

## The Creative Process: Prototyping Lab

Instructor: Kurt Kornbluth

The goal of today's class is to think differently about design. There are two processes:

Divergent – brainstorming, don't critique, generate as many ideas as possible. This is a process where you should not be afraid to say ideas, nothing is thrown out.

Convergent - critique, narrow down, throw some out, maybe narrow from 50 to 10 ideas.

Some ideas are good enough to not throw out right away – they might have potential. In the end, if there are no good ideas, you go back to brainstorming or look again at some you threw out.

Today we will work with many different materials. We will try out some different things you can use to build your ideas. Kurt works in steel faster than in CAD, it is part of his creative process. He has a friend who works in watercolor before doing any drawing, to set up the mood before the form. You should try out your creative process and find a medium you are creative in.

### Lab Practice

What should you make? Anything. Be creative, do what you want -- **but you have to explain it when you're done**. Do not work with your regular group. You can mix mediums. You will have 15-20 minutes at a station, and 2-3 people per station.

Here are the stations:

- Foam - cut w/ hot wire, glue together
- T square, drafting – if you have your design when you go to a country, you may discover they do not have the material you designed for, and you may not have access to CAD
- Legos
- Watercolors
- Clay
- Nuts, bolts, popsicle sticks
- Cardboard, duct tape
- Bendable wire and paper clips
- CAD/Solidworks

Switch stations and repeat the process. You can continue working on the thing you started with, or you can move on to something new.

Examples of things made in lab:

- Lego - House on a swing
- Lego - Every direction but up and down
- Lego - Stairwell of the damned
- Clay - Extremely high chair
- Clay - Dice variations. Holes cut, Dots on top, holes with dots inside
- Clay - device to pour from pots - pull handle on the side
- Foam - 3d eye test chart - carve, mash clay in, hard to read, then used foam cutter, cut out letters
- Watercolor - president's day card
- Watercolor - Ways to draw flowers and still be a flower
- Watercolor - Ancient Chinese "I am a person"
- Clay - Composting bin
- Paperclips - Picture frame
- Drafting - The great dome
- Mixed - Diorama - Foam, guy getting water, wire, wood, pipe cleaners
- Sticks - Chair, clay person
- Diorama with painting behind, house in front
- Mixed - Money clip - wood, wires, paper clips
- PVC - Noise maker - shoots objects

Photos of students working at the various stations are provided on the following pages. (Photos by MIT OCW.)



