As You Come In...



- Pick a table, any table...we'll be moving around soon!
- Take out your empathy map pre-work and get ready to discuss.
- (If you didn't print an empathy map, there are some in the back--try to do it quickly now!)

Let's Build Something!

A Rapid-Prototyping Instructional Design Workshop

Dani Brecher Cook, UCR Library -@danibcook Doug Worsham, UCLA Library - @dmcwo #buildsomethingCARL





Today's "Grand Challenge"

Have fun & make something together

Find Your Friends! (for the next four hours)

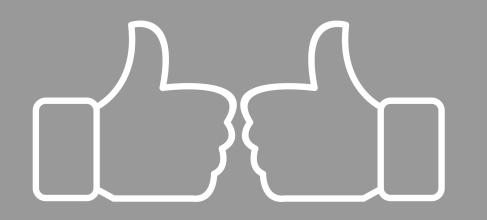
- Introduce yourself to at least 6 people from tables other than the one that you are currently sitting at. Ask:
 - What's the learning challenge you are working on today?
 - What type of learners are you planning to work with?
- Form 4 groups (one per table) working on similar learner groups or challenges.

The Let's Build Something! Mini-Manifesto

(it's short, we promise)

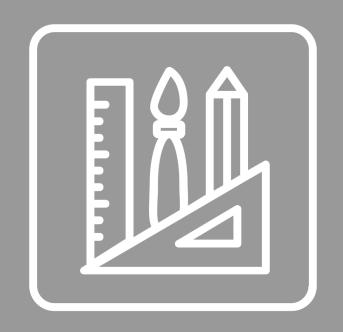
ONE. build imperfect solutions quickly & on purpose.





TWO. adopt a culture of Yes! (or, at least, Why Not?)

THREE.
work with what
you have.





FOUR.

do less to

make more.

FIVE. move from "constructive criticism" to



Let's Put This Into Practice...

Now we'll co-construct the characteristics of "learner-centered design thinking."

What does "learner-centered" mean to you?



What does "design thinking" mean to you?



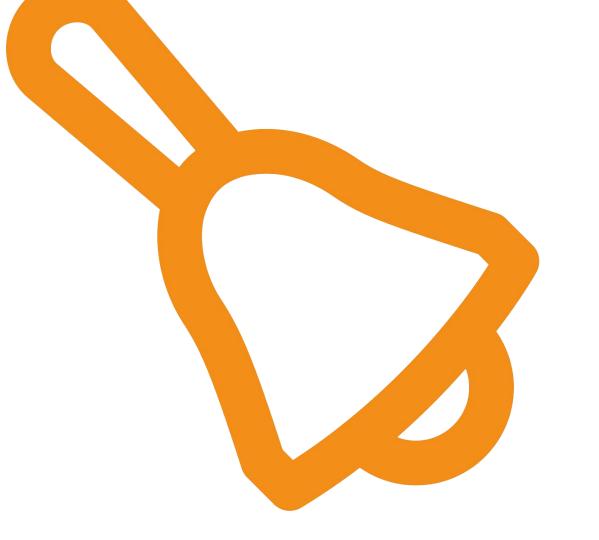
Learner-centered design thinking is:

TBD!

Agenda

- BREAK
- Tools & Techniques for Learner-Centered Design
 - Empathy maps
 - Journey maps
- Divergent & Convergent Thinking
 - "Four paths" to prototyping exercise
- BREAK
- Rapid Prototyping & User Feedback
- BREAK
- DIY Toolkit
- Wrap-up

BREAK! (5 minutes)



LEARNER-CENTERED DESIGN

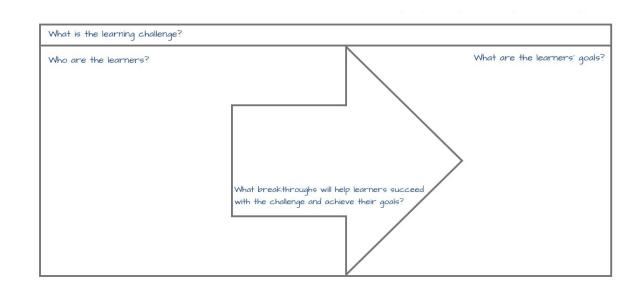
Tools & Techniques

Empathy Mapping

Center your design around learners and their goals.

Situate your design ideas in real-world learning contexts.

Develop insight into key breakthroughs in the learning process.



Learning Journey Mapping



- Describe the challenge (e.g., "critically examining primary source documents").
- Center circle: Write one learning outcome related to the challenge.
- 3. Left box: List pre-learning that might help set up students for success.
- 4. Right box: Identify next steps in the learning process.

Challenge: What comes first? What will set up learners for success? What comes next? What challenges are ahead? What background learning might be helpful? Learnina Outcome Break down your learning What will learners do outcome into smaller next? What is the larger tasks and more goal they are heading manageable steps. toward?

A Learning Journey Map Example



Challenge: Working in groups of 3-4 to propose & carry out an experimental research project during 10 week quarter.

What comes first? What will set up learners for success? What background learning might be helpful?

- Generate a list of possible topics and related research questions
- Do groups vote? How do they choose?
- Maybe vote after initial research to determine viability?
- . What plant & animals are supported by the lab? Can Ss get a list?
- . What measures are possible in the lab?
- How to figure out required research question structure?
 Maybe analyze a previous research article (from the class?) and identify the model, variables, and measures?

Learning Outcome

Narrow a broad research question by articulating: (1) the plant/animal model (e.g. **

- sunflowers)

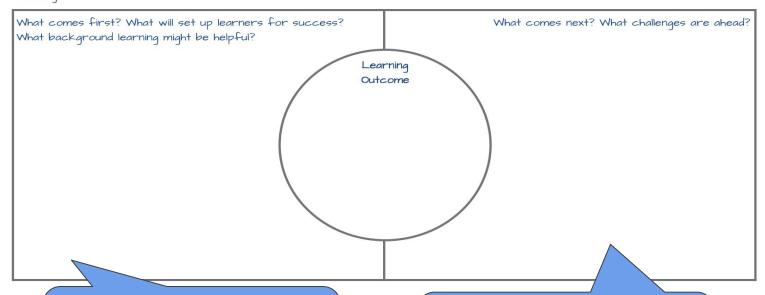
 (2) the variables (e.g., salinity)
- (3) the measures/tests to be
- investigated in the project (e.g., plant height)

What comes next? What challenges are ahead?

- Use topic, model, variables, and measures to generate effective literature search.
- · Screen/select research studies
- identify models, experimental/ control groups, measures/ methods used in previous studies
- use structured search (narrowing/expanding) to find related studies
- · Identify gaps in current research
- . Maybe revise/refine research question?
- ·

3 Minutes, on Your Own

Challenge:



Break down your learning outcome into smaller tasks and more manageable steps.

What will learners do next? What is the larger goal they are heading toward?

Now, Pair Up for 4-Minute Interviews:



- 1. Ask: What's your challenge and initial learning outcome?
- 2. Work together to:
 - a. Identify steps experts take (but sometimes forget).
 - b. Uncover hidden challenges and breakthroughs.
 - c. Discuss: Would you like to revise your learning outcome at this point?

Pick Your Learning Outcome



You have mapped several steps in a learning process.

Which **one** would you like to focus on?

Some factors to consider:

- What would be most helpful for learners?
- 2. Can learners create something to demonstrate their learning?
- 3. What seems narrow & specific enough to handle with a short learning object?

Challenge: Working in groups of 3-4 to propose & carry out an experimental research project during 10 week quarter.

What comes first? What will set up learners for success? What background learning might be helpful?

- Generate a list of possible topics and related research questions
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Learning

Narrow a broad research question by articulating: (1) the plant/animal model (e.g..*

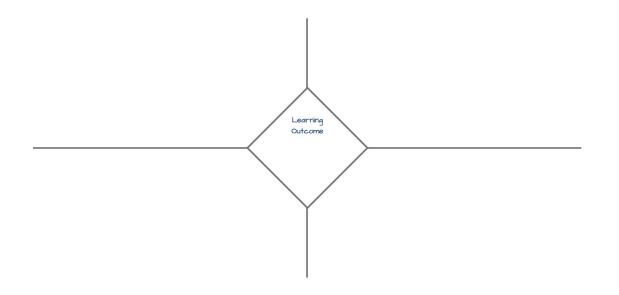
- sunflowers)
- (2) the variables (e.g., salinity)
- (3) the measures/tests to be investigated in the project (e.g., plant height)

What comes next? What challenges are ahead?

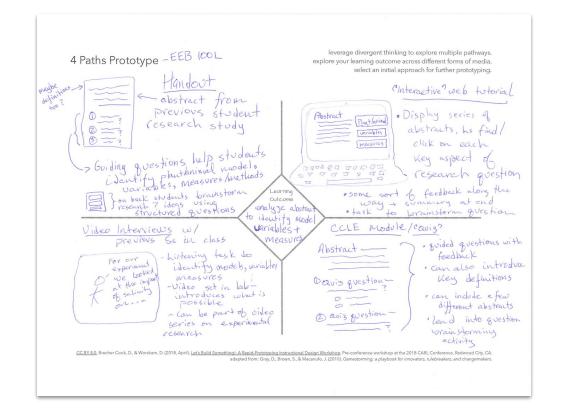
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- Maybe revise/refine research question?
-?

Four Paths Prototyping

- Write the learning outcome you are working on in the center diamond.
- 2. Rapidly sketch four different approaches to helping students with this learning outcome. Give yourself 90 seconds to explore, sketch, and jot down notes for each option.



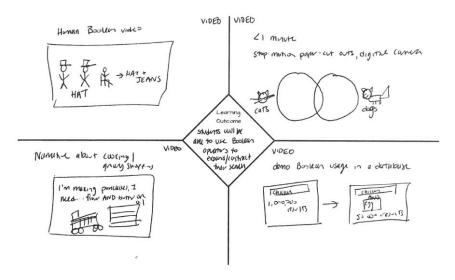
A "4 Paths" Example



Another "4 Paths" Example

4 Paths Prototype

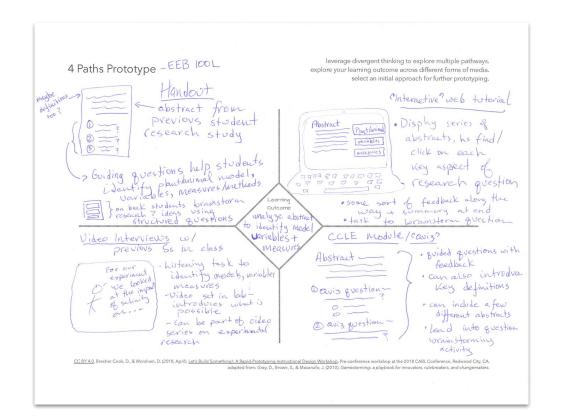
leverage divergent thinking to explore multiple pathways. explore your learning outcome across different forms of media. select an initial approach for further prototyping.



CC BY 4.0. Brecher Cook, D., & Worsham, D. (2018, April) Let's Build Somethingl. A Rapid-Prototyping Instructional Design Workshop. Pre-conference workshop at the 2018 CARL Conference, Redwood City, CA adapted from: Gray, D., Brown, S., & Macanufo, J. (2010), Gamestorming: a playbook for innovators, rulebreakers, and changemakers

Four Paths Feedback

- Get feedback!
- What seems
 - a. Feasible?
 - b. Engaging?
 - c. Impactful?
- 3. Assessment: What will learners create to demonstrate their learning?
- 4. Decide which path would you like to pursue in the next round of prototyping?





BREAK! (15 minutes)

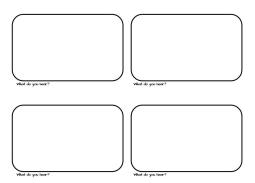
LET'S BUILD IT

Rapid Prototyping + User Feedback

Template options:

(on your table)

 Video and/or tutorial storyboard



Worksheet template

Class/Activity Name		
Activity One		
Activity Two		

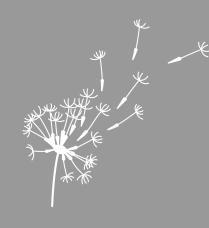
Blank paper



ROUND ONE. 20 minutes to sketch out your prototype 10 minutes for feedback



I wish...



What if...





ROUND TWO. 15 minutes to refine your prototype 10 minutes for feedback

User Feedback Interview

Share your prototype-in-progress.

Ask 1-2 specific questions about your design so far.

For example:

- What would make these directions clearer?
- How would you improve the introduction?
- How did you react when you saw this section of the storyboard?

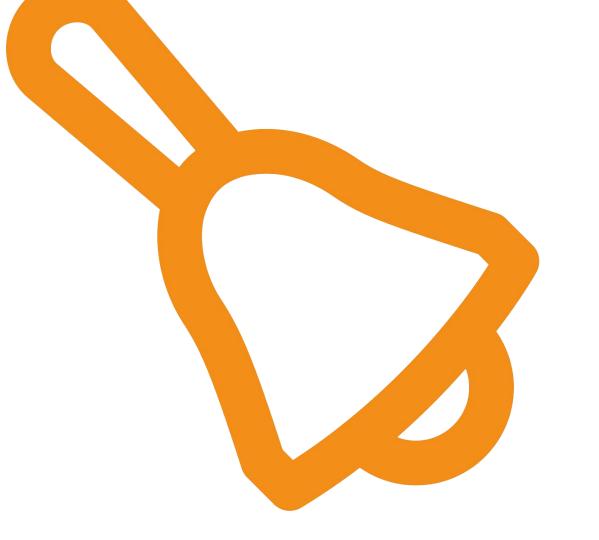


ROUND THREE.

7 minutes to develop a game plan for your next steps

- Do you need to iterate your prototype more times?
- Who else at your campus do you need to bring into the conversation?
- Who should you do user testing with? And how will you do user testing?
- What kinds of tools and expertise do you have available to build this out?

BREAK! (5 minutes)



DIY TOOLBOX

Use what you've got bit.ly/build-something-diy

Wrap-Up & Feedback

The toolkit:

ucla.box.com/v/build-something-toolkit

We'd love your feedback on today's pre-conference workshop.

We have a very brief feedback form at:

bit.ly/buildsomethingfeedback

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