

Library Makerspaces

Creating, Justifying and Funding
Makerspaces @ the Library

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What is a Makerspace?

- Learning environments rich with possibilities
- Foster experimentation, invention, creation, and exploration
- Gathering place for tools, projects, mentors and expertise



Libraries across the country are responding to the community's need to access technology and to develop programs that foster 21st C learning skills – critical thinking, problem solving and creativity.

Library Makerspaces are part of a growing movement of hands-on mentor led learning to **make and re-make the physical and digital world.**

They are the new 21st C **"computer lab" in the library**...many libraries are **rebranding** their current programs like writers groups, user groups, tech zoo, crafting programs, knitting circles – it's all about making "stuff".

Often developed within the framework of STEM or STEAM informal programming combining the technology to present learning in an interactive 'fun' way.

Many libraries have developed Makerspaces that are set up as learning incubators, modeled like a business incubator, they are spaces that encourage **collaboration, formal and informal networking, self directed learning and mentor directed learning,**

Makerspace programming helps patrons compete in the changing workforce as much as it is about life-long learning.

"Makerspaces are collaborative learning environments where people come together to share materials and learn new skills... makerspaces are not necessarily born out of a specific set of materials or spaces, but rather a mindset of community partnership, collaboration, and creation."

Library As Incubator Project



Successful makerspaces respond to the community's need and interest. Work with what you have. Start small, start big, but get started!

It is important to remember that the best designed makerspaces are part of a larger context of meeting the needs of all patrons, all ages, in developing their technological skills expanding their digital literacy, and developing 21C Skills – critical thinking skills, creativity, and problem solving – skills that have never been more important in our daily lives and the changing workplace.

All Shapes and Sizes

- “Genius Bar”
- DIY – with real tools and crafting materials
- Creative Technologies – Hardware and Software
- Resources Centers for entrepreneurs, students and job seekers, inventors
- Classes for novice and advanced learners



Everything from DIY (Do It Yourself) projects to creative technologies — patrons can go to the library and find what they need, use software to design furniture, (CAD drawing) – borrow a tool for a project at home, or learning how to work with hardware and software that includes video recording and editing, cartooning, video game creation, app creation, computer programming or just learning how to use Photoshop and download library resources on their own devices.

Why?

- Libraries are about learning.....
 - And helping people learn new things....
- Libraries are about the creation of knowledge
 - And are centers of innovation and inspiration



You all know– or you would not be why libraries are important educational resources – but it doesn't hurt to articulate why makerspaces are an integral part of library services – you ultimately will have to communicate the “why” to the public.

- Enhances the traditional role of the public library as a facilitator in the ‘creation of knowledge’ – a source for innovation and inspiration.

- Libraries play an important role in workforce development and the Maker movement is also regarded as a potential economic engine as more entrepreneurs emerge and thrive – Libraries foster the creative and critical thinking skills that are needed to drive this entrepreneurial spirit and the “new” economy.

Think about it - Biotechnology industry growing in Westchester – if we are to stay competitive, we develop the critical thinking skills and STEM education (informal learning) to support the future workforce. Libraries have a role here.

Why?

- Libraries promote literacy
 - Makerspaces help bridge the digital divide
- Libraries are about access
 - To technology, information and resources and even tools!
- Libraries are about community
 - Makerspaces build community connections

Most importantly – it is about literacy...

Makerspaces further the library's role in assisting patrons with access to technology and instruction on new literacies.

Promotes literacy as more than reading and writing; literacy has evolved into 'trans-literacy' - we need to read, write and interact across a broad range of platforms.

And it is about community.... Presents a myriad of opportunities for public engagement. They build community connections.

Some examples

MLK Library, Washington, DC
Digital Commons



 westchester
LIBRARY SYSTEM
• Promoting Literacy • Inspiring Connections

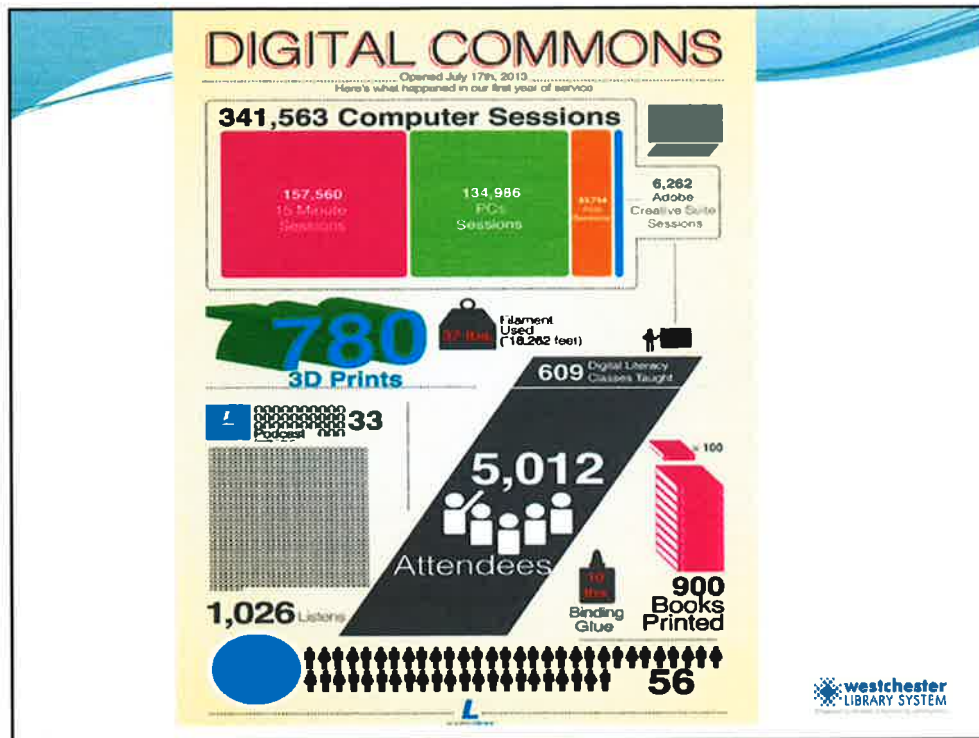
A wide variety of resources are available here – taking up the entire ground floor.

3D Printers, collaborative meeting spaces, an Espresso Book Machine, digital bar (like the MAC Genius bar) where patrons can spend up to 15 minutes “trying” various devices, explore different operating systems, and learn how to download and access library resources.

Around 300 public use computers – Mac Computers, design programs, meeting rooms, and classes on 3D printing, blogging, and computer programming. In first year – outgrew space – creating a second floor – ‘fab-lab’ with hands on tools and technology to create innovative projects, targeted to open Spring 2015.

Boost community involvement by hosting DC Tech Meet-ups, bring local businesses in the tech/creative industries together - modeling what businesses, incubators and organizations like Tech Shop and ideospace are doing.

Very entrepreneurial in their approach – staff comes from the tech and creative world.



They have outgrown their space – library staff (often industry professionals) train 500-700 people a month.

Looking to partner with a large institution or company to create a “badging” system – validate an individual’s skills in 3D printing or Arduino, etc.

In 2015, second floor renovation will include a sound studio, visual production area, laser cutters, and work benches for designing furniture and other projects.



Currently in its 3rd year - very successful, the development of the Makerspace is a natural outgrowth of a clear community interest and the library's commitment to the Maker movement. The makerspace has solidified the library's position as community hub for many different kinds of learning experiences.

Westport Public Library

- Initiated with IMLS funding in 2011, sustained with local funding and family foundations
- Built awareness and interest with 1st state-wide Maker Faire, dedicated staff and marketing effort
- “A place for people to connect and create”



Westport describes its Makerspace in The Great Hall as a **place for people to connect and create.**

The Library helps its patrons take **ideas and concepts from imagination to actual production.**

The MakerSpace is where **people can create content as well as also consume it--an incubator for ideas and entrepreneurship.**

Growing support for your Makerspace

- Articulate your vision and benefits to the community
- Use public engagement and programming as a cultivation tool
- Seek volunteer mentors to develop and implement programming



Build your case – what is your focus? Informal learning, life-long learning, technology access, digital literacy, digital inclusion, fostering 21st C workforce skills, building entrepreneurial skills, fostering creativity.

Articulate what you are doing (how does it fit into your strategic plan), tell people why you are doing this, what is your strategy to support it, and what is its potential impact on the community.

Use public engagement and programming as a cultivation tool

Newsletter

Update website

Host meet-ups for technology and creative industries.

Seek out local expertise/ mentor volunteers; use local experts to create a project that benefits the community.

Growing Support

- The Sparks! Ignition Grants for Libraries:
 - Small grants of \$10,000 to \$25,000
- 3D Systems - 3D Printers - November 17, 2014
- Your own backyard!
 - Pursue dollars for doers
 - Seek out matching gifts
 - Leverage dollars through a 'matching' program from a local donor
 - Leverage WLS support/ training opportunities/ mini-grants



Final thoughts:

Makerspaces – potential to build community, are about learning new things, public access to tools, software, electronics and more.

Take advantage of what is offered at WLS - Staff training is huge part of successful makerspaces.... Leverage WLS support – lots of training - “Train the Trainer, Arduino, University of Fashion Beta project.

WLS Con Ed grant – training on sustainable environmental education programming, funds to support community projects - more information will be forthcoming.

Pending IMLS Continuing Education Grant to provide hands-on training in Creative Technologies with for profit partner – DAE (March 2015).

April event – Breakfast with Bruni, Celebrating National Library Week – **will raise funds for innovative library programming.**

We continue to seek funds that support our mutual goals to provide the best in library services to Westchester.