

Five Chair Challenge

Monday, September 12, 2016 12:47 PM

5 Chairs Exercise

Overview: Chairs are essential to everyday living. They are functional but also can reflect an individual's personality and specific needs. Chairs can define people. Cersei in Game of Thrones, sacrificed for her place on the iron throne. Archie and Martin Frasier were very particular about their chairs (thrones).



Design Rationale: To encourage students to gain confidence iterating on designs based on human ergonomics, while working with different materials. Students will be encouraged to make use of various data on the ergonomics of chair design to create a prototype of a chair specific to an individual's needs. In this case, it will be for a character from The Simpsons.

<http://www.makeuseof.com/tag/what-to-look-for-in-the-perfect-office-chair/>

Problem Scenario:

Doh! Homer is so s-m-r-t. He has done it again.

While at work, he was playing with his control switches and SURPRISE he blew up Springfield's only chair factory. As the great Chair Festival is approaching – the town is in upheaval. Marge's hair is a tangle of frustration. 'Homy' is in the doghouse.

Matt Groening, the creator of 'The Simpson's,' has picked your team to restyle, refit and refurbish chairs for Springfield members to be featured in the 'Chair Festival,' reinstate Homer to his beloved State of Infamy in the community, and to restore Marge's beautiful coif.

Parameters:

Paper Bag (must use items)

- [Story Cards](#)
- Sharpies
- Paper
- Scissors
- Corrugated Cardboard
- Pipe Cleaners
- Modeling Clay
- Tape
- Toothpicks

Pantry items:

Duct tape, string, marbles, jumbo craft sticks, rulers, exacto knives, glue guns, glue sticks, surfaces for gluing, fun foam, flexible drinking straws, push pins, pom-poms, flagging tape, pro-wrap.

The Maker Day Tool Kit:

<http://innovativelearningcentre.ca/wp-content/uploads/2014/02/Mar27MakerDayToolKit.pdf>

Instructions (to the teacher):

Get students into groups of 4

- Pass out [story cards](#), one per group
- - 1.) During the interview process, have students highlight needs they see in the description of their user. Record in the interview notes.
 - 2) For older students, have them work on number 2. They will take the information from the interview and tweak their ideas.
 - 3.) Defining the Issue: Goals and Wishes: Your prototype chairs should attempt to reflect your own style as a designer. Your goal is to create something delightful/cool for your user.
 - 4.) Sketch the Ideas: Students will work on their own for twenty minutes to sketch five different ideas. The last idea should be completely ridiculous and fun.
 - 5.) Gain feedback from partner and take notes.
 - 6.) Redesign your idea based on feedback.
 - 7.) Each member sketches the groups agreed upon design.
 - 8.) Reflection on the Design Process.
 - 9.) Build the prototype:

Possible Extension Questions:

- Discussion Questions 5 minutes
 - What did you change along the way? What did you learn from your prototypes?
 - Which material did you enjoy working with the most? Why?
 - Which material did you like the least? Why?
 - Which material best expresses the essence of the chair you drew?
 - What tools did you use?

*Inspired by Scott Doorley, Grace Hawthorne & the Quarterly Co. Team