The Library and the 21st Century Learner

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21st Century Challenges for Libraries

Rapid economic, social and educational change
- Participatory learning
- Lifelong learning
- Multidisciplinary approach
- Government funding cuts

Globalization
- Movement from a manufacturing/factory-based to a knowledge-based society

Technological advances
- 24/7 Access to Internet on handheld devices
- Digital design, manufacturing

Read: “Museums, Libraries and 21st Century Skills”
http://www.imls.gov/assets/1/AssetManager/21stCenturySkills.pdf

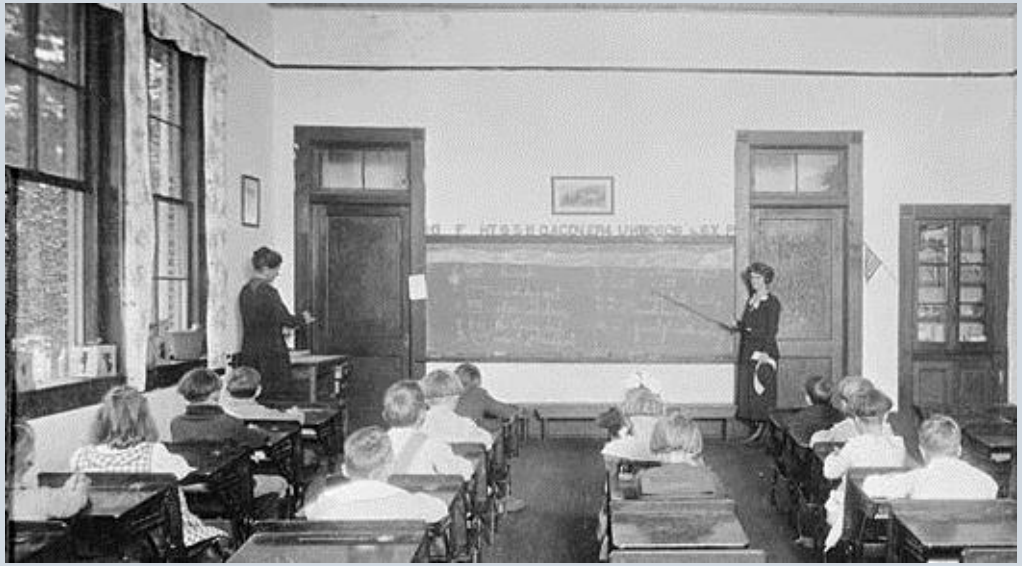
Globalization

Education Models are Changing

Teacher/School

Goal: Student Gets Degree

From Teacher-Focused to Student-Focused



http://georgiaarchives.org/

http://www.epa.gov/pestwise/work/index.html

The Changing Workplace

Picture credit: http://2012books.lardbucket.org/books/an-introduction-to-organizational-communication/section_11/11c710c75c3ddbc2ff9b675b56ae14eb.jpg

20th century	• 2 jobs in a lifetime
21st century	• 7-15 jobs in a lifetime

20th century	• Mastery of one field
21st century	• Simultaneous mastery of several fields

21st Century Skills

- Learning and Innovation
  - Critical thinking, creativity, visual literacy, scientific literacy
- Information, Media and Technology Skills
- Life and Career Skills
  - Initiative and self-direction, social and cross-cultural
- 21st Century Themes
  - Global awareness, entrepreneurial literacy, civic literacy, health literacy, environmental literacy

Libraries Are Learning Places

- Informal learning environments
- Guided by community needs
- Lifelong learning
- Content creation
- Citizenship
- Entrepreneurship
- Technology tools
- Innovation
- Self-directed learning

Libraries Moving from Books to eBooks

Lifelong Learning – Anytime, Anywhere

Embedded Librarians

Educate to Innovate: STEM in Libraries

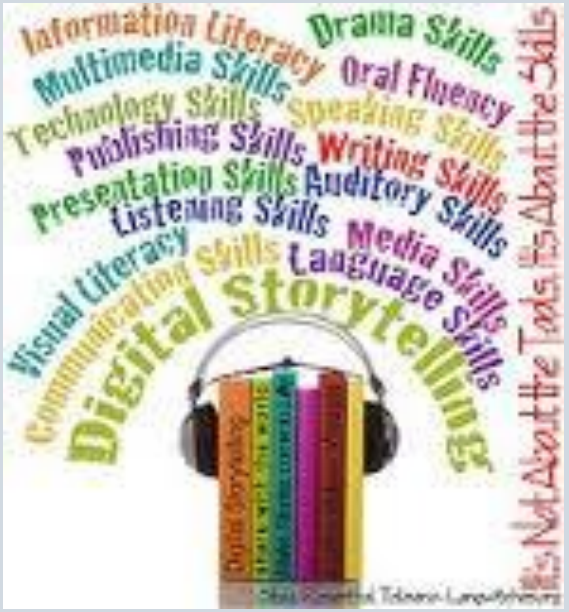
- Science, Technology, Engineering and Mathematics

Anne Arundel Public Library, Annapolis, Maryland

STEM Science • Technology • Engineering • Math Cafe`

Grand Forks Public Library, North Dakota

Collection → Creation



Some definitions

Digital media learning labs

- Focus on digital creations such as videos, game design, website design, digital storytelling, and more.

Fab Lab

- Focus on digital fabrication using 3D printers, laser cutters, milling machines and other computer-run machines.

Hackerspaces

- Focus on coding, modifying, and creating software and hardware.

Makerspaces can be seen as an umbrella term to cover all types of collaborative spaces.

Fab Lab (fabrication laboratory)

- A small-scale workshop offering personal digital fabrication.

Fab Lab – iSTEM at University of Illinois

What is a Makerspace?

A workspace with tools and equipment that people can use to create and make just about anything.

Detroit Public Library's Hype Makerspace

Creative and Sharing Environments

- Promoting inspiration, collaboration and conversation.
- The true maker philosophy is not about competition but exhibition.

Westport Public Library Makerspace, Westport, Connecticut

Digital Media Learning Labs

- You Media: Chicago Public Library
- http://www.youtube.com/watch?v=yRG2Bf-me6k

What Can Mentors Do?

- Give free workshops for the community.
- Volunteer to staff the space.
- Work with people on their projects.
- Provide guidance.
- Mentors/volunteers and community involvement can provide sustainability.

Westport Public Library Makerspace, Westport, Connecticut

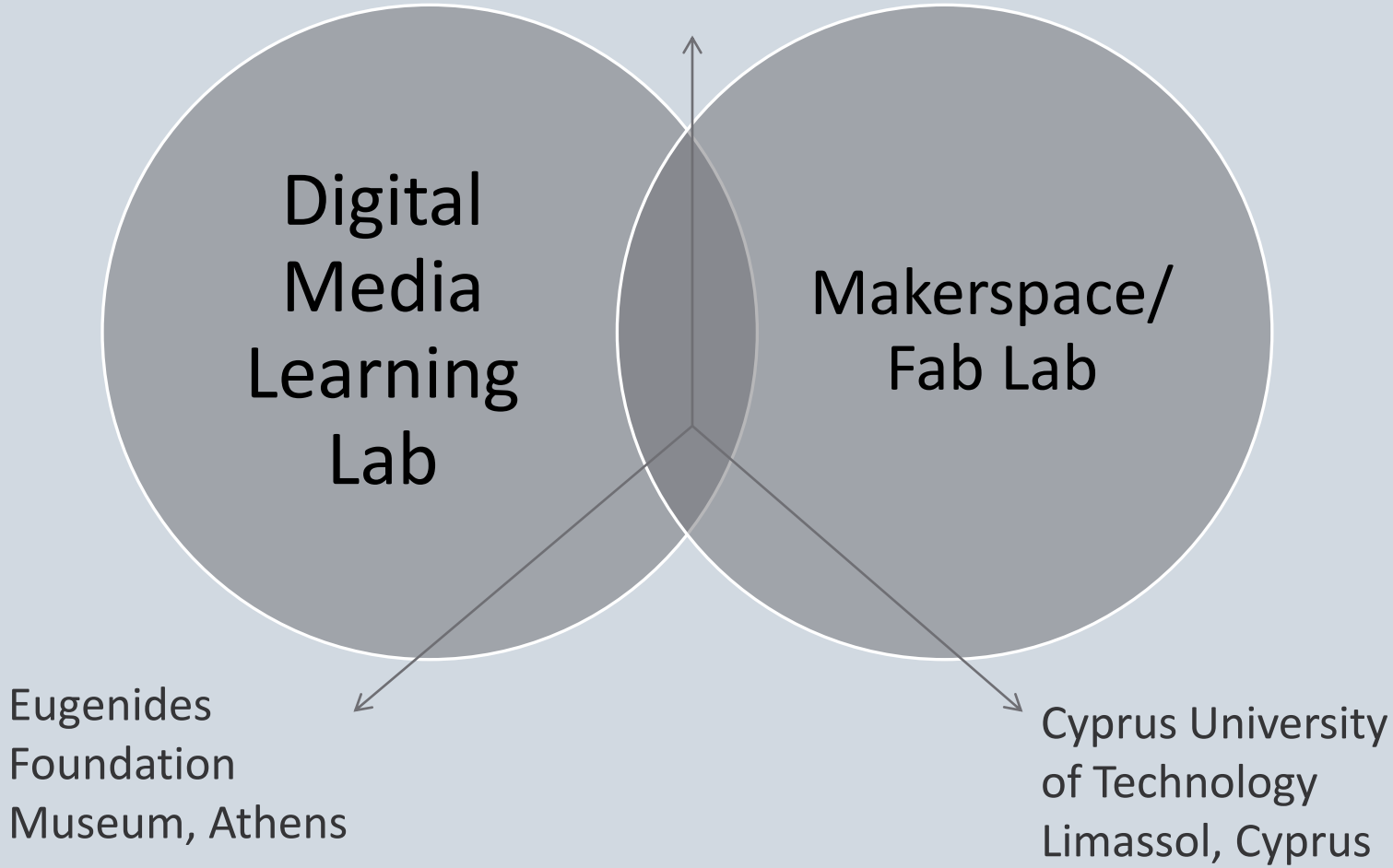
Blend of Makerspace, FabLab and Digital Learning Center Models

- Detroit Public Library's Hype Teen Center
- Offers bike tech, graphic design, crafting (knitting, sewing), electronics, Arduino robotics, and more!

YouLab Pistoia: An American Corner

Biblioteca SanGiorgio, Pistoia, Italy

YouLab Pistoia, Italy



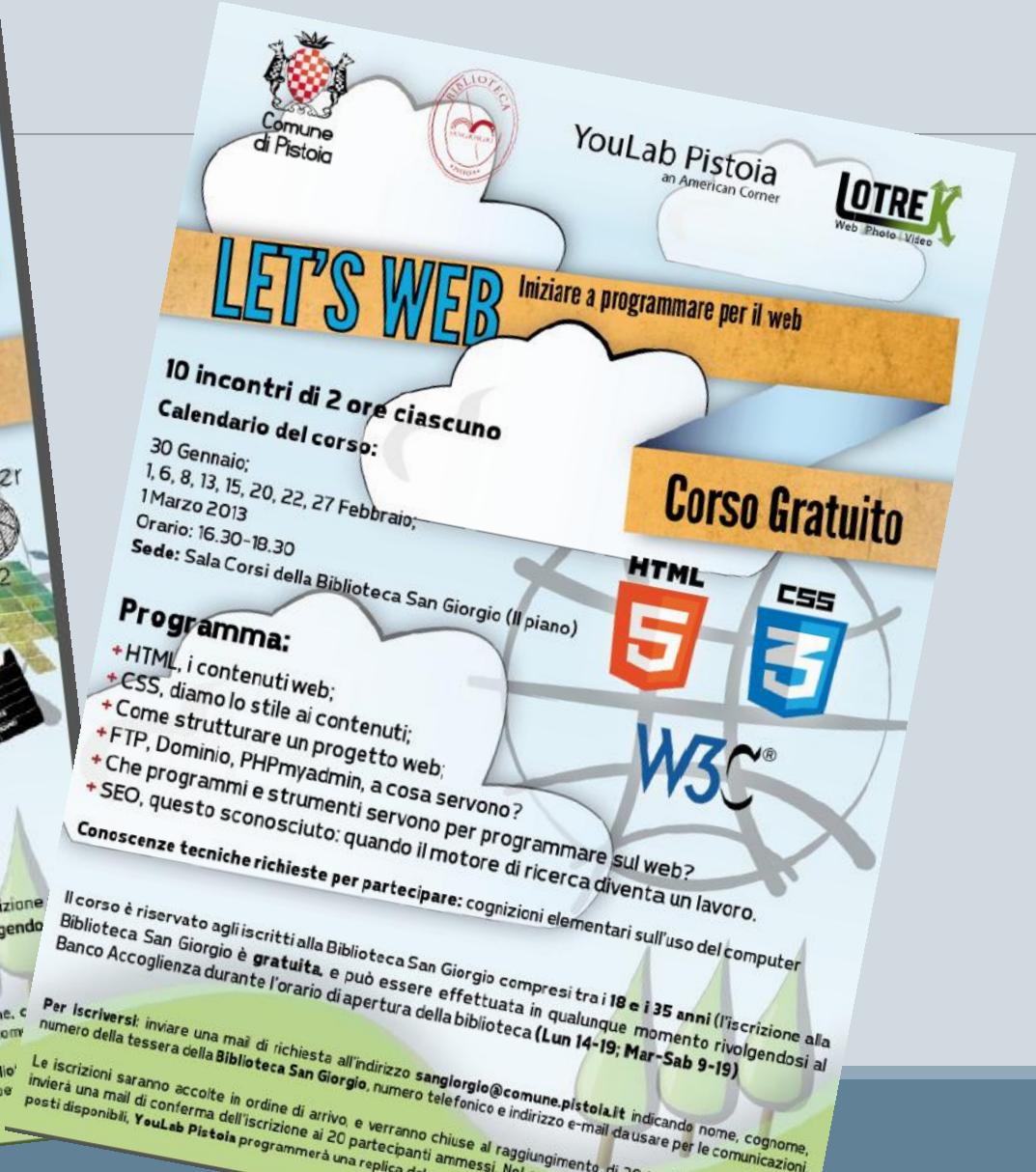
YouLab Pistoia Tools

- iMACs and PCs
- iPad and Android tablets
- Flipcams/sportcams
- Digital cameras
- 3D printer
- Arduino
- Drawing pads

… and books, speaker events, and more!

Workshops

CiakLAb:"
http://www.sangiorgio.comune.pistoia.it/assets
/files/corsociakyoulab.pdf

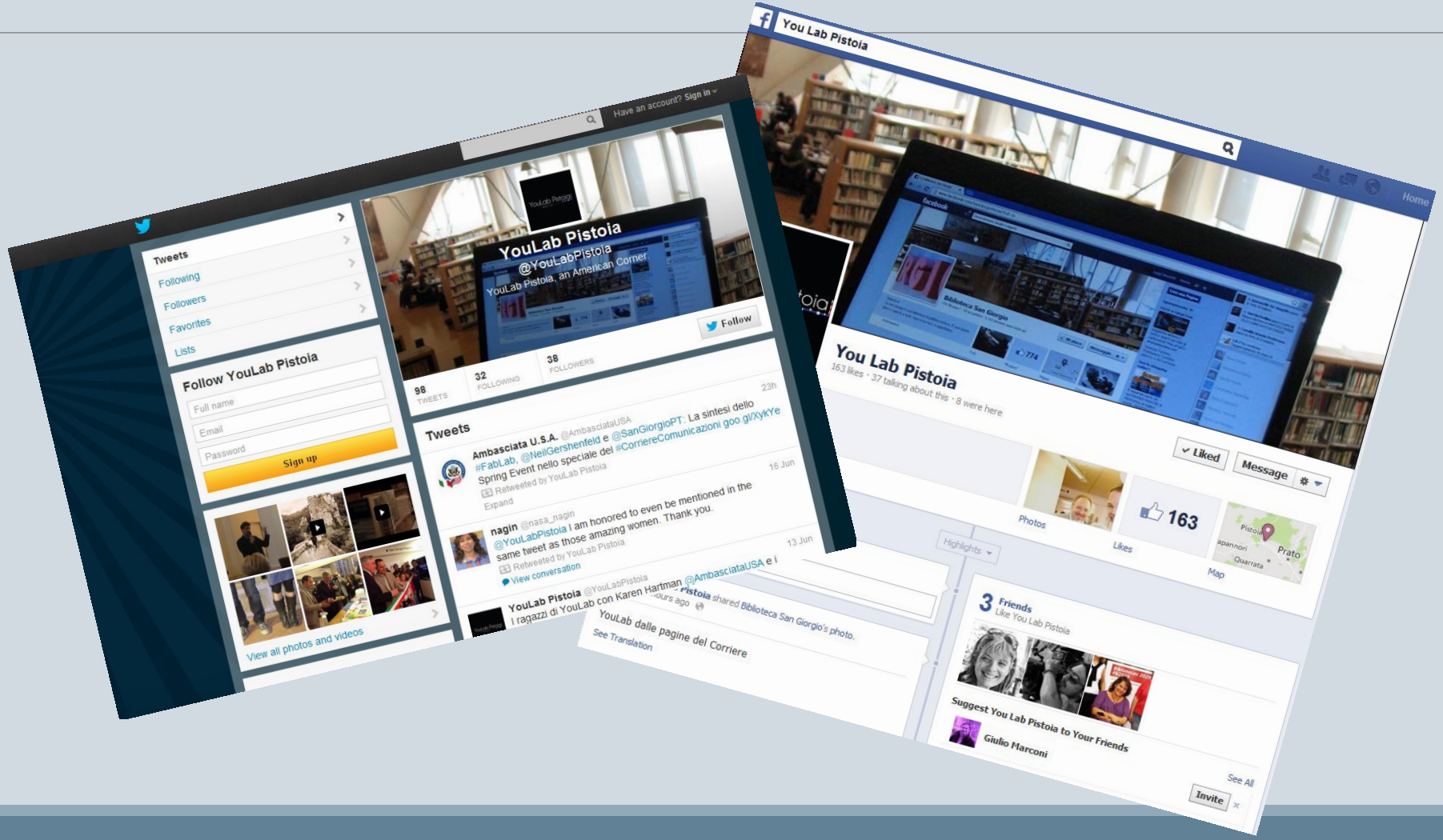


Projects are Shared

Photos:
YouLab
Pistoia
Facebook

SELF PUBLISHING SCHOOL
Pubblicare il proprio libro ai Tempi degli Ebook
STRUMENTI E TECNOLOGIE PER CHI SCRIVE
PER SCRITTORI GIORNALISTI BLOGGERS
HOME
CONTATTI
SELF PUBLISHING
Le possibilità e gli strumenti a disposizione di chi scrive ai tempi degli ebook
Corso Gratuito
Workshop da Venerdì a Sabato
Venerdì 5 aprile 2013, ore 15.30 - 19.00
Sabato 6 aprile 2013, ore 9.30 - 13.00
Sede: Sala Bigongiari della Biblioteca San Giorgio (I piano)
Docente: Mauro Sandrini, autore del libro "Elogio degli e-book" e ideatore della Self Publishing School
Mauro Sandrini
Self-Publishing School

Social Media



The Library is Changing its Focus

… from education to learning

… from consumption of information to participatory learning

… from institutions to networks*

- Connie Yowell, Director of Education, MacArthur Foundaton: "…focus on fostering passion, creativity, innovation, and the skills that are needed to compete and thrive in a global, connected world."

*MacArthur Foundation, http://macfound.org/reimagine/learning

21st Century Skills Resources

- Partnership for 21st Century Skills : http://www.21stcenturyskills.org
- Institute of Museum and Library Services: http://www.imls.gov
  - Museums, Libraries, and 21st Century Skills Report
- American Association of School Librarians: http://www.ala.org/aasl
  - Standards for the 21st Century Learner
- YouMedia http://youmedia.org
- "Hanging Out, Messing Around, and Geeking Out:" Kids Living and Learning with New Media," by Mikuzko Ito, etal. (free online)
- Maker Space Playbook http://makerspace.com
- FabLab Central http://fab.cba.mit.edu/
- MacArthur Foundation http://macfound.org

Thank you very much!

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