

## Teaching Philosophy

“Teaching is about making some kind of dent in the world so that the world is different than it was before you practiced your craft.” — Stephen Brookfield

As an educator in media arts and technology, my aim is to motivate students to break down the wall between art and engineering with their personal explorations. The most efficient way to achieve this goal within a short period of time is to lead a project-based course/workshop. To these ends, I practice and continually refine pedagogical strategies that reveal how a project can provide a full experience of scientific research as well as artistic creation. A typical project in my course usually contains three interlaced parts (literature review, hands-on experience, and presentation & critique), and each part can show students one or two important disciplines in arts-engineering research.

### Literature Review

Literature review is very important for research but is easy to be neglected by students who don't have particular training. Like the development of a skill, literature review requires practice, whereby repetitious acts form patterns that become easier to perform, eventually becoming natural, almost instinctual. I employ the strategies from both art and engineering sides to help students get a comprehensive understanding on which the topics they need to work. For example, after a brief introduction in the first class, the assignment is usually asking students to prepare a presentation to introduce an related art project and also a scientific research paper. My larger goal, though, is to foster the natural trajectory of this thought pattern so that students can spontaneously go through this process before they are about to start a project.

### Hands-On Experience

Engineering, like many other disciplines, was found on and continues to grow by finding solutions to real problems. During the process of actually making a piece, students can realize that solutions must be designed and coded with a certain precision. And I help students by engaging them in live problem solving. In stead of providing solutions to them directly, I always try to guide them to break down a complicated problem into several small sub-issues by asking them inspirational questions. I find that students are more engaged when we are performing problem solving together than when simply offering them an answer. For most of the time, students can find problems by themselves in the middle of the problem-solving process.

### Presentation & Critique

I believe that ideas or projects in a vacuum are not worth much, but are only valuable if they can be shared with others. To preform an efficient and successful presentation requires students to fully understand the topics and trains them to articulate their ideas within certain limitations. The idea of critique is derived from a pedagogical principle called “learning from teaching”. To draw on the diversity of insights and experiences of students, it is my responsibility to create an environment where we can all teach and share ideas with each other. During the critique session, I always encourage students to imagine them as a curator from a museum or a reviewer from an academic journal so that they will subconsciously use more critical thinking to review a project.