February 6, 2021

What is Design Thinking?
A crash-course for educators

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Before we start:

1. Make a copy of this workbook by going to links.asu.edu/sprint

1. Make it your own:

This workbook belongs to <TYPE YOUR NAME HERE>
Welcome to the Sprint

Make a copy of this workbook by going to links.asu.edu/sprint
Quick recap

Make a copy of this workbook by going to links.asu.edu/sprint
Every aspect of education is designed

Make a copy of this workbook by going to links.asu.edu/sprint
Teachers are designers

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Teachers are designers of learning experiences.

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design thinking is STEAM?
An purposeful, analytic and creative process that engages a person to experiment, create and prototype models, gather feedback, and redesign... Goes beyond disciplinary boundaries
Design melds STEAM together and provides a framework for re-thinking STEAM curriculum.

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• Not a linear process
• Takes time
• … & lots of sticky notes, markers, walking & talking
● Not a linear process
● Takes time
● ... & lots of sticky notes, markers, walking & talking

... and, we have
~40 minutes
Time to warm up!

This is going to go fast. As we work together… tapping into our collective creativity, and build out your workbook

Withhold judgement (for now), go with the flow

And let’s enjoy the run

Make a copy of this workbook by going to [links.asu.edu/sprint](links.asu.edu/sprint)
The process: Cycles of 3
The process: Cycles of 3

1. We (Danah/Punya): Set the context & provide a prompt (2/3 mins)
The process: Cycles of 3

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2. Collectively: Write into the chat your first immediate response to the prompt (2/3 mins)
The process: Cycles of 3

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2. Collectively: Write into the chat your first immediate response to the prompt (2/3 mins)

3. Individually: Synthesize what you read & add insights/ideas to your workbook (3 mins)
At the end...

We will have experienced ONE sprint through the design thinking process...

You will have this set of slides, with your annotations, as a resource for the future!
Let's Go!
Prompt 1: What is your vision for a powerful STEAM learning experience in your context?

Type your ideas in the chat to share with everyone

Keep an eye out for ideas you may want to “borrow” or adapt
Prompt 1: What is your vision for a powerful STEAM learning experience in your context?

Synthesize your thoughts (and what you “borrowed” from others) and type it here ...
EMPATHIZE
DEFINE
IDEATE
PROTOTYPE
TEST
Empathize

To put ourselves in other people’s shoes and connect with how they might be feeling about their problem, circumstance, or situation.
Designing for the extremes
Designing for the extremes
The idea of a jagged profile (and the myth of the average)

In searching for the average we ignore most of the population

Image credit: Designing for the extremes
Jagged profile

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<th>Skill</th>
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<th>AVERAGE</th>
<th>HIGH</th>
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Empathize

How might we design, not for the average, but for individuals at the extremes of a given continuum?
Prompt #2: Think about the learners you serve and choose one continuum along which they fall. Envision a student at each end of this continuum and write a brief profile for each student.

Type your ideas in the chat to share with everyone.

Keep an eye out for ideas you may want to “borrow” or adapt.
Prompt #2: Think about the learners you serve and choose one continuum along which they fall. Envision a student at each end of this continuum and write a brief profile for each student.

Examples: A continuum of skills (eg. social-emotional), knowledge (eg. math, literacy), experiences (eg. race, gender)

Describe each student’s profile here…
Define

How might we get clearer in stating our vision/goals?
“If I had an hour to solve a problem I’d spend 55 minutes thinking about the problem and 5 minutes thinking about solutions.” — Albert Einstein
Prompt #3: Revisit your vision while considering the student profiles you created. What opportunities/challenges now emerge as you consider these profiles? Write out a “How might we...?” question that addresses a challenge/opportunity.

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Prompt #3: Revisit your vision while considering the student profiles you created. What opportunities/challenges now emerge as you consider these profiles? Write out a “How might we...?” question that addresses a challenge/ opportunity.

How might we... <Type your question here>?
Ideate

How might we allow ourselves to think creatively and break out of our assumptions?
Prompt #4: Choose one of the following movie genres, and consider how it could be the solution to your defined challenge or opportunity. What new ideas emerge? [thriller/ mystery/ drama/ comedy/ tragedy/ family drama/ rom-com]

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Keep an eye out for ideas you may want to “borrow” or adapt
Prompt #4: Choose one of the following movie genres, and consider how it could be the solution to your defined challenge or opportunity. What new ideas emerge?

[thriller/ mystery/ drama/ comedy/ tragedy/ family drama/ rom-com]

Type (withholding judgement) all the ideas/possibilities that emerge…
Prototype & Test

How might we try out an idea, and how do we know if we are successful?
Prompt #5: Briefly describe how you could start small to test out your idea. What would be your measures of success?

Type your ideas in the chat to share with everyone

Keep an eye out for ideas you may want to “borrow” or adapt
Prompt #5: Briefly describe how you could start small to test out your idea. What would be your measures of success?

Type your ideas here…
Closing prompt: What value (eg. skills, mindsets, habits) could be gained by using design thinking to develop and refine STEAM instruction and curricula? What could be gained by students approaching their learning in this way?

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Keep an eye out for ideas you may want to “borrow” or adapt
Closing prompt: What value (eg. skills, mindsets, habits) could be gained by using design thinking to develop and refine STEAM instruction and curricula? What could be gained by students approaching their learning in this way?

Type your thoughts here…
Q & A
Additional resources

- 45 Design Thinking Resources for Educators
- Design Thinking for Educators Toolkit
- Design Thinking Gives STEAM to Teaching (2019)
- Creating STEAM with Design Thinking (2017)
Thank you!

Many thanks to Claire Muñoz, Craig Rosen, and the conference organizing team, and to all of our participants!

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