Curriculum and Instruction
Makerspaces:
Think Labs

Chappaqua Schools

January 27, 2016

Eric Byrne, Assistant Superintendent for Curriculum & Instruction
Jessica Marchetti, District-wide Staff Developer
Ellen Moskowitz, Elementary Instructional Technology Coach
Alison Turner, Elementary Librarian

Paper Table Challenge

Your challenge:

- Design and build a table out of newspaper tubes.
- Make it at least 8 inches tall and strong enough to hold a heavy book.

Materials:

- 1 piece of cardboard
- Heavy book
- Masking tape
- 8 sheets of newspaper

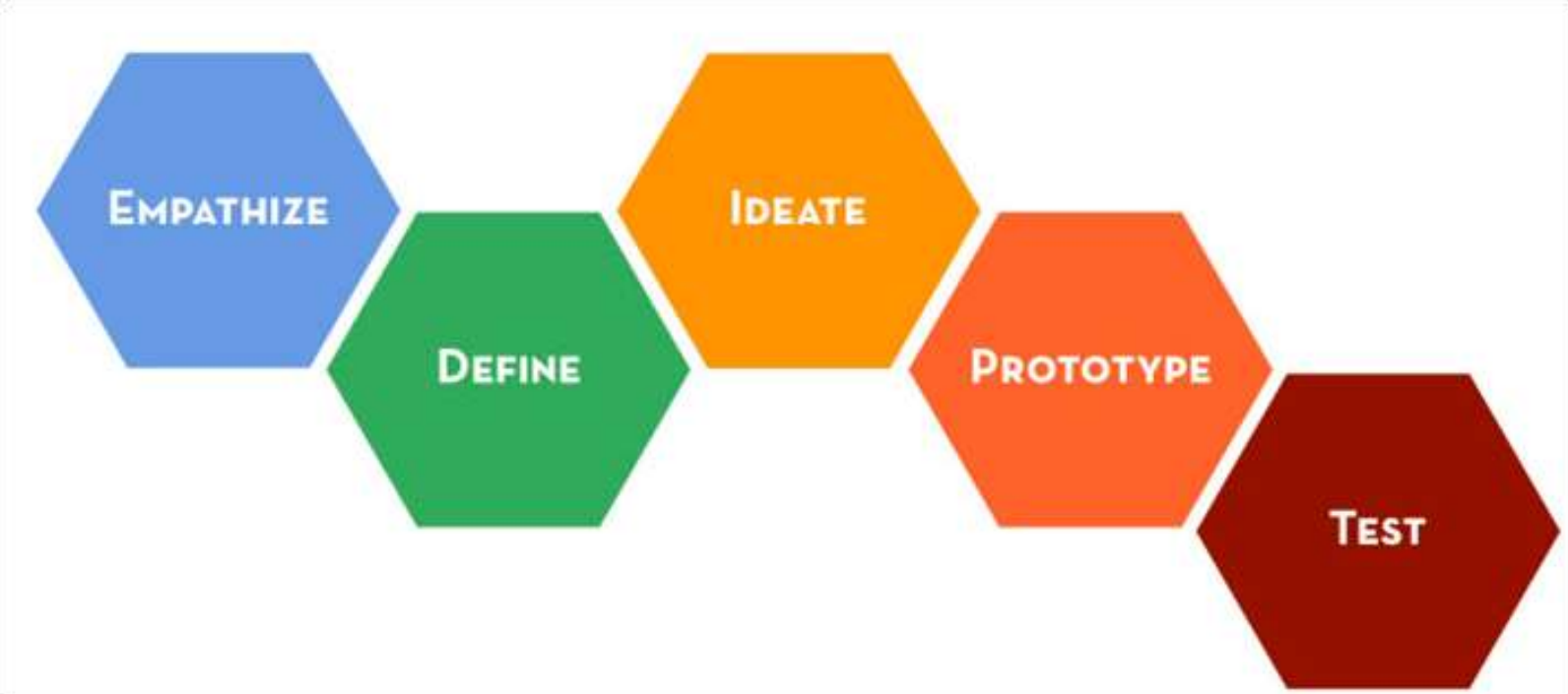
What is a Makerspace?

- A space dedicated to the integration of STEAM disciplines.
- Students apply the principles of the *design process*.
- Students generate and share ideas, solve problems, test solutions, and revise.
- Students build skills in collaboration, creativity, and problem solving.

Chappaqua Schools

Design Process

Stanford d.school



Chappaqua Schools

Why are Makerspaces important?

- Bring to life the district vision for creating active learning environments.
- Foster problem solving, collaboration, and critical thinking.
- Engage students in creative and "outside of the box" thinking.

Chappaqua Schools

Why are Makerspaces important?

- Provide opportunities for students to follow a passion with staff and peer support.
- Allow students space to make mistakes and see them as opportunities to learn.

Chappaqua Schools

How are our students and teachers using the Makerspaces?

Maker Challenges:

Short term activities presented as problems to solve, with a defined set of criteria. These usually begin with a low-tech supply list and time limit.

Chappaqua Schools

How are our students and teachers using the Makerspaces?

Maker Projects:

Longer-term projects tied directly to the curriculum. Students conduct research, draft, prototype, create, test, revise, and present their projects.

Chappaqua Schools

How are our students and teachers using the Makerspaces?

Professional Learning:

- Integration of projects and challenges as contexts for learning in the core curriculum.
- Staff meetings, staff development days, Learning Symposium, BOCES, technology meetings, and in-service learning teams.

Chappaqua Schools

What's next?

- Continued Professional Development.
- CSF Grant to enhance our Makerspaces.
- Promotion of Maker Projects based on the principles of project-based learning.

Chappaqua Schools

What's next?

- Further integration of coding and computer science concepts into our technology curriculum.
- Continued support of monthly Maker challenges at home.

Chappaqua Schools

Visit the Elementary Makerspace website