Beyond Rubrics Teacher Guide

Superpower Hour Introduction to Maker Elements as Superpowers

Overview

Superpower Hour is an activity aimed to help classes build a collective understanding of the Maker Elements and practice identifying them by learning about real inventors. It helps show students why the Maker Elements are something they should care about, and how real people use them as skills to do important work. This activity should be implemented near the beginning of the year, as a way to introduce the Elements and get students excited about monitoring and building these skills in themselves and their classmates. They should come away from this activity with the sense that inventors, engineers, and scientists are not superheroes but rather regular people with some super powers - powers that each of us can build up in ourselves and apply in our own projects.

given a superpower story in varying formats. A superpower story is a true story of an inventor, engineer, or scientist that describes their path to one discovery or contribution. The stories exemplify one or more of the Maker Elements, in the context of a real person. Groups work through the story together identifying where they see instances of the superpowers (Maker Elements). Through this process, they will discuss what does and doesn't count as each superpower, building their own understanding of what that skill looks like in practice.

For each superpower they recognize in their story, groups will add a piece to the cape they are constructing. At the end, the different capes can be used as the start of a larger, full class conversations about what each of the Maker Elements look like in action.



In this activity, small groups of students are









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Before Class

- Preparation Time: 10 minutes
- Materials: Printed inventor bios (samples provided or find your own!), writing & drawing tools, scissors, tape, other craft materials to create capes, stuffed animals or puppets to wear the capes.
- 1. Select which Maker Elements you plan to discuss in class.
- 2. Select & print inventor stories that show selected Maker Elements.
- 3. Arrange building and craft materials in the classroom.

During Class

- 1. Explain to students that important inventions come from regular people who worked hard over time.
- 2. Introduce or remind students about Maker Elements.
- 3. Provide a superpower story in varying formats to groups of students to learn about how real world inventors used superpowers to achieve their work.
- Have students create capes for the super heroes as students gain a deeper understanding of the Maker Elements by spotting them in real stories, and creating their cape as a representation of the superpowers.
- 5. Have students present what they created and discuss how Maker Elements exist in every person and as something that can be referred to throughout the year.

We have created several variations of this activity. For other versions and prompts see this Google Sheet: <u>bit.ly/superpowerhour</u>

Extend, Adapt, Remix!

This guide is just the start! We encourage you to adapt the tool to your context: use your own assessment constructs, adapt for your classroom routines and procedures, or co-design new versions with your students!

Here are a couple of ideas we've seen to get you thinking:

- Discuss with your students how they would transfer understanding of the Maker Elements to new situations
- Use real world people in students' life as characters to look for superpowers. Have them research about their family members or friends and explore what superpower they might have employed to be who they are now.



We want to hear from you!

The Beyond Rubrics tools are a work in progress that we want to improve. If you try out a tool and you love it, please let us know! If you try it out and you find it frustrating, design a better version, or have specific feedback, let us know that, too!

For more information, visit our website or reach out!

Project Website: <u>makered.org/beyondrubrics</u>

On Twitter: @MakerEdOrg & @playfulMIT