Coding Initiative in Wisconsin Public Libraries

Tech Days 2016

September 14--Franklin Public Library

September 22--Fond du Lac Public Library

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Initiative Coordinators

Ryan Claringbole

Tessa Michaelson Schmidt

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What IS Coding?

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When we say "coding," we mean not only coding and computer programming, but also **coding as a literacy**, as the ability to apply **computational thinking for problem solving and stimulating creativity**. More than anything, we want to increase awareness that coding concepts are for anyone and everyone.

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[Coding Video]

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What does coding in public libraries look like?

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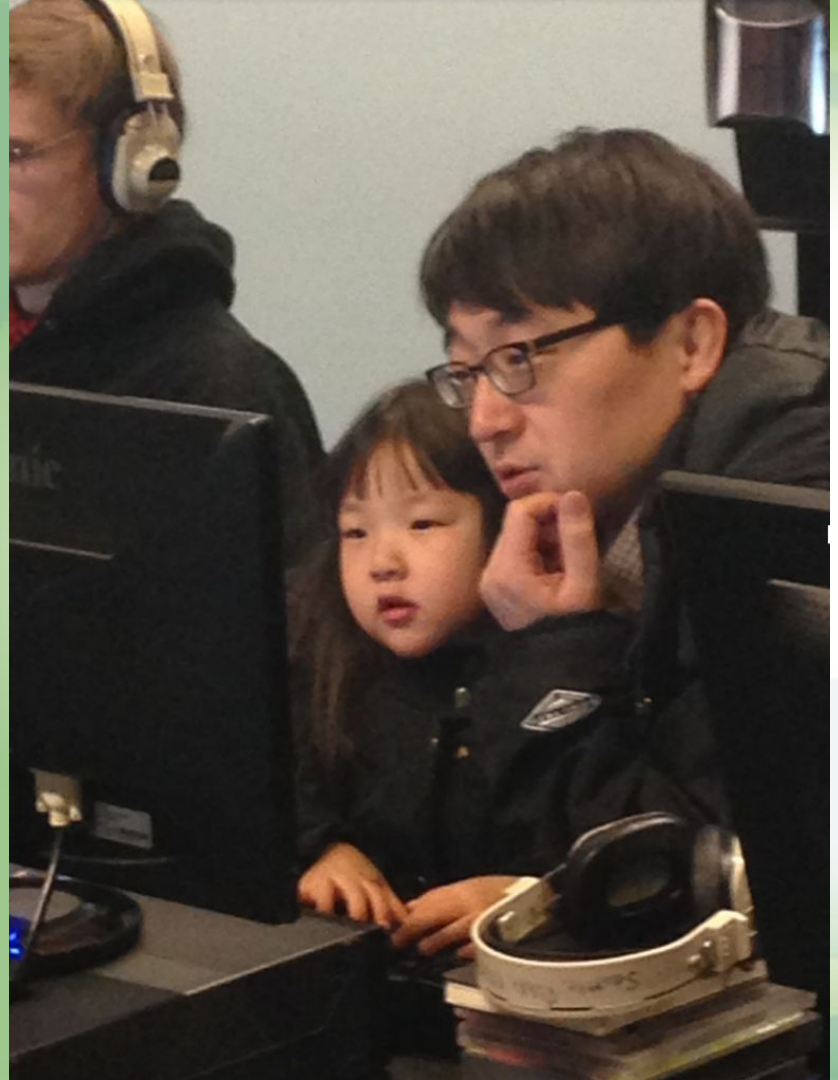

Hour of Code

Two eager students puzzle over the solution to a Star Wars coding game in downtown Seattle's Central Public Library during last December's global Hour of Code event

Source:
http://www.gamesandlearning.org/2016/01/11/hour-of-code-reflects-diverse-interest-in-learning-coding-skills/

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Library Staff

Attendees learn CAD modeling in the COLab at the 2016 Public Library Association Conference in Denver.

Source: https://americanlibrariesmagazine.org/blogs/the-scoop/pla2016-lessons-makerspaces-coding/

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Workforce Development

Louisville (KY) Free Library's Code Louisville, a 12-week program for adults using Treehouse learning.

Source: http://www.courier-journal.com/story/news/local/2014/10/30/federal-grant-will-help-louisville-agency-promote-computor-coding-training/18188337/

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Geek Girl Camp

The Fayetteville Free Library's (NY) week-long Geek Girl Camp gives elementary-age girls the opportunity to learn and play in various STEAM fields all in one location – the library!

Source: http://publiclibrariesonline.org/tag/fayetteville-free-library/

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Teen-Led Coding

Two teens start “Coding for Kids” program at Silicon Valley libraries

Source:
http://www.slj.com/2014/11/public-libraries/two-teens-start-coding-for-kids-program-and-teach-at-silicon-valley-libraries/

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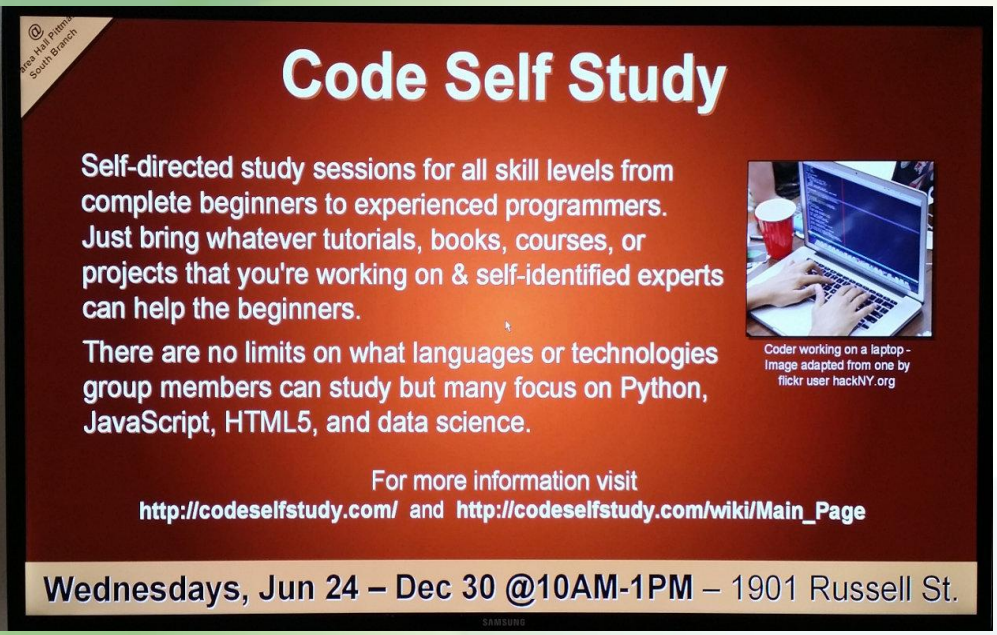
Coding Self-Study



Berkeley Public Library hosts self-directed study sessions that generally have no scheduled itineraries and all programming languages and skill levels are welcome from complete beginners to experienced programmers.

Source: http://publiclibrariesonline.org/2016/03/breaking-barriers-how-one-library-is-making-coding-more-accessible/

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What does coding in WISCONSIN public libraries look like?

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Ozobot Coding

Lester Public Library
1001 Adams Street Two Rivers, WI 54241 (920)793-8888 | Contact Us

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Coding Wednesdays

Play easy and fun coding games to learn basic coding concepts. For 5th Grade and up.

Second Wednesday of each month.

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Tween Scene Coding Classes

Special Tween Scene: Hour of Code classes will be held in the Digital Media Lab. Tweens will learn valuable skills while having fun coding with friends.

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Scratch Drop-In Program

Drop in Scratch Programming Session Monday, August 15th 1-2pm. Geared to 16 years old and under. No previous programming skills are required! Come give it a try!

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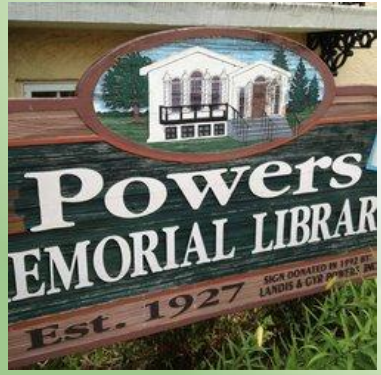
All Ages Drop-In Activity

The MakerSpace area is open every Thursday afternoon from 3:30 - 7:00 p.m. Everything from 3D Printing, Robotics, LEGOS, CNC Milling Machine, scrapbooking, Raspberry Pi, Snap Circuits, littleBits, and so much more can be found there. Let your imagination soar!



Palmyra, WI

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Tenants with Skills

Proto, an non-profit makerspace organization, leases space in Brown County Central Library through an arrangement in which they teach library users programming skills with Arduino and Raspberry Pi.

Brown County Library

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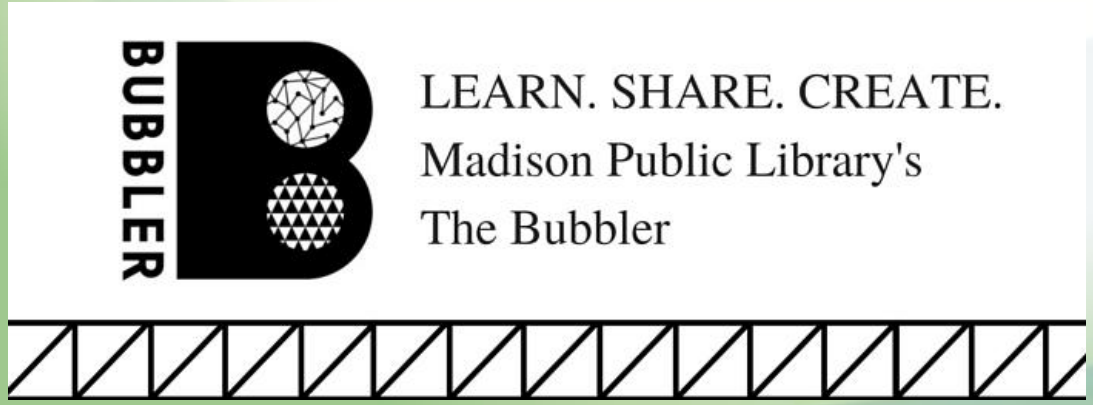
Volunteers with Skills

Please fill out the following form in relation to your interest in helping with The Bubbler program at Madison Public library.

- ❏ Maker (3D printing, arduino, raspberry pi, etc.)
- ❏ Media Lab (animation, game design, music, etc.)



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WiLS World:
An Intro to Coding With the WorldCat Search API

Join Steve Meyer from the OCLC Developer Network for a beginner-level session that will take you from programming concepts to hackathon participant in a single day. We'll spend the first part of the day walking through the building blocks of coding a simple search interface for the WorldCat Search API. In the afternoon, we'll help you use that knowledge to add more functionality to that interface, creating your own working search application.

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WisCODE Literati

WisCode Literati was started as a project of ILEAD USA- Wisconsin by a group of librarians interested in problem solving, technology, and learning.

http://www.wiscode.org/

Kits + Resources

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Coding Basics for Adults

The basic knowledge of how lines of code create the digital worlds explore every day is becoming a fundamental digital literacy. Get an introduction to the basics and learn how you can build your coding skillset. Registration is required.

KENOSHA PUBLIC LIBRARY
WHERE KENOSHA CONNECTS

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Hour of Code for Kids

The Hour of Code is a global movement reaching tens of millions of students in 180+ countries. Spend an hour with us learning code and join the movement! Limit of 12 students per class - registration required. Grades 3-5.

KENOSHA PUBLIC LIBRARY
WHERE KENOSHA CONNECTS

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Let's Move Beyond Silos of Success

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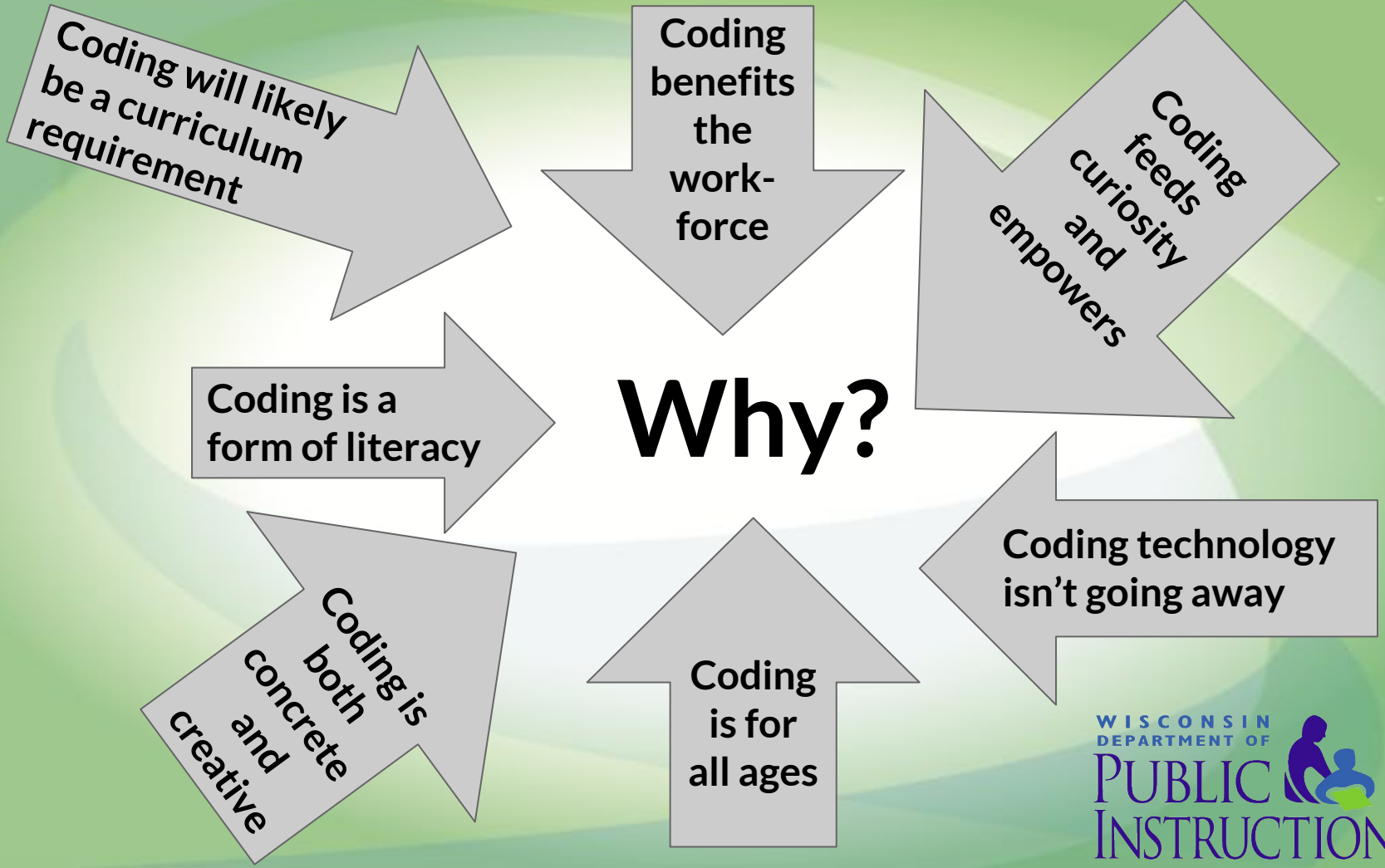
Coding will likely be a curriculum requirement
Coding benefits the work-force
Coding feeds curiosity and empowers
Coding is a form of literacy
Why?
Coding technology isn't going away
Coding is both concrete and creative
Coding is for all ages
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National Focus on Coding in Libraries

Libraries Ready to Code:

A new project of the American Library Association

- Focused more on K-12 partnerships and programming, less on awareness
- Talking with Wisconsin about the Coding Initiative

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State Focus on Coding in Libraries

Wisconsin is leading the way with its statewide effort to assist public libraries with coding training, contacts, and tools.

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Coding Initiative in Wisconsin Public Libraries

Through LSTA funding, the Division for Libraries & Technology is doing a multi-year coding initiative focusing on awareness of coding (computational thinking) for people of all ages, including library staff.

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Coding Year 1

- 2016-2017
- Awareness campaign
- Needs assessment and resource development
- Establish partnerships
- Host public library screenings of the documentary CODE: Debugging the Gender Gap

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CODE: Debugging the Gender Gap

Free public screenings of this documentary are scheduled at 20 Wisconsin libraries in the upcoming year

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Coding Year 2

- 2017-2018
- Continue with awareness campaign and resource development
- Sandbox Projects
  - Integrated teams explore coding with library staff, patrons, and system members
  - CE opportunities
  - Technology purchases

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Coding Year 3

- 2018-2019 (dependent on funding)
- LSTA competitive grant category for public libraries and systems
- Evaluate initiative
- Develop sustainability plan

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Goal: Awareness

- What do we mean when we say “coding project”?
  - Computer science and computational thinking
  - Coding as a literacy
- For anyone and everyone
- Add Wisconsin dimension to national efforts

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Goal: Partners

- Help libraries to identify local organizations and individuals
- Connect libraries with schools regarding computer science curriculum
- WisCode Literati
- YOU!

WisCode Literati
DREAM BIG. LEARN CODE.

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Drop Us a Line...of Code

Notify us about:

- Your programs
- Your partners
- Your resources
- Your needs
- Your wishes

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Code Curious?

WANTED: Libraries and systems to play in the coding sandbox during Year 2.

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[Hour of Code]

File
Edit
Tips
About
Soltice Card
by schmichaelson (shared)
Scripts
Costumes
Sounds
Motion
Looks
Sound
Pen
Data
Events
Control
Sensing
Operators
More Blocks
move 10 steps
turn 15 degrees
turn 15 degrees
point in direction 90
point towards mouse-pointer
go to x: -40 y: -81
go to mouse-pointer
glide 1 secs to x: -40 y: -81
change x by 10
set x to 0
change y by 10
set y to 0
when clicked
say Happy Soltice! for 2 secs
switch costume to hat3
when this sprite clicked
switch costume to costume1
switch backdrop to gingerbread
wait 3 secs
switch backdrop to slopes
x: -44 y: -180
Sprites
New sprite:
Stage
3 backdrops
Sprite1
Snowflake
Snowflake2
Snowflake3
Snowflake4
New backdrop:

Questions?

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