

Overview

One of the growing trends in fashion is called up-cycling. Up-cycling gives old or discarded clothing a better purpose through a process which converts it into something useful and often beautiful. From Triple Pundit website:

“There are more textiles produced in the world today than realistically can be used—many of the large clothing chains can produce as many as a half a billion garments a year. A question you have to ask is ‘What happens to those clothes after they have fulfilled their “useful” lives?’ About 14.3 million tons of textiles were sent to the landfill in 2012, or around 5.7 percent of total municipal solid waste generation in the U.S., according to the Environmental Protection Agency (Retrieved January 2016, <https://www.epa.gov/facts-and-figures-about-materials-waste-and-recycling/textiles-material-specific-data>). If not discarded as trash, unwanted apparel is often donated to thrift stores. Though a good step toward avoiding the landfill, this is not as beneficial as people think as only about 20 to 30 percent of donated clothing is actually re-sold (Retrieved January 2016, <https://greenthreadblog.wordpress.com/2014/02/20/the-afterlife-of-our-closets/>). Part of the reason such a low percentage of re-sale exists is due to the drastic increase in second-hand clothing stores in the past 15 years which leaves thrift store with cheap fashion and junky basics instead of vintage gems.”(Retrieved January 2016, <http://www.triplepundit.com/special/sustainable-fashion-2014/upcycling-new-wave-sustainable-fashion/>).

Design Rationale

How might we up-cycle textile waste in our world? We all have garments that have worn out or gone out of style. Typically, these items will end up in a landfill, even if they make a brief stop in a thrift store first. One of the first things we learn as we try to be greener is to try to reuse items before recycling them. Fascinating sites like *40 Mind blowing Ways to Repurpose Old Clothing* (Retrieved January 2016, <http://www.trendsandideas.com/40-mindblowing-ways-to-repurpose-old-clothing/>) provide some interesting ideas for consideration.

Problem Scenario

Every year the school ends up with lots of unclaimed clothing in its lost and found collection. Your team has been given the task of designing something useful that could be made from that collection. It could be an item for a vulnerable member of our community (i.e. a homeless person, a person in a shelter, a person in a care facility, a person receiving medical treatment, etc.). You need to design a prototype of your item.

Your design sketch and prototype must meet the following criteria:

- It should be appropriate, functional and attractive
- It might be designed for a specific season or purpose

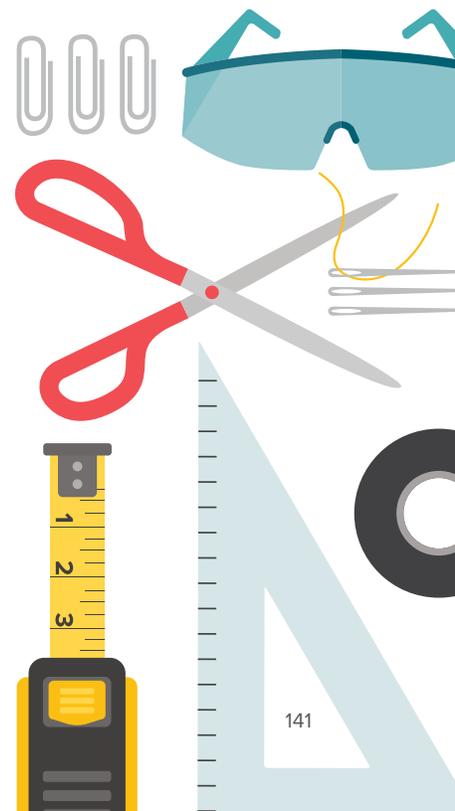


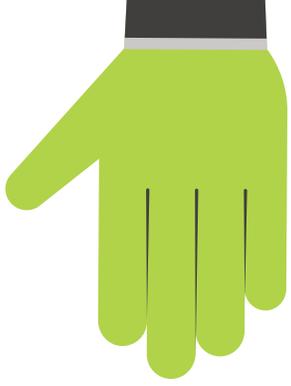
Suggested Grade Level

Upper elementary through to secondary school

Suggested Subject Area

- ADST
- Fabric and Textiles
- Home Economics
- Social Studies

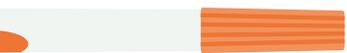




Success Determinants

Success will be determined by:

- Alignment to design motto: “Make it smaller, stronger, do more, be easier to use, be cheaper, be clean, be greener.”
- Degree to which your prototype looks like your design sketch
- Ease of long term maintenance and durability
- Functionality of the design and prototype
- Uniqueness and originality of the design
- Usability of your prototype and the degree to which it solves an actual problem



Parameters

- You may use the tools provided to you in the classroom pantry.
- You must complete a display panel, which includes your design thinking sketch, your prototype, your design notes, and your reflections on the activity.
- You must consider how to make your prototype colourful, intriguing, and ergonomic.
- You must use some of all the items in the participant group kit in some way.

