Reuse as a Sustainability Strategy

Suggested Readings & Resources

Weeks 1 and 2

OLLI at Illinois Fall 2017

These are NOT required, but are provided for your information if you wish to explore concepts further.

General Resources

- Illinois Sustainable Technology Center: https://www.istc.illinois.edu/
- Really Reuseful: http://reallyreuseful.blogspot.com/

Week 1 (Sept. 13): Sustainability and Circularity

- Wikipedia: Sustainability: https://en.wikipedia.org/wiki/Sustainability. (retrieved 9/3/17) *This is a broad overview, dealing with concepts beyond what we will deal with in this class.*
- Donella Meadows Project—Leverage Points: Places to Intervene in a System: http://donnellameadows.org/archives/leverage-points-places-to-intervene-in-a-system/. (retrieved 9/3/17) *This is if you’re really interested in systems thinking and how to use it to bring about change.*
- The Answer by Robinson Jeffers: https://www.poemhunter.com/poem/the-answer-2/. Yes, it’s a poem; I like to use poetry, literature, and art to illustrate concepts. I love this poem because it relates to seeing humans as part of an overarching system—which you might call “nature” or some other term. This is a beautiful expression of systems thinking, and going beyond paradigms, as touched on in the above article on leverage points by Donella Meadows. It also reminds you that perfect sustainability, or perfection of any kind, for all things, it not achievable—it’s something to strive toward.
- The Biomimicry Institute: https://biomimicry.org. (retrieved on 9/3/17)
Week 2 (Sept. 20): Design Paradigms: Durability vs. Disposability

- Slade, G. (2006). Made to break: technology and obsolescence in America. Cambridge, Mass.: Harvard University Press. This book is available via the Champaign Public Library as an audiobook on Hoopla Digital. A hard copy is also available at the Illini Gadget Garage and may be read on site (i.e. not checked out) during open hours.

- McDonough, W., & Braungart, M. (2002). Cradle to cradle: remaking the way we make things. New York: North Point Press. This book is available at the Champaign Public Library in hard copy and as an audiobook via Hoopla Digital. A hard copy is also available at the Illini Gadget Garage and may be read on site (i.e. not checked out) during open hours.


- The Core Toaster Concept: https://sustainabilityworkshop.autodesk.com/project-gallery/core-toaster-concept-designed-longevity-repair. (retrieved 9/5/17)

- iameco: www.iameco.com/. (retrieved 9/5/17)

- International Sustainable Electronics Competition: http://www.ewaste.illinois.edu/. (retrieved 9/5/17). This is a student competition I used to coordinate, which ended in 2013. Explore some of the winning concepts at http://www.ewaste.illinois.edu/previous.cfm. Some of those which apply to design for repair or durability are similar to concepts that actually came to market in time. See also the categories and judging criteria for the 2013 competition at http://www.ewaste.illinois.edu/2013/rules.cfm#categories. Those informed the development of product and non-product categories in the US EPA SMM Electronics Challenge, https://www.epa.gov/smm-electronics/sustainable-materials-management-smm-electronics-challenge, as a US EPA staff member working on that challenge sat in on our jurying process.

- US EPA Basics of Green Chemistry: https://www.epa.gov/greenchemistry/basics-green-chemistry. (retrieved 9/5/17) This is generically related to more sustainable product design, not specifically to design for durability.


- US EPA Safer Choice (formerly Design for Environment or DfE): https://www.epa.gov/saferchoice. This is generically related to more sustainable product design, not specifically to design for durability.