TEACHING PHILOSOPHY

Studying design involves students actively engaged in design work with an instructor acting as a guide through the process. For my students, this engagement happens both in the studio and in faculty mentored research experiences. Through a mix of open-ended process-structured projects and topic-focused learning exercises, my role is to formulate a framework within which students can begin to synthesize the tools and process we present into a work-flow that makes sense for them.

ENGAGING STUDENTS IN THE ACTIVITY OF DESIGN

When we discuss the study of design, we discuss students learning how to think and plan when faced with the opportunity to shape an object or system that does not yet exist, or that exists in a problematic state. During recent curriculum development efforts, I've advocated for learning outcomes that focus on thinking like a designer. Before graduation, students must learn to think through doing, frame and reframe a problem while pursuing solutions, and to reflect on their design choices through critical feedback at all stages of a project.

THOUGHT THROUGH ACTION

I consider a successful student to be one who thinks through making. This thought through action seems to occur in two stages. First, students learn to contemplate the project parameters and constraints by sketching and prototyping. Nearly all of the projects I construct engage students in an ideation phase, an opportunity to think through doing. Whether they are sketching or prototyping, students first need to be trained to address the project with action. Quick sketching activities in class work well for this purpose and similarly providing paper prototyping kits for students and giving them a ten to fifteen minute time limit help encourage them to get started by "just making something."

Once students have been trained to make things, they need to understand and act upon the notion that sketches and prototypes are not limited to thoughts that already exist in our head. Instead, students learn that sketching is engaging in a conversation between our head and our hand. A student who has internalized this concept will work a stray pen mark into their concept, creating a new concept or show how she has taken feedback from one set of sketching and incorporating it into the next.

FRAMING THE PROBLEM WHILE PURSUING THE SOLUTION

The ability to frame a problem and solution in parallel using iterative prototyping and evaluation is a significant aspect of design and a valuable skill for a designer. However, students are often used to being told exactly what is expected of them. A challenge in my teaching has been stimulating students to formulate their own understanding of the problem while keeping them from being overwhelmed by projects that are wide open.

In each course, I am continuously developing strategic projects that give students the opportunity to identify his or her goals for the outcome. In the web design courses, an example is the Interactive Sequence project. This task analysis and system redesign project has need-finding and user research stages, as well as a synthesizing findings stage that I have added in recent iterations. Students are asked to identify an on-line task, and perform some light user research, observation, task analysis and documentation before identifying what is important to them for the redesign. I have some stipulations about output such as a user test video, a flow chart and some storyboards, but the decisions of what to do in the redesign come entirely from their user testing. One of the core lessons here is that when students have questions, they learn to make something and test it to find out.

REFLECTION AND CRITICAL FEEDBACK

It is essential that my students understand that waiting until the end of a project to elicit significant critical feedback is not the way to think about critique. I've incorporated concept selection exercises and time to prototype and evaluate ideas in class, giving students ample opportunity to get valuable feedback. I also implemented a series of progress checkpoint in certain projects. In these projects, some students may not meet the expectations of the checkpoint and are required to continue working before they can move on to the next stage.

It's crucial to me that students feel comfortable and accepted when presenting their ideas. I use variety of critique techniques based on the level of group comfort and trust, and sometimes just to keep things fresh. For example, when a group hasn't quite built that trust, I've found Roy Behrens' "Ricochet Critique" method a good option. This method asks a student to present another student's work as their own, giving them the opportunity to critically evaluate someone else's work as a whole, as well as having another student do the same for their work.

MY ROLE AS PROFESSOR: THE GUIDE ON THE SIDE

My role in the student's education is most often that of the "guide on the side." Whenever possible, I want the student to feel that they are engaged in meaningful work. Of course, there are times that exercises can feel like busy work, formal explorations, or technical mastery are a necessary foundation for later projects, so the intrinsic motivation just isn't there. Once that foundation is in place, I attempt to construct each project as a framework for the student work freely within, synthesizing the tools and process and shaping the project to fit their interests.

Project briefs are sometimes intentionally vague as a way to require students to actively engage in the formulation of the project. In other projects I will provide examples of work, but not necessarily past student work. For instance, in the introductory graphic design course, there is a project where students are asked to moderate the concepts of in-situ and modularity. I don't show them past student work but instead images of installations that are either modular or site specific and instruct them to reconcile these two ideas through action.

FOSTERING DEVELOPMENT AT MULTIPLE LEVELS: AWARENESS, DEPTH AND MASTERY

As students move through their design education, they encounter three stages of development. At the beginning, students move through an **awareness stage** in which they become oriented to the possibilities and thought process of design. It is typically in introductory courses that student develop an overview of how to think like a designer and what activities a designer is engaged in. After gaining an understanding of the possibilities of design, students then dig into a variety of topics in depth. This **depth stage** is often represented by topic-based elective courses, typically in the second semester of their sophomore year and throughout the junior year. Finally, students enter a **mastery stage** in which they begin to synthesize elements of their education, internalizing the design process and tools they learned in the depth stage into a process that works for them. This is typically seen in senior studio courses where students are given more freedom to drive their own response to a project.

As students progress through a program, they will mature intellectually while developing a mastery of core design skills. Ultimately, their success is marked by a combination of skill mastery and intellectual ability. I have recently investigated and proposed these levels of awareness, depth and mastery as a structure for curriculum development to my colleagues. By demonstrating how many of the courses we intuitively felt were important for a design program fit into this framework, we were able to sequence the coursework and identify gaps in our new B.F.A. / professional degree to foster multi-level development in our curriculum.