10 Days Group:

$600.00

Challenge

Build a Mobile Maker Cart

Why:

Who:

Where:

What:

When:

How:

Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Block: \_\_\_\_\_\_\_

Grade 8 DMI Project: Design a Maker Cart

Big Idea: Design can be responsive to identified needs (i.e. prototyping and testing).

The Project in Brief

**Driving Question:** How can we re-purpose a cart to meet the needs of the user?

#### Challenge #1

#### Do your Research / Empathy:

* Interview/Survey users about their experience with working/learning spaces.
* Dive deep: think about how the users feel.
* Reflect on personal experiences.
* Use Agency by Design's [Think Feel Care routine](http://www.agencybydesign.org/wp-content/uploads/2014/10/AbD_TFC.pdf) (PDF).
* This step will take One class period plus homework.

**Challenge #2**

**Define the Problem:**

* What are the issues with our current working/learning spaces?
* Create a problem statement (such as, "[How might we. . . ?](http://www.designkit.org/methods/3)").
* Develop a Thematic Cart (Tinker, Craft, Construction, Electronic, Digital etc.)
* This step will take One class period.

**Challenge #3**

[**Brainstorm**](http://www.designkit.org/methods/28) **and** [**Prototype**](http://www.designkit.org/methods/26)**:**

* In five minutes, think of as many solutions for your problem as possible.
* [Choose one or more to prototype](http://www.designkit.org/methods/30).
* Include a budget
* Source out
* Materials must have longevity-easy to replace
* Find a Mentor to guide you.

**This step will take One class period plus homework.**

#### [Feedback](http://www.designkit.org/methods/57) / [Test](http://www.designkit.org/methods/4):

* Return to users for feedback on the prototype.
* Does this prototype solve the problem?

#### [Reiterate](http://www.designkit.org/methods/19):

* Incorporate feedback into your prototype.

#### Challenge #4

#### [Final Build](http://www.designkit.org/methods#filter):

* Now that you've received feedback and reiterated your piece to reflect that feedback, build it!
* Sketch it out! Don't forget to use Digital Tools (e.g. Google Sketch-Up). Continue to test by asking, "Does this work? Do we need to make adjustments?"
* Include a budget
* This step will take One class period.

#### Challenge #5

#### Pitch:

* Maker Faire- **May 26 Thursday**
* Present Prototype for voting
* Present your design to a panel, which includes the principal, teachers, experts, and other administrators. Real audience members add authenticity.
* Include a Task List for students to partake
* This step will take One class period.

#### Challenge #6

#### Build a Mobile Maker Cart

#### Apply tasks pertaining to sign-up List

#### Everyone should have a task to perform

#### Use materials supplied

#### Reflect / Discuss:

* Review the experience of using design thinking to work with real users and real problems.
* Consider the process of building and reiterating. Was it frustrating when something didn't work?
* How can we redefine failure?
* What did the homework involve, and how did it help?

<http://www.edutopia.org/blog/architecture-psychology-furniture-fallon-plunkett-lisa-yokana?utm_source=facebook&utm_medium=socialflow>