Teachers Learning Code: Educator Workshop
Layout of the Day | Instructor Notes

Preview Slides:
https://ladieslearningcode.github.io/tlc-workshop-for-educators/slides.html

Contingency Download Folder:
https://drive.google.com/file/d/0B0D0LWVu-xHyNmw5Z3NLamlEd0k/view?usp=sharing

DO THE ROBOT ICE BREAKER ACTIVITY [12 minutes]

- Pairs take turns as both Robot and Programmer working through this unplugged activity
- Reflection
    - Which role was more difficult?
    - Why?
    - Discuss concepts learned & discuss modification options
    - Note: this is on teacherslearningcode.com as a lesson and in the how-to-guide: http://teacherslearningcode.com/en/lessons/ruby-robot

AGENDA REVIEW [3 minutes]

INTRODUCTIONS [10 minutes]

- What brings you here? What are your goals?
- Lead and mentor introductions
- What the goals of the workshop are

WHAT IS TEACHERS LEARNING CODE? [15 minutes]

- Introduction to the organization
- Why we started the program
- Our successful formula for programming
- Why teach coding
- Learning objectives

- Diversity matters
- What the program includes
- Who the program is for

TEACHING TOOL: SCRATCH [60 minutes]

- Code Along in Scratch
    - Point out the main elements (sprites, stage, scripts) *OR* watch the intro video with the group
    - Give teachers 2-3 minutes to try a few challenges
    - See FAQ sheet for more support
- Exploring Scratch through a Teachers Learning Code Lesson
    - We recommend Painting with Gobo (already in the slides)
    - See the Painting with Gobo solution sheet
    - You can also replace this activity with another lesson from teacherslearningcode.com. For example:
        - Wildlife Soundscapes
            - Starter Project: https://scratch.mit.edu/projects/147165193/
            - Video Tutorial: https://youtu.be/o_lV16MlcW4
            - Follow along the lesson and have teachers try out extensions and modifications!
- Cover concepts like:
    - Logic and reasoning (like events, loops, conditionals)
    - Online vs desktop tool (both free!)
    - There are no wrong way of doing things; “real” developers will solve the same problem in multiple different ways

SHOW & TELL + DISCUSSION [45 minutes]

- ½ walk around; other ½ share what they did with them
    - Repeat for other half
- Discuss challenges encountered
    - What challenges do you think your students may have
    - Explore vs structure
    - Encourage individual learning styles
- Debugging Activity
    - Give a few minutes for teachers to try and debug 1-2 projects

LUNCH [60 minutes]

BUILDING THE WEB WITH MOZILLA WEBMAKING TOOLS [30 minutes]

- Explain what HTML & CSS are
- Open X-Ray Goggles and give a quick summary (used for 'hacking' websites)
- Open Thimble and give a quick summary (used to remix or build websites from scratch)
- Have everyone log in via http://thimble.mozilla.org

TEACHING TOOL: MOZILLA X-RAY GOGGLES [30 minutes]

- Have teachers brainstorm around their role model (information collection)
- Go through the Superhero Profiles activity
    - Demonstrate how to edit text and replace images from a Google search
    - Teachers remix their own superhero page, then Publish to the web.
    - Example: http://thimbleprojects.org/HTTP/glccamp/135907

BREAK [10 minutes]

TEACHING TOOL: MOZILLA THIMBLE [30 minutes]

- Have teachers research their favourite province or territory
- Go through the Tourism activity
    - Remix the starter HTML project in Mozilla Thimble
    - Demonstrate how to edit text elements
    - Demonstrate how to embed a video from YouTube (Click "Share" > "Embed" > Copy and paste the iframe code into your HTML file)
    - Have teachers Remix their own page
    - Example: https://thimbleprojects.org/teacherslearningcode/353483/
    - Demonstrate how to edit CSS styles, if time. See http://css.cool for inspiration
    - Remind everyone to rename their project (top, left) and Publish

SHOW & TELL + DISCUSSION [45 minutes]

- Have teachers volunteer to share their Superhero Profile or Tourism Website
- What challenges do you think your students may have
- Explore vs structure
- Encourage individual learning styles

NEXT STEPS [10 minutes]

- Question to group: What's YOUR next step?
- Give a few ideas

- Hand out sticky notes (and pens)
- Have them write down their next step, then share with the person beside them
- After wrapping up have them stick their next step sticky on the wall, so people can see each other's next steps/get inspired
- THANK YOU!
- Feedback Survey

Other Topics for Discussion/ Work Period Ideas

- Talk about assessment
    - How a student could save/share/submit for "marking"
    - Individual URL's in Scratch and Mozilla Thimble
    - Educator accounts for Scratch
- Encourage everyone to share share something they learned
- Working Period
    - How will you use this in your class next week
    - Lesson plan
    - Talk amongst yourselves, I'm here to support