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## **Online Studio Courses in Landscape Architecture**

I apologize for any typos - in the wake of the current situation, I wanted to make this information available to everyone as quickly as possible. I've been doing online education in LA for over a decade now and these are my lesson learned to help you transition online. This is not an exhaustive document, and I am just going to try and focus on some of the most common, key issues that people will run into while moving their studio online.

Teaching a studio course online has several challenges that you will want to address, but the good news is that it can be done, and it can be done effectively. My own research on our basic hand graphics class found that online students performed about as well as face-to-face students, many performed better. Additionally, there is a mountain of research on online education that has demonstrated its efficacy. We have some unique challenges in the design fields. I've tried to organize my comments around how best to recreate the rich social learning environment of the studio.

### **Social**

One of the biggest concerns that I have with online studios is the impact on the social environment. Studios are lively and engaging places to work in. When online learning is not done well it can lead to a socially isolating learning experience that is very un-studio like. You do not want this to occur. In the studio it is typically difficult for students to hide in a corner, but it is very easy for students to do that online, even ones who might otherwise be very sociable in the physical studio.

To avoid isolation, I recommend using small group projects so that, at a minimum, students are regularly interacting with at least one of their peers. Make sure that you are actively engaging with students beyond emails regularly through video chat, something where they can have face-to-face interaction with you. Similarly, encourage students to interact with each other online as much as possible.

### **Communication and critiques**

Communicate with the entire class 2-3 times a week. At a minimum, begin each week with a detailed explanation of what you expect of them during the coming week. Establish a mechanism for talking to students individually about their progress, you want to mimic the interactions that you have in the studio as closely as possible. Do not overload students with communications otherwise it turns into a boy-who-cried-wolf scenario and students will stop paying attention to your messages (or looking at them much later than you would like).

The most important communication that you need to recreate in the studio involves critiques. Again, you want to mimic the environment of an in-studio critique as much as possible. To do this, I strongly recommend relying on some form of interactive video system. Here I will describe my recommendations for both synchronous and asynchronous critiques.

### *Synchronous critiquing student progress*

It is a logistical nightmare to try and schedule video conferencing with 30 students two times a week. I would not recommend this approach. Rather, I would schedule video chat sessions with **small groups** of students. Where you are transitioning a face-to-face studio online, you probably have groups of students who already sit near each other and are used to listening in on your critique for their nearby peers. Leverage these existing social relationships in organizing your small groups and include these students in the same group. Take turns having students share their project on the screen, or alternatively you can have them email you their files and you can share your screen and go over the files. If your university uses Webex, it does include an annotation feature where you can draw on the screen to leave graphical feedback on a student's work, but the drawing feature isn't great. These online small group critiques can replicate the indirect and secondary learning opportunities (educational theory called the horizon of observation!) that the studio environment affords students. Also, having to share their work in the small group will encourage the students to keep making progress.

Despite these benefits, please bear in mind that you are still facing some limitations and challenges. While an online video crit session can provide good verbal feedback to students, I recommend using an additional sketch sharing space during the critique such as the online apps *AWWapp* or *Ziteboard* or the free desktop app *Drawpile*. These will allow students to upload a PDF of their current file and then yourself and the student can simultaneously draw on the file. To utilize any of these to maximum effect, I recommend using a Wacom tablet to mark up the drawings. *Drawpile* is especially nice with a Wacom tablet because it utilizes the touch sensitivity of the pen. When combined with a video/audio chat, this can be a very effective (and frankly fun) way to critique students from a distance. You can also export your markups so that the students have continued access to them.

In summary,

The **benefits of this approach** are:

- Replication of the indirect learning mechanisms that the studio environment excels at
- Reduces the level of logistical organization
- Encouraging students to make progress
- Synchronous collaboration

The **drawbacks of this approach** are:

- Effective mark ups will require multiple approaches
- Utilizes more student time than individual critique sessions
- Will require higher bandwidth for all participants

### *Asynchronous critiquing student progress*

Another option is to critique student work asynchronously. This provides you and the student with an increased amount of time flexibility. However, typically you are trading flexibility for efficiency, and you can expect to spend more time using this approach. There are two approaches that I would recommend considering. The first is to have students upload their current progress and then mark that up using a PDF annotator, Photoshop, or simply print it out and mark it up by hand. This provides students easy access to you critiques, but its only the final mark up. A better approach is to use a screen capture program where you can draw and then record an audio of your stream of conscious as you critique the project. Then upload this video critique for the students to watch. This enables students to understand your thought process while you were critiquing them, and enables them to better evaluate your comments on their design. Be sure to include a final version of the document still, to make it easy for them to see the final crit. There are several apps for doing this, but the one I have used most is called Educreations on the iPad. It is easy to use and easy to share the completed video with students. If your university is using Canvas, then you may have access to Kaltura, which will let you record your screen while you are editing and upload that right into Canvas.

In summary,

The **benefits of this approach** are:

- High time flexibility
- Can provide students good insight into your thought process
- Requires low bandwidth

The **drawbacks of this approach** are:

- Most likely increases overall time you will spend
- Students cannot as easily see the critiques you are giving other students

### **Collaboration**

Group work is critical on many studio projects. In addition to the tools that I mentioned in discussing effective critiques, consider using other tools to help students collaborate. Some of the more effective tools are Slack, Trello, Office 365, Google Drive, Social Media, and simply email and messaging. In the past I have dictated to students what collaboration tools to use. Now I typically take a hands-off approach and allow students to select their preferred method of collaboration. Most of them will

probably gravitate towards Slack and Google Drive. Also, remember that many of the software that we utilize has some forms of collaborative or online features built into it that can be utilized in an online setting.

More important than dictating what collaboration method students use is ensuring that collaboration is occurring. To do that, consider asking students to either provide you with a weekly report on their collaboration (you want them to assess how well they are collaborating) or ask them to add you to their collaboration (so that you can check in and see if there is any collaboration occurring). This is especially critical at the beginning of a project because if a team does not build the habit and technical skills to collaborate online at the beginning, it is much less likely that they will develop those skills later when they have more time demands as a project nears completion. Your role needs to be as guide and overseer in ensuring that they are collaborating effectively.

One of the things most difficult to recreate in an online studio is studio wall space. By doing small group crits you can at least have a handful of students seeing and aware of what their peers are working on. But it is more difficult for students to effectively share and view all of their peers work in the same way as looking up at the wall. I would encourage you to create a central digital sharing space where students will be constantly uploading some of their images to so that other students can see what their peers are doing on their projects. This could simply be done in Google Drive. I have also found it to be effective to create a custom-built social media app using Ning. Students may have concerns about sharing their work digitally and the worry that other students will copy their model or line work, so I would not require them to upload their actual working files (ie. dwg or psd files) but just an image file of their projects. Then you will want to encourage students to browse their peers work the same way they might browse what is being posted on the walls of the studio.

### **Course organization**

From a nuts and bolts perspective, make sure that your course organization is clear. Think of each module as a checklist that you can provide the students to do: read the readings, watch the lecture, take the quiz, complete this assignment, etc.

When I teach a studio face-to-face, I typically have large sections of the course devoted to a single project and I don't necessarily have built in check points - rather I am working with students on an individual basis as their progress warrants. So some students may be still in the site analysis phase while others are at the concept phase. I have found this doesn't work as effectively online, and would recommend that you try to break your projects into weekly segments to encourage students to make consistent progress. This keeps all the students at roughly the same place in the process (which will be helpful if you do the small group critique option) and keeps them making progress. Remember that the course structure needs to do many of the things that you innately do when you have face-to-face contact with students in the studio; the course structure is checking in with students and keeping students on task.

### **Student anxiety**

Some students inherently struggle in an online class. In my experience, these students typically fall into two categories:

1. Those who are not organized or innately self-motivated to stay on top of their coursework. To help these students, be sure to have built in check points. ie. sub-divide larger projects into logical chunks where you might require evidence of progress. Make sub-assignments for these checkpoints and assign some point value to these, even if minimal, to help these students stay on top of the course in an online format.
2. Those who don't have or are not confident in their computer skills. Be sure to have ready access to links to online tutorials or guides to help these students. I caution against trying to individually trouble shoot their problems, otherwise it can become a major time suck for you. Most student questions are readily solved with a quick Google. If you have university-provided teach support, try to point students towards that. Invariably, you will need to help some students in depth.

### **3rd-party tools**

Here is a list of 3rd-party tools that I would recommend you look at while you are transitioning to online. Some of these may be paid services:

#### *Critique:*

AWWapp  
Ziteboard  
Educreations  
Kaltura

#### *Communciation:*

Google Hangouts  
Webex  
Zoom

#### *Team Collaboration:*

Office 365  
Google Drive  
Box  
Slack  
Trello  
Swift  
Github  
InVision  
Mural  
Concept Inbox  
Ning

Good luck moving forward as we all deal with this difficult situation. Please feel free to reach out to me ([benjamin.george@usu.edu](mailto:benjamin.george@usu.edu)) with any questions you might have and I will try to be as helpful as possible.