## Lawrence Langham

Visual Presentation and Exhibition Design Communication Design Pathways

# Reflective Teaching Portfolio Teaching with Technology

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## Professional and educational background

I am an Associate Professor in FIT's Visual Presentation and Exhibition Design program. In addition, I teach classes in three dimensional design in the Communication Design AAS and have taught a model making course for the Interior Design department.

I earned a Bachelor's degree in Industrial Design at Pratt Institute and a Master's Degree in Sustainable Interior Environments at FIT. Prior to teaching at FIT, I served as Director of Exhibitions at the Children's Museum of Manhattan and was an exhibition designer for the American Museum of Natural History.

Recent projects include exhibition design of an interactive interpretive center in Dobbs Ferry for the Friends of The Old Croton Aqueduct (FOCA) in collaboration with the office of New York State Parks, Recreation & Historic Preservation.

## Teaching philosophy and approaches

There are numerous things that come to mind in thinking about my approach to teaching. Here are some:

### 1 - Good design is nourished by good process

My approach to teaching is supported by a strong belief in the power of process. Typically the assignments that I create for my classes (or that I develop with collaborating instructors) have a framework that guides the student through a rigorous design approach encompassing directed research, conceptualization, narrative design development, documentation, and production/presentation.

Each phase of the project benefits from resources, tools, activities, and collaborative engagement that inform/develop the concepts and strengthen the effectiveness and impact of the final product.

## 2 - People learn and experience in multiple ways

In many of my classes I introduce Howard Gardner's Theory of Multiple Intelligences as a way to get Communication Design and VPED students to think about the variety of ways that people interact with the world and learn throughout life. This awareness can be enormously helpful in designing exhibitions and other immersive experiences.

It is also helpful to me in thinking about the varying interests and capabilities of our students. For instance, getting visual thinkers to use visual math when looking at proportions in 3D design for interior spaces.

### 3 - Students are on a variety of paths

Our department is interdisciplinary, with several upper division options: Advertising Design, Graphic Design, Packaging Design and Visual Presentation and Exhibition Design. Part of my role in teaching lower division AAS courses is to underscore for students how the concepts, skills and principles in the class are applicable to any upper division option.

#### 4 - Good teaching requires continued learning

In addition to earning a Masters Degree while teaching at FIT, I have also taken numerous credit and non credit courses over a number of years. Most recently I took the *Introduction to 3D Printing for Designers Certificate Course* in FIT's Center for Continuing and Professional Studies. This type of course enables me to bring a greater scope of awareness and skills to my teaching.

#### 5 - Empathetic teaching requires standing in the shoes of the student

Having taken many classes at FIT including a full time program has made me very personally aware of the demands that are placed on students taking multiple courses while working and balancing family and other life commitments. It has made me more inclined to streamline assignments and work closely with students to prioritize their efforts.

#### 6 - Students generally want to participate in a better world

Many of the projects that I assign students give them options to work with non-profit, charitable, environmental, or health related clients. I find that the majority of students are quite eager to work on these types of projects. This is delightful for me, as I have an interest in environmental and cultural education that is rooted in the many years I designed interpretive exhibitions for the American Museum of Natural History and the Children's Museum of Manhattan.

I find that I am able to help the students look very carefully at the mission and vision of the institutions and organizations that they opt to work with. Relatedly, I am very glad to be able to bring concepts such as material life cycle analysis, universal accessibility, and integrated design process directly from my graduate level experience to the undergraduate classes that I teach.

## Roles and applications of technology in teaching

## 1 - Digital design tools for course projects

Technology is used extensively in the courses that I teach. The design apps utilized include several within Adobe Creative Cloud: Illustrator, InDesign, and Photoshop, as well as Adobe Acrobat. Sketchup is used for 3D project visualization. VectorWorks is used for design delineation and drafting.

Students use these applications in virtually every project and at various stages of project development. Familiarity with the capabilities of the apps and technical skills for in-class demonstrations and links to instructional resources is important to my teaching.

Our classes also give students the opportunity to work with digital output including large format printing, vinyl graphics, laser cutting, 3D printing and CNC router. These tools and processes have been integrated into my classes in collaboration with departmental and college technical support.

## 2 - Photography and scanning

Smartphone photography is used to capture reference images and to document 2D and 3D processes. Students photograph 3D models and further develop composite images for analysis and presentation documentation.

Scanning applications are used to document sketches, handwritten mind maps, diagrams, etc. Other digital software is used to enhance these images or to develop hybrid documentation that incorporates typography, reference images, etc.

## 3 - Digital apps for writing and project management

I have transitioned from using Microsoft Office to Google Apps including Google Docs for writing syllabi, assignment sheets and other documents. I use Google Sheets for spreadsheets for course and collaborative project management. This makes it much easier to share files with students and access files from various locations and devices.

## 4 - Course Management and Web Services for course delivery and interaction

I have used Blackboard Learn, Basecamp, and Google Classroom to deliver course content and facilitate course interaction. Content delivery includes course syllabi, documents related to project assignments, examples of previous projects from past semesters, videos of demonstrations, links, etc. Attendance and student work submission are typically carried out through one of these services.

Pinterest has become very useful for research and sharing of precedent images, projects, materials, structures, etc.

## The impact of technology on teaching and learning

Technology is infused throughout virtually every course that I teach. The impacts are myriad. Here are few that come to mind:

### 1 - Technology enables access

There is an astonishing universe of resources, methods, and experiences that can be shared in a class environment through the use of digital technology.

For example, if I would like to show students temporary moveable structures, I can very quickly bring up examples to show the class. If I need to try to give an accurate answer to a student question, I can show them how to access that information (typically) very quickly. I can also demonstrate how to verify information in real-time to correct factual errors.

## 2 - Demonstration and development of skills

Technology is used to demonstrate skills during class sessions and in one-on-one meetings with students. In addition to my own demonstrations, nearly every design related skill is available through online video tutorials and other materials. My classes have benefited from using these as resources for students. These include hand skills such as working with tools and materials as well as digital and media based skills.

Relatedly, I have started to create my own videos of hand skills using an at-home set up for my smartphone camera.

Students are eager to learn using these kinds of resources. They are also excited to share resources that they discover on their own.

## 3 - Collaborative work with students and faculty

File sharing through Basecamp and Google Drive (as well as other services like Pinterest) facilitate collaborative work, sharing resources and developing professional approaches to workflow.

## 4 - Implications for professional success beyond FIT

The digital tools and approaches that students apply to VPED course projects are presented in a professional context and combined with numerous interactions with guest lecturers, critics, internship opportunities and other connections with working designers and organizations. Students are thus prepared to bring a strong tool box of technical design skills to professional opportunities. My classes show students how learning and applying digital skills in my classes will likely help them on the job.

# Further integration, development, and refinement of technology in my teaching

Here are some things that I am either planning or considering for the coming school year:

## 1 - Adaptation of existing course for digital environment

The Communication Design Pathways Department is developing an online offering of the Communication Design One Year AAS. This will make the program available remotely to students internationally, as well as students anywhere that are unable to attend face-to-face courses.

I plan to adapt DE 216 Foundation in Visual Presentation and Exhibition Design for on-line instruction. Teaching the course online will require adaptation (and possibly an update) of the course of study and submission through the curricular process at FIT. It will also require that I participate in FIT's Online Instructor Training this coming semester.

I am hopeful that this training will help me develop further capabilities for digital instruction and grow my awareness of appropriate tools for instruction both online and in blended learning courses.

## 2 - Creating and sharing video demonstrations of hand skills, materials, and digital tools.

I have started to create videos showing how to work with model making tools and techniques. I anticipate that there will be a number of demonstrations, both digital and with physical materials that I would like to create.

## 3 - Use of dual screen set up for course related work from home

I can see the usefulness of having two screens, particularly if one is shared with students during class time or in one-on-one meetings.

## 4 - More in-depth curation of existing demo videos

Directing students to video tutorials is quite helpful. I plan to better organize my efforts to make it easier and more engaging for students to access the resources.

## 5 - Digital glossary of CDP related terms

I think it would be helpful for faculty and students to be able to access a unified glossary of terms for our department. I am considering working on this with other faculty members and perhaps creating links within the glossary to visual examples.

## 6 - Developing "End of Class Session" deliverables

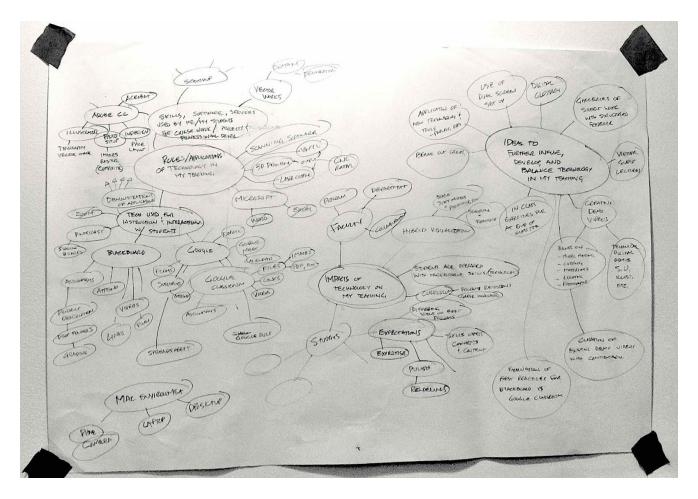
As a way to get students to make use of class time and move their work forward I plan to work with other faculty members to identify strategies for making substantive deliverables that can be brought to a meaningful level of development during class studio time. This way, work could be handed in at the end of a typical class session.

## 7 - Meaningful use of break-out groups

Developing approaches for small group work, perhaps in combination with item 6.

## Assessment of growth in teaching with technology

Growth will be assessed through formal and informal feedback and discussion with students as well as ongoing collaborative discussions and sharing of experiences with other faculty.



Practicing what I preach: Here is a mind map that was part of the process of writing this document.