DESIGN THINKING @UG

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DESIGNING THE LEARNING SPACE OF THE FUTURE

DESIGN CHALLENGE

Problem: As an educator, you are responsible for facilitating a meaningful learning experience in learning environments or spaces.

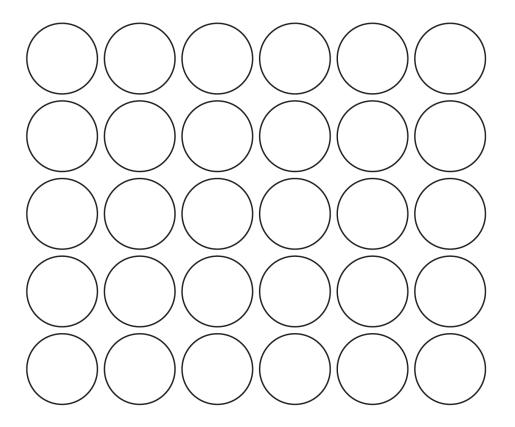
People spend many hours each year, and thousands of hours over a lifetime, sitting in learning spaces. Some of these spaces are transformational and some are terrible. Sometimes learning spaces are something else or in between these two extremes.

Design Challenge: Design the learning space of the future

THINK - EMPATHIZE - DEFINE

Design Strategy: THINK

Instructions: Complete the 30 Circles Challenge (3 mins)



THINK - EMPATHIZE - DEFINE

Design Strategy: EMPATHIZE

Engage in design research (10 mins..5 mins each)

Instructions: Select a course (if you are not teaching, select a former course or other learning experience you want to work on). Interview your partner to learn the following information:

- 1. Title of Course/Topic:
- 2. Dream learning outcomes (what do you hope students will learn and be able to do after taking this course):
 - Objectives:
- 3. Sketch the learning space where this course/topic is currently taught below.

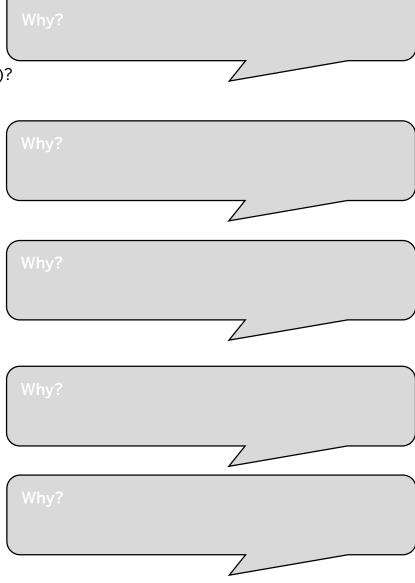
4. Ask your partner what is painful about the learning space they use.

Design Strategy: EMPATHIZE

Continue your research (12 mins..6 mins each)

Instructions: Ask your partner: If you could have any object in your classroom, regardless of cost, what would it be (dream big)?

Continue asking why.



THINK - EMPATHIZE - **DEFINE**

Design Strategy: DEFINE

Define the design problem (8 mins...4 mins each)

Instructions: Prepare a **problem statement** based on your research. Get feedback from your partner and implement their feedback).



do so?

needs a way to_____

Name of partner needs a way to
(continued)
(key insight: but surprisingly, interestingly, however, unfortunately)
(continued)
(continued)
GET FEEDBACK! (Ask your partner - if you could improve this problem statement in one way, how would you

THINK - EMPATHIZE - **DEFINE**

Design Strategy: DEFINE

Warm up for ideation: Create a How Might We (5 mins total)

Instructions: Turn the problem statement into a design opportunity by phrasing it as a How Might We/I?

How Might We? (HMW)

Hint: How Might We (HMW) statements tend to be too broad or too narrow at first. One way to test the quality of your HMW is to see how many ideas you can generate from it. If you can only generate 1 idea in response, then it is too narrow. If you cannot generate any ideas, it is too big. If you can generate at least 5 ideas, including some wild ones, your HMW is just right.

Too Broad: How might we redesign learning spaces for all courses? **Too Narrow:** How might we redesign the desks in classroom A?

Just right: How might we remove physical barriers to learning in a classroom space?

How might we			

IDEATION IDEATE - PROTOTYPE

Engage in divergent thinking to generate ideas (5 mins total)

Design Strategy: IDEATE

Instructions: It's time to diverge (remember timeboxing)! Write down as many ideas as you possibly can on post-its in response to your How Might We. 1 Idea Per Post-it! Be as boring or as wild as possible.

IDEATION IDEATE - PROTOTYPE

Design Strategy: IDEATE

You weren't quite wild enough. Let's get crazy with a Mash-Up. (6 mins total)

Instructions: Take elements from Category 1 and mash with Category 2. Isolate the design feature from the wild idea.

What's the 5-star Resort version of a classroom?	
Category 1: Elements of a classroom or learning space 1. Desks 2. 3. 4. 5. 6. 7. 8. 9.	Category 2: Things you find on a vacation 1. A Spa 2. 3. 4. 5. 6. 7. 8. 9.
Mashup: Students learn on massage tables instead of at desks	Design objectives: Calming, quiet, reflective

Instructions: Sketch three very differe use words, communicate visually. (The	nt concepts for your partner that response concepts could be space-based or o	ther kinds of issues) (6 mins total)

Instructions: Get Feedback; I Like/I Wonder/What If (10 mins5 mins each)
Present your sketches to your partner and solicit specific feedback as follows:
What do you like about each concept?
What do you wonder about each concept?
How would you finish this sentence: With this concept, what if you?

Instructions: Time to converge. Determine What to Prototype. (5 mins total)
List the key elements of the concept you are going with:
What parts of your concept need to be tested? What questions do you have about your concept?
What element of your concept do you want to test through a 3-D prototype?

IDEATION

IDEATE - PROTOTYPE

Design Strategy: PROTOTYPE

Instructions: Use the provided materials to construct a rapid 3-D prototype that you could use to test your idea and answer one or more of the questions you listed above. This porotype can be realistic or symbolic and representative. **(9 mins...)**

IMPLEMENTATION

TEST

Instructions: Put your prototype in the hands of your partner and pose the question you have about it. **(10 mins total 5 mins each)**

What do they like about your prototype? What do they wonder? What could you do to iterate and make it better FOR THEM?

How does this prototype meet your original learning objectives OR does it lead to new objectives you didn't know you had?