requires less capacity for you but more willingness and work on the part of the schools.	Use a strategy like this to support schools in determining how they will integrate maker education and create the story for their campaign.	Use this strategy if you want to build a strong relationship with a school and work with them from conceptualization to implementation.
YOUR ROLE	Provide only the amount of campaign support and professional development you feel capable of.	Offer support in developing the vision for schools' campaigns. Schools still take primary responsibility for creating and launching their campaigns.	Provide full support in setting maker goals, developing and running the campaign, and, if necessary, designing new professional development to meet their needs.
CAPACITY			
TIMING			
CAMPAIGN ASSISTANCE			
PROFESSIONAL DEVELOPMENT			
EXAMPLES	<ul style="list-style-type: none"> Walk through the toolkit with the schools so they can use it on their own Review completed visioning and goal alignment tools with schools Provide feedback on campaign page Promote campaigns through your organization's social media channels Facilitate a professional development workshop after the campaign closes 	<ul style="list-style-type: none"> Walk through the toolkit with the schools so they can use it on their own Review completed visioning and goal alignment tools with schools Help schools storyboard their campaign video Provide feedback on the written campaign narrative Promote campaigns through your organization's social media channels Facilitate one or more professional development workshop after the campaign closes 	<ul style="list-style-type: none"> Administer an application and selection process to choose participating schools Facilitate visioning and goal alignment and campaign development workshops for schools Provide ongoing support through scheduled in-person or phone visioning sessions, professional development, and technical assistance Help schools create each aspect of the campaign, including video and narrative Support the schools in outreach to their communities Offer multiple professional development workshops, designing new offerings when necessary
COST	10-20 hours of staff time over several months	10-30 hours of staff time over several months	50-100 hours of staff time over several months

VISION STATEMENT

The Vision Statement Tool aims to surface the goal(s) of your makerspace or maker activities as a learning environment or program. As a tool, it helps to scaffold the work of building a coherent message. It is important to note that a Vision Statement is a living document that will evolve over time.

1. Individually or with your team, take 5-10 minutes to address each prompt in the order that they are presented. Use the extra prompt text below to help generate ideas. The questions below the prompt are examples of the kinds of questions you might ask yourselves and your colleagues to help complete the prompt statement. Write down words, phrases or sentences that apply to each prompt.
2. Review your responses to each of the prompts, as a group.
3. Use your responses to each prompt to create a cohesive vision statement. This vision statement can be thought of as an "elevator pitch." Therefore, restrict yourself to a statement that can be said in less than one minute.
4. Read (or have members of your team) read the vision statement aloud and make refinements.
5. Revisit the statement from time to time as a way to evaluate its relevance for your work related to making.

PROMPT 1: WE BELIEVE What are your values? What is your philosophy?

This is the emotional core of your makerspace and what it addresses for your organization.

- Do you believe all children are creative or should be creative?
- Do you believe all adults can be entrepreneurs?
- Do you believe all members of your community should have access to high-tech tools and materials?

While you and your team might believe all of these (and maybe more), your most essential values for your makerspace and maker program will be surfaced here.

PROMPT 2: BASED ON What are our strengths? What are our areas of expertise?

There's a reason why a makerspace or maker program makes sense in your institution. And, there are certain strengths and expertise that your institution has.

- Are you a leading provider of children's programs in your community?
- Do your programs provide experiences that develop scientific thinking or other learning behaviors or skills?
- Has your organization been at the cutting edge of technological learning experiences in your area?
- Do you and your team bring strengths that prove a makerspace is a natural evolution of what you provide for your community members or target audience?

PROMPT 3: WE AIM TO What are our goals? What do we want to accomplish?

Makerspaces and maker programs aim to achieve a wide variety of salient and reasonable goals. However, productive makerspaces and maker programs are clear about what they want to accomplish based on their strengths and their core values.

- Do you want to develop creativity in the children your program serves?
- Do you want to develop scientific inquiry skills in your program participants or their technological fluency?

- Do you want to target specific technical or craft skills for young adults that may translate to the workplace?
- Maybe you want to create a consistent place for teens to come after school so that they are not “on the streets.”

This prompt seeks to center on what impact your makerspace or maker program hopes to have.

PROMPT 4: FOR WHOM Who is the audience that our program or space serves? Who are the stakeholders?

This prompt provides a chance to specify whom the stakeholders are that the makerspace is targeting.

- Does the makerspace or program focus on a particular age group, or demographic group?
- Does your makerspace or program target a particular expertise level of amateurs or experts?
- Does your makerspace or program seek to work with a particular interest group like hobbyists, students, or teachers?

PROMPT 5: BECAUSE WE KNOW Why is this important? What have you observed?

You can think of this prompt as your “needs statement.” What problem or issue will your makerspace or maker program be solving or addressing? This prompt provides an opportunity to incorporate some data into your pitch.

- Is science learning important because currently only 10% of your community’s juniors perform competently on state standardized science tests?
- Are creative arts classes being cut from local schools and so youth need opportunities to engage in creative endeavors?
- Have you noticed many groups of teens hanging out near your organization with little to do?
- Have children told you they want to learn how to make clocks?

Although it might strengthen your story to use “hard” data to support your makerspace or maker program in the minds of some stakeholders, what you see and what your audience tells you also provides compelling warrant for what you are doing.

PROMPT 6: WE WILL SUCCEED WHEN What are our metrics for success? What are the indicators that our program is working?

How will you know that you are reaching the impact that you aim to have? How does this relate to the needs and opportunities that you have observed and/or recorded?

- While many programs traditionally use metrics like the number of people who attend a program as a measure of success, those metrics might not truly capture the quality of the learning experience that is being created in a makerspace or through a maker program.
- Perhaps the number of participants served is appropriate if your goal is simply to offer a safe, alternative experience to what teens in your community currently might be doing.
- If the design process is important for your space, then evidence of iteration may be your marker of success.

Metrics for success are challenging, but useful for showing the change over time, as a makerspace or maker program becomes a reality.

VISION STATEMENT Tool

WE BELIEVE

What are our values? What is our philosophy?

BASED ON

What are our strengths? What are our areas of expertise?

WE AIM TO

What are our goals? What do we want to accomplish?

For what do we want to seek funding from backers? What steps will we take to accomplish this?

FOR WHOM

Who is the audience we serve?

Who are our partners? Who are our stakeholders?

BECAUSE WE KNOW

What have we observed that supports this development?

What are the needs we will fill or problem we will solve?

Why is this important for the audience, stakeholders, and backers?

WE WILL SUCCEED WHEN

How will we know we met our goals?

PIECES & PARTS

The purpose of the Pieces & Parts tool is to help develop a common language across team members related to important aspects of your makerspace or maker programs.

This tool can also be a starting point for action. It is designed to encourage cross-organizational discussion and consideration of many of the core aspects of makerspace or maker program activity and practice, and how those aspects fit together and impact one another. This tool asks you to consider many of the factors that are often core to designing and maintaining a makerspace, such as facilitation, types of tools and materials, structure of activities, etc.

This tool encourages you to consider these various facets of your makerspace or maker program on a series of spectra. The spectra do not carry any weight or value. They simply visibly show many of the fundamental tensions that are often at play when designing making experiences for learners. The spectra that are featured on the tool are not exhaustive, meaning there are many many more facets, decision factors and tensions that are at play when designing making experiences for learners. A hope is that through using the tool, participants surface additional spectra for their team to consider together.

Ultimately, these spectra are intended to facilitate discussion. Depending on where your makerspace or maker program is with respect to some of these spectra, discussions can be had to consider how you might achieve some meaningful changes with regard to your vision or activity. Revisit these spectra from time to time as a way to evaluate where you and your team have made such changes or which aspects of the makerspace or maker program have remained constant and strong.

1. As a group, choose one big part of your work as it relates to making, such as the design of the space or a specific program that you will use this tool to consider.
2. As an individual, mark where your chosen space or program falls on each of the spectra.
3. Once completed, discuss with a partner from your team and your team as a whole, where you decided to place your space or program on the various spectra. To encourage conversations, focus on where you see the biggest differences in opinion.
4. Based on the differences, try to explain them. The differences may be the result of different perspectives on or visions for your makerspace or program that two team members have. The differences also may be due to a difference of interpretation. All of these differences, and even the similarities are important to consider as your team develops and evolves your makerspace and/or program.

PIECES & PARTS Tool

ACTIVITIES

- Open-Ended ↔ Closed-Ended
- Long Term, Multi-Session ↔ Short Term, Single Session
- Single Age / Grade ↔ Multi-Age / Grade
- Collaborative ↔ Independent
- Product-Oriented ↔ Process Oriented
- Tightly Tied to Curriculum ↔ Loosely Tied to Curriculum

Our approach to **ACTIVITIES** is:

We have this approach because:

TOOLS, MATERIALS & EQUIPMENT

- Digital ↔ Analog
- Purchased ↔ Donated
- Fast, Reliable Internet ↔ No Internet
- Fixed ↔ Flexible
- Stay in Space ↔ Used Outside of Space
- Novice Use ↔ Expert Use

Our approach to **TOOLS, MATERIALS & EQUIPMENT** is:

We have this approach because:

SPACE

- Permanent ↔ Mobile
- Dedicated ↔ Multipurpose
- Can be Messy ↔ Must be Clean
- Fixed ↔ Modular
- Fits 5 People ↔ Fits 50 People
- Classroom Space ↔ Shared Community Space
- Lots of Storage Space ↔ No Storage Space
- Secure ↔ Open Access
- Ample Access to Electricity ↔ No Access to Electricity
- Access to Running Water ↔ No Access to Running Water
- Ventilation ↔ No Ventilation

Our approach to **SPACE** is:

We have this approach because:

What safety concerns do you have?

How do the tools, materials and equipment align to your values and learning goals?

What physical architecture is important for your maker experiences? Why?

Who is responsible for keeping your tools and equipment in working order?

Are they skilled enough to do so?

Who makes sure materials are restocked?

Who purchases or acquires materials for the space?

Who organizes and cleans your space?

Are they familiar with the special needs or restrictions of the tools, materials and equipment in your space?

What types of training/professional development does your staff need in order to effectively facilitate making when considering your approach to activities, tools, materials and equipment, and space?

INSTRUCTION & LEARNING

Use this tool to consider the ways in which making can be incorporated into your school-based learning activities.

When thinking about making as a learning process, it's easy to get excited about what you or your students are going to make rather than focus on the learning value of the experience. This tool encourages you to focus on the learning goals and the evidence of learning that you hope to design to support and see when learners engage in making.

Go through this tool sequentially for each learning goal you hope to address through making.

1. LEARNER: Who will engage in making as a learning process?

- What ages and/or grade levels?
- Are the intended learners students, teachers, community members, etc.?

2. LEARNING GOAL: What do you want learners to be able to do, know or feel through a making experience?

- What bit of knowledge, skill or a habit of mind do you want to support learners to develop or engage in through their maker-based experience?

3. EVIDENCE: What does it look like to demonstrate this learning goal?

- Does this evidence for learning align with certain disciplinary practices or objectives? If so, which ones?
- Does this evidence for learning support learning outside of defined disciplinary practices or objectives, such as dispositional or skill development?
- Evidence may be verbal, written, drawn, photo, video or artifact-based

4. ACTIVITIES: What activities produce the intended evidence of this learning goal?

- Do these activities align to certain disciplines or disciplinary objectives better than others? If so, which ones?
- Do these activities fit within certain formats of instruction and learning, such as classroom-based instruction, elective classes, afterschool programming, out-of-school community events, or common, unstructured or drop-in times like lunch, recess, etc.?

AUDIENCE IDENTIFICATION & OUTREACH PLANNING

One of the most powerful tools behind nearly every successful fundraising project is a solid outreach plan. It's important to get the word out about your project and to encourage parents, friends, family, colleagues and supportive strangers to back them. Putting together a plan ensures that you'll be spreading the word to the right people at the right time with a consistent, clear and compelling message.

Before you launch your campaign, figure out who you need to tell about your project, think through how you'll be able to reach them, and develop a plan to get the word out about your project. Determining this early will improve your chances of success because your campaign will be targeted to the people who are the most likely to contribute.

1. IDENTIFY YOUR CORE AUDIENCES

The first step in developing your outreach strategy involves identifying the core audiences that will care about your project, and developing an understanding of the reasons why the project is relevant and compelling to each audience.

Some questions to consider when identifying your core audiences:

- Who will be directly and indirectly impacted by this project?
- Who has supported other community fundraising and development efforts in the past?
- What organizations, businesses, and local groups have a special interest in what you are doing?

Parents and caregivers, friends, family, and colleagues are all people you should plan to reach out to. Beyond that, think about other groups who might have a special interest in what you are doing, such as neighborhood-based organizations, local businesses, local representatives, formal and informal social groups, school alumni, etc.

2. HOW TO REACH YOUR CORE AUDIENCES

The next step involves figuring out the best way to connect and communicate with the core audiences that will care about your community's project. *This activity involves identifying where each of your core audiences gets information so that you can reach them as effectively as possible.*

Some questions to consider as you plan to reach out:

- Who in your audience has the most influence and reach?
- Where and how do people in your audiences share information about similar efforts?
- What newsletters, newspapers, magazines, radio shows cover local news stories?
- What have been successful approaches that were used in the past?

3. CREATE OUTREACH PLAN

The final step involves putting together an outreach plan that consists of *assets* and a *timeline*. The *assets* are an inventory of the materials you will create to spread the word about your project. Your list will include things like text blurbs for newsletters, email copy, Facebook posts, printed flyers or posters. The *timeline* maps out when and how

your team will get the word out about your project. It will help you coordinate your team’s efforts and make sure that you are getting the right communications to the right people at the right time.

Some questions to consider as you create your outreach plan:

- Who do you need to connect with before launch day to help get the word out?
- On launch day, who will you reach out to and what will be your message?
- How many times during the campaign should you reach out to each core audience?
- When do you need to start working on assets to make sure they’ll be ready on time?

Review the example below, and then complete the accompanying tool for your three core audiences.

1. WHO IS A CORE AUDIENCE?

The first step in developing your outreach strategy involves identifying core audiences, and understanding the reasons why the project is relevant and compelling to each audience.

Ex AUDIENCE: Parents of students at the school
WHY WILL THIS AUDIENCE FIND THE PROJECT RELEVANT AND COMPELLING? Makerspaces will provide their children with new opportunities to learn and explore STEAM concepts through hands-on activities. Supporting this project is an opportunity to contribute to the larger school community.

2. WHERE DOES THIS AUDIENCE GET THEIR INFORMATION?

The next step involves figuring out the best way to connect and communicate with the core audiences that will care about your community’s project.

3 PEOPLE:	3 WEBSITES:	3 RESOURCES:
President of PTA	Local newspaper website	Parent email list
Active parent in school community	School website	School newsletter
Parent most involved in makerspace project	School or parent Facebook group	Area at school where parents pick up their kids

3. WHAT IS THE OUTREACH PLAN FOR THIS AUDIENCE?

The final step involves putting together an outreach plan that consists of assets and a timeline.

ASSET:	ASSET:	ASSET:
Pre-Launch Event	Email to Local Newspaper	Copy for School Newsletter
DESCRIPTION: President of the PTA will ask parents for their support and give them more details.	DESCRIPTION: Email to editor of local newspaper to inform them about the project and provide copy for their website.	DESCRIPTION: Short copy blurb to be featured in the school newsletter the week when the campaign launches.
RESPONSIBILITY: President of the PTA	RESPONSIBILITY: Assistant Principal	RESPONSIBILITY: Assistant Principal
DUE DATE: 9/15	DUE DATE: 9/22	DUE DATE: 9/23

AUDIENCE IDENTIFICATION & OUTREACH PLANNING Tool

Use this tool to determine a strategy to reach three core audiences for your campaign.

WHO IS YOUR AUDIENCE?

The first step in developing your outreach strategy involves identifying core audiences, and understanding the reasons why the project is relevant and compelling to each audience.

1 AUDIENCE:

WHY WILL THIS AUDIENCE FIND THE PROJECT RELEVANT AND COMPELLING?

WHERE DOES THIS AUDIENCE GET THEIR INFORMATION?

The next step involves figuring out the best way to connect and communicate with the core audiences that will care about your community's project.

3 PEOPLE:	3 WEBSITES:	3 RESOURCES:

WHAT IS THE OUTREACH PLAN FOR THIS AUDIENCE?

The final step involves putting together an outreach plan that consists of assets and a timeline. You may want to develop more than three assets depending on your outreach strategy.

ASSET:	ASSET:	ASSET:
DESCRIPTION:	DESCRIPTION:	DESCRIPTION:
RESPONSIBILITY:	RESPONSIBILITY:	RESPONSIBILITY:
DUE DATE:	DUE DATE:	DUE DATE:

WHO IS YOUR AUDIENCE?

The first step in developing your outreach strategy involves identifying core audiences, and understanding the reasons why the project is relevant and compelling to each audience.

2 AUDIENCE:

WHY WILL THIS AUDIENCE FIND THE PROJECT RELEVANT AND COMPELLING?

WHERE DOES THIS AUDIENCE GET THEIR INFORMATION?

The next step involves figuring out the best way to connect and communicate with the core audiences that will care about your community's project.

3 PEOPLE:

3 WEBSITES:

3 RESOURCES:

WHAT IS THE OUTREACH PLAN FOR THIS AUDIENCE?

The final step involves putting together an outreach plan that consists of assets and a *timeline*. You may want to develop more than three assets depending on your outreach strategy.

ASSET:

ASSET:

ASSET:

DESCRIPTION:

DESCRIPTION:

DESCRIPTION:

RESPONSIBILITY:

RESPONSIBILITY:

RESPONSIBILITY:

DUE DATE:

DUE DATE:

DUE DATE:

WHO IS YOUR AUDIENCE?

The first step in developing your outreach strategy involves identifying core audiences, and understanding the reasons why the project is relevant and compelling to each audience.

3 AUDIENCE:

WHY WILL THIS AUDIENCE FIND THE PROJECT RELEVANT AND COMPELLING?

WHERE DOES THIS AUDIENCE GET THEIR INFORMATION?

The next step involves figuring out the best way to connect and communicate with the core audiences that will care about your community's project.

3 PEOPLE:

3 WEBSITES:

3 RESOURCES:

WHAT IS THE OUTREACH PLAN FOR THIS AUDIENCE?

The final step involves putting together an outreach plan that consists of assets and a *timeline*. You may want to develop more than three assets depending on your outreach strategy.

ASSET:

ASSET:

ASSET:

DESCRIPTION:

DESCRIPTION:

DESCRIPTION:

RESPONSIBILITY:

RESPONSIBILITY:

RESPONSIBILITY:

DUE DATE:

DUE DATE:

DUE DATE:

PLATFORM COMPARISON

Which crowdfunding platform is right for you? Use this tool to help determine which features are most important to you and your community.

PLATFORM	Campaign Length	Project Page Templates	Video Option	Rewards Option	Money Towards Fundraising Goal	Funds Accessed During Campaign	Accessible Information About Backers	Processing Fees per Transaction
Kickstarter	1-60 days	●	●	●	all or nothing		●	3% + 20 cents
Donors Choose	max 4 months	●		●	all or nothing		●	optional 15% donation
Indiegogo / Generosity	open	●	●	●	keep amount raised	●		3% + 30 cents
GoFundMe	open	●	●		keep amount raised	●	●	5% + 2.9%
Rally.org	open	●	●		keep amount raised	●	●	2.9% + 30 cents
StartSomeGood	1-60 days	●	●	●	all or nothing		●	5% + (2.9% + 30 cents)
Fundly	open	●	●		keep amount raised	●	●	4.9% + (2.9% + 30 cents)
CrowdRise	open	●	●	●	keep amount raised	●	●	2.9% + 30 cents
FirstGiving	open	●	●	●	keep amount raised		●	5% + 2.5%
CauseVox	open	●	●	●	keep keep amount raised	●	●	2.5-4.25% + (2.25% + 30 cents)
IOBY	open	●	●		keep amount raised		●	3% + \$35 platform
Razoo	open	●	●		keep amount raised		●	4.9% + (2% + 30 cents)
Network for Good	open	●			keep amount raised			monthly or annual

CAMPAIGN COMPARISON

Use this tool to compare, contrast and critique others crowdfunding campaigns designed to raise funds for maker education. The featured campaigns can all be found on Kickstarter.com, but seek out campaigns from other crowdfunding platforms as well! There's a lot you can learn about what works and what doesn't from others' campaigns.

PROJECT & KICKSTARTER WEBSITE	"Space Lab: A South Suburban Chicago Makerspace"	"The Mini Makers: A Kid-Focused Makerspace"	"Play: Ground: An Adventure Playground in NYC"	"Inventors Club Makerspace: Build. Break. Fix. Repeat"	Find Another:
Goals: How well articulated are the goals of the project? As a backer, do you know what you will be funding? What are the steps they are taking to achieve this goal?					
Importance: Why is this project and funding required? What problem is it solving? What needs is it addressing? How does your contribution matter?					
Audience: Who is the audience for the project? Who are the other stakeholders?					
Sustainability: Does the project have legs? Have they identified those people who will be responsible for the project?					
Cohesion: Does the program seem to fit within the school culture and learning priorities?					
Authenticity (Video): Is the video a personal introduction, and an invitation for the community to get involved? Does it feel authentic to the school/community?					

DETERMINING YOUR BUDGET

Spending some time to determine an accurate and achievable fundraising goal is an important step in developing your campaign development. This tool will help you to determine what's reasonable for your organization.

1. DEFINE YOUR GOALS

Restate your goals as you defined them in the [Vision Statement Tool](#):

2. IDENTIFY YOUR NEEDS

Review the [Pieces & Parts Tool](#) to determine your needs with respect to the following areas.

EQUIPMENT, TOOLS & MATERIALS: When choosing equipment, tools and materials consider how each aligns with your goals, values, staff & student interest and capacity.

- **Equipment:** Large and/or significant investment, usually permanent to the space. Examples include, laser cutter or engraver, sewing machines, drill press, band saw, 3D printer, computers, etc.

Desired equipment:

Projected cost:

- **Tools:** Medium-to-significant investment and have a relatively long term of use, usually remain in the space or are loaned out. Examples include, safety goggles, soldering iron, wire cutters, hammers, hand drill, screwdrivers, clamps, fabric scissors, knitting needles, digital camera, tablet, tape measure, hot glue guns, etc.

Desired equipment:

Projected cost:

- **Materials:** Consumables, small but ongoing investment, usually are used up or carried out of the space. Examples include, tape, binder clips, paper, batteries, solder, LEDs, wire, needles, thread, yarn, buttons, sandpaper, nails, screws, etc.

Desired equipment:

Projected cost:

MAKESHOP's [Make a Makerspace Tool](#) is a great resource to help you get started in determining which equipment, tools and materials are right for your makerspace.

EQUIPMENT, TOOLS & MATERIALS TIPS & CONSIDERATIONS:

Consult with local and respected vendors to determine expenses.

Don't get carried away buying tools and equipment. In most cases you can integrate making without spending a lot of money.

If you buy expensive equipment before you know how it might meet your goals, you may find that you do not use the equipment or wish you would have spent the funds elsewhere.

SPACE: Where will making take place at your school? Consider the following categories and consult with your facilities team and/or local partners to identify potential costs.

- Furniture (e.g. seating, sturdy tables, workbenches)

Desired furniture:

Projected cost:

- Fixtures (e.g. sink, lighting, flooring, doors, walls)

Desired fixtures:

Projected cost:

- Storage (e.g. equipment, tools, materials; what is always accessible and what is not always accessible?)

Desired storage:

Projected cost:

- Maintenance (e.g. space, equipment, tools, materials)

Desired maintenance:

Projected cost:

PROFESSIONAL DEVELOPMENT: Training and ongoing support is key to building capacity for effectively integrating making.

Desired professional development:

Projected cost:

SPACE TIPS & CONSIDERATIONS:

Making is often associated with repurposing, or “hacking” old or existing things. Reused, repurposed or even redesigned furniture can be a fun and economical choice for a makerspace

What fixtures are already in-place within your desired location and what fixtures would need to be added? Costs for installing electricity, plumbing and walls can add up quickly.

Who will organize and clean your makerspace? How familiar are they with the special needs or restrictions of the equipment, tools and materials in your space?

PROFESSIONAL DEVELOPMENT TIPS & CONSIDERATIONS:

What training and support is needed to help you reach your goals, and to ensure that staff are able to use the resources within the makerspace?

Consult with your Hub to determine the Professional Development Services they offer, as well as other potential providers in the area.

Will you need to raise funds for substitute teachers while staff participates in Professional Development? Are there any associated travel expenses?

3. INITIAL ESTIMATE & FUNDING GOAL

Calculate an initial estimate based on the expenses you defined above.

Estimated funding goal:

4. PROJECTING SUPPORT

To determine whether your funding goal is realistic, it's important to estimate how much money you expect to raise from your community.

Use [the worksheet linked here](#) to calculate the projected amount of money you will raise by estimating how many people will likely pledge \$5, \$25, \$100, \$500 and \$1000 to your project

- Develop optimistic, realistic and pessimistic versions of your estimate
- Compare your projected raise with the ideal funding goal above.
 - » How do they compare?
 - » Do you need to rethink your funding goal to match the projected amount you will raise?
 - » Do you need to develop new strategies for increasing funding potential?

If the amount of money you can raise from your own network isn't adding up to enough to reach your goal, there are some creative things you can do to help you reach a more ambitious goal.

- Consider match funding. Offering a match through your campaign is a fun way to rally people around your project. Many foundations require match funding for grants, and campaigns can be used as that match.
- Local council members, assembly people and even state senators have funds to support this kind of work. Find out who your local representatives are.
- Just like the soccer team or the school play, there are fun ways to include local businesses as sponsors of projects. You can even create a special reward tier just for businesses to get involved
- Companies who make products and resources for makerspaces are sometimes open to act as sponsors for makerspaces - sometimes with cash, discounts, or with tools or other supplies.

DETERMINING YOUR BUDGET TIPS & CONSIDERATIONS:

Most crowdfunding successful campaigns are for less than \$5,000. While you can be successful with a higher fundraising goal, it may be harder to accomplish.

Typical projects on Kickstarter raise between \$1000-\$10,000 from less than 100 people.

Most people pledge \$25.

The typical range is between \$10-\$50

DETERMINING YOUR REWARDS

Your rewards are a chance to share a piece of your project with the people that fund the project, your backers. It's helpful to think about rewards not as "stuff" people get in exchange for their pledge, but as a way to help tell the story around the project and build community.

Most often, great rewards are things you can't buy in a store: experiences, collaborations, mementos – things that showcase the personality of the creator and the unique pursuit of the project. Rewards can also be something that provides direct access to the creative project you are funding. So if you are making a film, the reward is to see the film; if you are making a new music album, it is a chance to listen to the album.

Not all projects lend themselves to a direct exchange. The next best thing is for a reward to be something that:

- Advances the goals of your project
- You have to make anyway
- Will be compelling to communities who will back your project

Some important considerations when planning your rewards:

REWARDS TYPES

On Kickstarter, for instance, there are generally four types of rewards:

The Thing	A copy of or direct access to what you're making (ex. curriculum, a kit, or a workshop)
An Experience	Rewards where someone gets to participate in the process or final project (ex. an event in the makerspace)
Acknowledgement	Rewards where someone gets credit in some way (ex. a wall with all the backers names on it)
Memento	Rewards where someone gets an item that celebrates the thing that's being made (ex. a postcard, sticker etc.)

REWARDS PLANNING

There are several important factors to keep in mind when planning your rewards:

PRICE

- Most people pledge around \$25, though the most profitable pledge tier is often a bit higher, at around \$100.
- Projects typically offer something at the \$1 level that invites a backer to follow along as a project unfolds.

QUANTITY

- We typically recommend offering a range of rewards (maybe 5 to 7 to start) at different price tiers. This gives people a number of entry points to support the project, but not so many that they don't know which one to select.
- A common mistake people make is offering too many rewards. For example, mementos are fun, but be careful to consider and track the expenses and time associated with creating and shipping them to your backers. The money it costs and time it takes to make and ship mementos quickly add up, and can take away from your ability to realize your actual project.

SHIPPING

- Don't forget, if it is a physical good you will have to package and ship it. Take the time to mock up your rewards, determine what boxes they will fit in, and what it costs to ship them both domestically and internationally.
- Digital rewards are great, especially at the lower levels, because they don't add extra costs to your projects but still allow your fans to support the project without spending a lot.

DESCRIBING YOUR REWARDS

- Be as concrete as possible when describing rewards. It will make your rewards more compelling, and it will help you better understand the work required to bring it to life.
- If you are offering artwork from a student, give backers a sense of what type of student artwork they might receive. Are they drawings, 3D printed objects, or something else? It's ok if you don't have an actual picture of the work, but it helps to be precise. And if you do have a picture, make sure to include it in the project description.
- If you are planning an event, provide details about the programming. For example, let people know if a "Maker Night" is just a visit or a tour of the makerspace, or if it involves making activities.
- Add a rewards section to your project description where you can share images and go into more detail about each reward. Give a pithy overview of the reward, eg. "One of our students will print you something from the 3D printer you helped us to purchase!"

REWARD IDEAS

Here is a list of rewards that have been used by other school and community makerspace campaigns. This is just a starting point for you to brainstorm other rewards that represent your project.

\$5	<ul style="list-style-type: none">• Updates about the process of building the makerspace• Acknowledgement on social media, website, or newsletter• Virtual high-five or free hug
\$25	<ul style="list-style-type: none">• Hand-drawn postcard created at the makerspace• Invite to "virtual makerspace" on Facebook where other educators and parents can swap ideas and stories, and ask each other for help with projects• Thank you video from the students and faculty
\$50	<ul style="list-style-type: none">• Two (2) admission tickets to local hub organization (e.g. museum or library)• Invitation to opening celebration event for the makerspace• Thank you gift made by students from recycled materials
\$100	<ul style="list-style-type: none">• Four (4) admission tickets to local hub organization (e.g. museum or library)• Invitation to themed activity night or class at the makerspace• Maker kit with materials and instructions for a project to do at home• Founder acknowledgement plaque on founder wall at the makerspace
\$250	<ul style="list-style-type: none">• Invitation to entire family for themed activity night at the makerspace• Naming rights for one of the equipment in the space
\$500	<ul style="list-style-type: none">• Patron acknowledgement plaque in the makerspace
\$1000	<ul style="list-style-type: none">• Private themed activity night at the makerspace• Naming rights for the makerspace

Don't forget to do some research and check out other similar projects. With rewards, pay close attention to not just what is being offered and at what amount, but also which of those rewards are most popular with backers. Sometimes an idea is great but is priced wrong, or something that seems like a great idea to you will fall flat with your community.

DETERMINE YOUR REWARDS

This tool will help you create a portfolio of rewards that offer your core audiences compelling entry points to support your project. Make sure that each core audience is offered a range of options with different price tiers.

CORE AUDIENCE:	REWARD:	REWARD TYPE:	PRICE:
Ex Parents of students at the school	Invite for two to opening party	Experience	\$25

CORE AUDIENCE:	REWARD:	REWARD TYPE:	PRICE:
1			

CORE AUDIENCE:	REWARD:	REWARD TYPE:	PRICE:
2			

CORE AUDIENCE:	REWARD:	REWARD TYPE:	PRICE:
3			

SETTING UP YOUR ACCOUNT

Steps for setting up your account will be different depending on which crowdfunding platform you choose to use. No matter which you choose, set up your account well before the launch of your campaign.

Use the steps below to help you set up your account.

DETERMINE WHICH TEACHER, ADMINISTRATOR, OR SUPPORT STAFF WILL BE LISTED AS THE MAIN CONTACT TO THE ACCOUNT

- Choose a person who is comfortable working on a digital platform.
- This person should create the account and password.
- Other than their name, no other information on the account should be personal (i.e. do not include a personal checking account number)

DETERMINE WHICH OF YOUR SCHOOL'S CHECKING ACCOUNTS YOU WILL USE.

- You will need to provide a checking account number when setting up your account. This often requires approval from the business manager or others at your school. Seek understanding and permission early.
- Do not use a personal banking account.
- You will need to provide an address linked to the checking account number.
- For some platforms, you will not be able to change this information once it is entered and saved.

IMPORTANT: Talk with your business manager. Providing account information can make many business managers nervous. Meet with appropriate administrators early to determine willingness to provide this information.

ACCOUNT VERIFICATION

- After you enter all of the basic information, your account may need to be verified. This usually involves verifying that a human being is connected to the project.
- For verifying identity, this may involve sharing their name, address and the last four digits of their social security number.
- For the Bank Account, this may include the name, EIN, bank routing and account number of the school.
- This can take more than one day. This is another reason it is essential to set up your account early.

ONCE THE ACCOUNT AS BEEN SET UP, YOU CAN USUALLY LOG IN, CONFIRM AND VIEW YOUR ACCOUNT INFORMATION THROUGH THE PLATFORM.

CREATING A PROJECT PAGE

The project page is where you dive into the details of your team’s vision for integrating making into your school’s activities. Use this tool to make your vision tangible, to map out the path for how you are going to get there, and to begin developing content for your project page.

1. PROJECT TITLE AND SHORT BLURB

Your project title and blurb should be simple, specific, and memorable. Be sure to incorporate any keywords here. Include the name of your school so that it is easy to find through a search. These words will help people find your project, so choose them wisely.

2. WHAT WE WANT TO DO

Share your vision for integrating making into your school. Keep it short, two or three paragraphs at most. Share what activities will take place, and provide an overview of the resources and expertise that will be required.

SEE VISION STATEMENT: What are our goals? What do we want to accomplish? Who is the audience we serve?

3. WHY IT MATTERS

Talk about why making is important to your school and your students. Introduce some of the reasons why your school is equipped to do this work. Remember, you are selling your vision for making in your school, not the school itself.

SEE VISION STATEMENT: What are our strengths? What are our areas of expertise?

4. HOW WE'RE GOING TO DO IT

Share your plan to bring making to your school. Talk about the most important steps and milestones associated with your project. Talk about the work that has already been done and the steps that lie ahead. Give your community confidence that your school can deliver on your vision.

SEE VISION STATEMENT: How will we know we met our goals?

5. WHY WE NEED YOUR SUPPORT

Invite your community to take part in the project. Let them know that their contribution matters. Be specific about the ways in which their funds will be allocated. Share ways that they can participate and contribute beyond pledging money. Ask them to share the project with others.

SEE VISION STATEMENT: What are the needs we will fill or problem we will solve? What have we observed that supports this development?

SEE PIECES & PARTS: What is our general approach to activities, tools, materials and equipment, and space? Why are we taking this approach?

6. HOW WE'LL THANK YOU

Share the rewards that you'll be offering to your backers, if applicable. Your rewards should enable your backers to engage in your project in a different or at a deeper level. Make sure to communicate how grateful you are for the support from your community.

SEE DETERMINING YOUR REWARDS

7. ABOUT OUR SCHOOL

Go into more depth about your school. Talk about your educational philosophy and any important related concepts. Introduce some core members of your staff and a selection of students who will participate in and be impacted by the project.

SEE VISION STATEMENT: What are our values? What is our philosophy?

8. PARTNERS

Talk about the Hub you are working with, and any other organizations that are providing support for your project. This can include local organizations that might have helped with development or promotion of the project.

SEE VISION STATEMENT: Who are our partners? Who are our stakeholders?

CREATING A PROJECT VIDEO

It is not hard to make a great looking and compelling video that shares the vision of your school's makerspace, though it does take some planning and effort. There are two main things to think about when creating a project video: *how to tell a great story* and *how the video looks and sounds*.

HOW TO TELL A GREAT STORY

Every project video should:

- Be authentic and short
- Share your project goals and importance
- Introduce your team
- Ask for your community's support

BE AUTHENTIC AND KEEP IT SHORT

Your video should be a short, personal introduction to your vision and an invitation for your community to get involved. It is most important to be yourselves. A fancy video produced by a high-end studio is not necessary. Many of the most effective videos are shot with a smartphone, and made simply using little editing.

Likewise, your video doesn't have to include everything about your project. The best videos are between 1-2 minutes long. They provide a compelling overview of the project but don't go into great details about what it will entail; that's what the rest of the project page is for.

SHARE YOUR PROJECT GOALS AND IMPORTANCE

The best project videos both show and tell the story of what they want to make. When doing this, make sure to frame the story in a way that will resonate with the audience you hope to reach through your project. For example, if your main audience is your schools' teachers and parents, the story you tell in your video should speak to them directly.

The better you can bring to life your vision for the makerspace or maker program, the more likely you are to get support from your community. If you've already identified the space, selected the tools and developed a floor plan, share that in the video. Make sure to also show the passion and hard work that you've already put into the project.

INTRODUCE YOUR TEAM

It is important to introduce the team of people who are behind the project. Crowdfunding is about people supporting other people. Without seeing the people behind a project, it is hard to create the human connection that is so important to making your project a success.

A NOTE ON KIDS

Make sure you have a photo release so you can include photos of the kids from your school.

Show students exploring activities similar to what they will be exploring in the makerspace when it is complete. The parents of the kids will be that much more likely to share the video with their networks and help you spread the message of the project.

Keep in mind that footage that includes students will be even more impactful with the students talking about what they are excited about. Also, remember that this is just one part of your overall story; it should help bring to life the vision for the makerspace.

ASK FOR YOUR COMMUNITY'S SUPPORT

A clear call to action is key to the success of any crowdfunding project. Your project video should explain to people that the project will only happen with the support of the community. Mention that crowdfunding works when lots of people all pledge modest amounts of money. Help them understand that even \$1 is helpful.

HOW IT LOOKS AND SOUNDS

You don't need a lot of equipment. Many project videos are filmed using a smartphone. Smartphones have pretty great cameras these days and it's likely that someone on your team has one. Smartphones are easy to use, are portable, and you can even attach one to a simple tripod for steady shots. The audio quality on a smartphone is pretty good, but if you want, you can purchase an inexpensive external mic to make it that much nicer. Beyond that, the only other things you may need are some clip lamps for additional lighting.

DO:

- Plan to shoot in a place that is well lit and quiet.
- Film in your classroom if it has great natural sunlight.
- If the light isn't great use additional lighting like lamps or clip-lamps.
- Shooting outside will work as long as you can find a place that's quiet and well lit.
- Film horizontally when using a smartphone.
- Also brace your elbows against your chest for a steadier shot.

DON'T:

- Film in a school hallway where the light is not great and there is a hum from fluorescent lighting.
- Shoot outside on a windy day, or in a place where there is a lot of ambient sound like car traffic.
- Film in a classroom full of kids chatting or making other types of noise.

You are now ready to start planning your video. The accompanying tools will help you create the story components to produce a simple video that communicates the vision for the makerspace in a way that is clear and concrete.

Kickstarter has created an online tutorial for how to make a good project video: <http://bit.ly/ksr-video>

CREATING A PROJECT VIDEO Tools

Use the following tools to create the story components to produce a simple video that communicates the vision for the makerspace in a way that is clear and concrete.

INTEGRATE THE STUFF INTO THE STORY

Your video doesn't need to cover every single activity you imagine will take place in your makerspace, or all of the fun tools you will offer. However, it is helpful to share a few specific examples of how the resources that backers are funding fit into the overall vision for the project and your school culture. This will help people understand your vision, and the impact that it can have.

Look back to *Pieces & Parts* and/or *Determining Your Budget*. Create a few specific examples of how the activities, equipment, tools, materials, space and related expenses, such as professional development, fit into the overall vision for the project, benefit the school culture and impact students.

What activity will take place in your makerspace?	What equipment, tools and materials will this activity use?	Where will this activity take place? Do we need any furniture, fixtures or storage?	What kinds of training do our staff or students need to be able to engage in this activity?	How will this activity fit within our school culture or curriculum?
Ex Students will create electronic instruments that light-up	Makey Makey, soldering irons, batteries, LEDs, recycled materials	Grounded outlets	How to use a Makey Makey	Music, Science, Math; End of year celebration

TELL YOUR STORY

Before you start shooting your video, brainstorm ideas for reaching your core audiences using the following prompts:

HOW WILL YOU BOTH SHOW AND TELL PEOPLE WHAT YOUR PROJECT AIMS TO DO, WHY IT IS IMPORTANT, AND WHAT THEIR DONATION WILL SUPPORT?

HOW WILL YOU CREATE EXCITEMENT, PULL AT THEIR HEARTSTRINGS, AND MOTIVATE THEM TO DONATE?

WHO IS ON YOUR TEAM? WHO IS IMPORTANT TO SHOW IN YOUR VIDEO? HOW WILL YOU INCLUDE THEM IN THE VIDEO?

HOW WILL YOU INVITE BACKERS TO BE A PART OF YOUR PROJECT?

CREATE A STORYBOARD

A storyboard is a simple graphic organizer for planning the content of a video. Use the ideas you brainstormed along with the outline of activities that you developed to create a storyboard for your project video. Focus on describing the key moments by calling out the people involved, the location where the footage will be recorded, and the key messages that will be covered.

STORYBOARD TITLE:

<p>1</p> <p>People involved:</p> <p>Filming location:</p> <p>Key messages:</p>	<p>2</p> <p>People involved:</p> <p>Filming location:</p> <p>Key messages:</p>	<p>3</p> <p>People involved:</p> <p>Filming location:</p> <p>Key messages:</p>
<p>4</p> <p>People involved:</p> <p>Filming location:</p> <p>Key messages:</p>	<p>5</p> <p>People involved:</p> <p>Filming location:</p> <p>Key messages:</p>	<p>6</p> <p>People involved:</p> <p>Filming location:</p> <p>Key messages:</p>

ADDITIONAL RESOURCES

Making + Learning: A framework to support the learning in museum and library makerspaces, including a publication describing the framework and its development, descriptive case studies, a suite of conceptual tools, and an online learning course. Developed in collaboration between Children’s Museum of Pittsburgh and the Institute of Museum and Library Services.

www.makingandlearning.org

Supporting Learning in Museum-Based Makerspaces: Design-based research study of family learning in museum-based makerspaces funded through a National Leadership Grant from the Institute of Museum and Library Services. Findings include the Learning Practices of Making, an empirical framework for identifying, assessing and designing to support learner engagement in making, and additional resources and tools to assist educators in designing and facilitating making as a learning process.

www.makinginmuseums.org

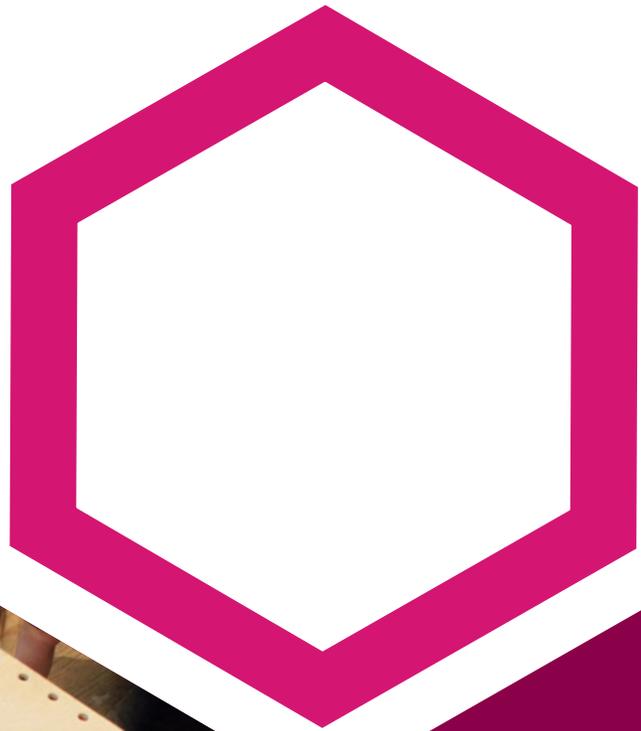
Maker Ed, Resource Library: A curated collection of online resources to support practitioners in integrating and sustaining maker education.

<http://makered.org/resources/>

Making in Schools Kickstarter Campaign Development Tool: An online tool created by Kickstarter for schools to build crowdfunding campaign using the Kickstarter platform.

www.kickstarter.com/pghkidsmake





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