Using a design process is common in any creative field. The approaches and phase descriptions used by various people may vary slightly but the idea is the same. You have to determine what you need to do, understand the context, generate lots of ideas (good and bad), experiment with the few ideas that begin to show promise and then develop the final iteration. Included in this packet are two graphics from two different websites.

The first is from an article written by Daniel Stillman (2012), with an excerpt from his site: http://www.core77.com/posts/23480/Design-Process-Kills-Creativity-Design-Process-Creates-Creativity:

# THE FIVE PHASES



#### **EXAMINE**

Dig into the problem. Look at the history, the context, the objects, and (most importantly) the people involved.



### **UNDERSTAND**

Go deeper and find patterns. Establish open questions to build on.



### IDEATE

Have lots of ideas, good and bad. Don't stop at the obvious or the impossible.



# **EXPERIMENT**

Try some things out. Make some things. Fail cheap and fast.



### DISTILL

Strip your solution down to the essentials and tell the story to others.

I teach a five phase design process. I advocate for a thorough research phase that we call EXAMINE as separate from an analytical or organizational phase we call UNDERSTAND. It's good to try to separate these two phases, but in real design practice, it can be hard to tell when one phase stops and the next starts.

IDEATE flows from that analytical phase, giving us solid needs and goals to work from. Having great ideas and a lot of them fuels the EXPERIMENT prototyping phase. The storytelling phase, what we call DISTILL, helps make sure we stop and ensure the work we've done has a memorable impact. When the time comes to talk about what you have done and what you plan to do next, you have artifacts and clear thinking from the previous four phases to draw upon in service of your story.

These five phases are a framework, and we NEED frameworks to help us process and think better. If I tell my students "have some ideas" or "solve some problems creatively" that won't work nearly as well as giving them some solid frameworks on how to ideate. I think designers need to refresh their memories on good frameworks regularly, to keep themselves sharp and to look at the work they do with new eyes.

The second graphic comes from an article written for Make Magazine by Chris Connors (2008). This excerpt is from his article, Using the Design Process: <a href="http://makezine.com/2008/11/16/using-the-design-process/">http://makezine.com/2008/11/16/using-the-design-process/</a>:

# THE DESIGN PROCESS **IDENTIFY PROBLEM BRAINSTORM** DESIGN BUILD REDESIGN TEST & EVALUATE SHARE SOLUTION

### Steps

Often, the Design Process is presented as a series of steps that you go through in developing an idea or product. They (usually) include: Identify a problem, Gather information, Propose solutions, Choose the best idea, Test the idea, Evaluate and Communicate. There are many different versions, no set list covers all the ways people interpret the Design Process. As you get more familiar with the use of the process, you tend to skip around inside it as your project needs dictate.

### Looping

In this image, the design process is shown as a loop. In considering a project to work on, you find a problem to solve, gather information, try out an idea, test it and evaluate. If you solve the problem, move on to another problem or aspect of the project that needs attention. If you don't solve the problem, you have some more information about what won't work. That information gets incorporated in your next go-round.

## Making it right

As you cycle through the Design Process, your product should be getting better as you go. The more you identify problems, pose solutions, test them and implement them, the device, program, product or project gets better. New problems arise the more you work the process. If you nail the biggest ones first, eventually you have something that works pretty well and then begin fine tuning after a while. It is possible to overdo this fine tuning part, causing the project to never see the light of day. It is also possible to short circuit this phase. EBay, second hand stores and the

dump are full of examples of products which did not get enough exposure to this phase.

### **Delivering**

When your product is sufficiently complete, and you have resolved the most pressing problems determined in the process, it is time to deliver. This does not mean that the project is done forever; instead, it means that it is ready for more testing in a real world environment. As you (and your team, as may be the case) see the product in the world, you will hopefully be looking at it for examples of where it can be changed and improved. As you find aspects of the project that need refinement, you make a plan for revision and implement it. Hopefully these flaws you find at this point are not tragic enough to seriously stall or ruin the project.