Inquiry & interest-based approaches for learner engagement: instructional perspectives from academic & public libraries

http://knowyourmeme.com/photos/19246-this-is-relevant-to-my-interests

http://knowyourmeme.com/photos/235-this-is-relevant-to-my-interests
Introduction/Welcome

Martina

Holly
Introductions - Where participants are from today

Tufts University
University of Toronto
University of British Columbia
MacEwan University
The King's University
Government of Alberta
University of Alberta - Rutherford library
Southern Alberta Institute of Technology
University of Western Ontario
Strathcona County Library
University of Education, Winneba, Ghana
University of Ottawa
Northern Lights Library System
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<td>Robot Fashion show</td>
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<td>Explore + Demonstrate</td>
<td>Brainstorm, explore materials &amp;</td>
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<td>Make + Experiment</td>
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<td>Share + Celebrate</td>
<td>Pitch, strut, cheer!</td>
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Learning Goals

Design Challenge
Goal: Familiarity with technology concepts

Robot Fashion Show
Goal: Familiarity with coding concepts

Workshop Goal: Experience interest & inquiry based learning
Theoretical Background

**Constructionism theory:** creating or building something helps learning. Learning by making. (Harel & Papert)

**Constructivism theory:** learners are involved in the design of their own learning. (Piaget)

**Inquiry based learning pedagogy:** starting with questions, problems & scenarios. (Schwab, Herron)

**Interest based learning:** learner centered, responds to interests, strengths & abilities. (source: http://blog.theeducationpartners.com/interest-based-learning) (Carl Rogers)

**Active Authentic Engagement**

- **Level 1 Confirmation:** known
- **Level 2 Structured:** Teacher provides question + procedure
- **Level 3 Guided:** Teacher provides question
- **Level 4 Open:** Learner provides question

*Source: The Many Levels of Inquiry by Heather Banchi and Randy Bell (2008)*
Getting to know you
Go to: www.menti.com Code: 55 64 45
Design Thinking Activity

In a small group...

- Choose a random SILLY word and TECHNOLOGY word

In the next 15 minutes...

- Brainstorm a product or service that will make life better AND combines the two words.
- Develop a prototype of your idea using the materials provided
- Develop a pitch for your idea aimed at a large technology investor (e.g., Google)
Introducing Dash and Dot

- Made by Wonder Workshop (early Kickstarter).
- At least one pair live at each branch of EPL.
- Programmed with Blockly.
- Learn-to-code robots for 6 - 14 year olds, or anyone who loves cute robots.

With a small group, work together through the exercise to learn the basics movements, actions, and logic to animate the robots.
Dash and Dot Exercise using Blockly app

1. Make Dash move forward.
2. Add a command to make Dash move backwards.
3. Add a command to make Dash talk or laugh after movements finish.
5. Make Dot trigger when Dash starts the triangle.

6. Make Dash repeat the triangle, without repeating the movement blocks.
Robot Fashion Show

With a small group…

- Select an iPad Mini and a Dash robot.
- Choose a favourite literary character. Design a costume inspired by that character for your Dash (and optionally Dot) using materials provided.
- Design a stylish “catwalk strut” for your Dash, that must include:
  - 1 event activated by Dot
  - 2 changes in direction
  - 1 “signature move”
  - 1 loop

Activity adapted from: https://www.makewonder.com/play/ideas/34

If you get stuck…
- Have you tested it yet?
- Has another group figured it out?
- Is there a code example online?
- Check in with the facilitators!
Character Ideas

Hermione Granger - Harry Potter
Doc Brown - Back to the Future
Zoolander
Minions
Jackie Kennedy
Vivian - Pretty Woman
Mary Poppins
Nina - Black Swan
Lady Gaga
Beyoncé
Furiosa - Mad Max
Juliet
Dorothy - wizard of oz
Little Red Riding Hood
Rose - Titanic
Padme Amidala - Star Wars
Reflection Questions - www.menti.com  55 87 99

- Which interests of yours were you able to pursue today?
- What challenges or problems did you overcome?
- What is one thing you are going to try in your instruction?
- What did you find most enjoyable about the workshop today?
- What did you learn to avoid or what would you do differently if implementing a similar activity in your context?
Facilitation Techniques

● Focus on learner’s questions and interests
  ○ Leave room to respond to these

● Provide a balance of structure vs. room for creativity
  ○ Boundaries help creative thinking

● Position learners as teachers
  ○ Ask those who know, or discover, to share

● Self-reflection/assessment
  ○ Ask learners to identify what they learned
  ○ Ask learners to identify what others (peers) learned
Thanks for joining us today!

Any questions?

Holly Arnason, harnason@epl.ca

Martina King, kingm10@macewan.ca