Effective Online Teaching

Written by Judy Lewandowski & Alex Ambrose

Will you be teaching your whole course online this year, perhaps due to an accommodation? This document is for you!

Introduction

The research on effective teaching, whether face-to-face (F2F) or online, is clear: learning design decisions matter. Studies indicate that the modality of teaching does not determine overall impact or effectiveness of a course; the design of the learning environment and the strategies used to support learning do (Bernard, et al. 2004; Zhao, et al. 2005; and U.S. Department of Education (2009)). Shifting to an online teaching environment requires intentional focus. This shift to a new format, where all aspects of teaching feel different, can seem daunting. But, if you take the time to step into the online environment in a way that reflects the unique goals of your class, you’ll find that it can be an impactful and even enjoyable experience.

F2F v. Online Teaching: Differences in Approach

While good course design transcends modality, it is important to acknowledge the inherent differences associated with each. Teaching in an online environment is different than teaching in a F2F environment. Research from Boettcher and Conrad, (2016 p. 8-10) and Stavredes (2011, p. 152) offers insight into these differences:

- **Instructor role adjustment**: The instructor role shifts to have a larger emphasis on facilitation. While live sessions offer an opportunity for direct instruction (e.g., lecture, discussion), the creation of asynchronous materials requires time to be spent on developing and leading learning experiences that happen both in and out of the live session experience. Examples include the creation of recorded mini-lectures (chunking of content into smaller portions), monitoring discussion forums, and supporting student work through off-line communication.

- **Learner autonomy**: Online courses tend to focus on students’ learning decisions. The students often can choose when / where / how they will utilize the course materials. Therefore, students must be actively engaged in thinking, dialogue, writing, and/or reflecting to construct their own knowledge. This engagement relies upon the creation of
effective stimuli for learning activities. Additionally, all items related to course activities will require clarity of purpose and detail. Succinct directions and clear deadlines will be beneficial.

- **Content flexibility:** Learner autonomy, the vast number of online resources, and content adaptability to multiple devices dictate that online courses use multiple resources. However, it might be overwhelming for learners to cope with the abundance of materials. The instructor should establish a weekly rhythm and prioritize content. Flexibility is a positive attribute, but it does require a guiding structure for consistency.

- **Asynchronous/Synchronous communication:** Clear communication is even more critical in an online environment. A blend of both asynchronous and synchronous communication can positively impact the learning environment. As students work in an online environment, clear messages from the faculty will help to strengthen their understanding of the content and the overall flow of the course.

**Benefits of Online Teaching**
Ko and Rossen (2017, p. 17-22) indicate that teaching in an online environment has been linked to benefits that impact both online and F2F teaching. Examples include:

- **Strengthens teaching awareness.** Preparing and designing online courses before launching them increases awareness of what strategies work better for students and allows for improvement. Making design decisions in this way requires an intentional focus and connection to the overall learning goals of the course. This process leads to an increased awareness of the alignment and connection of course content.

- **Opportunity for reflection.** In the online course environment, faculty have an opportunity to capture and reflect upon their teaching techniques and student learning activities. This visualization and recording of your teaching allows you to come back and reflect more easily than in your face-to-face classes.

- **Increased creativity.** Teaching online can also be a gateway to creative ideas as you adjust to the medium for your online courses. These creative ideas can often be brought back to the F2F environment or offered in a blended format.

- **Wider connections:** Online courses allow you to interact with students from all over the world and collaborate with instructors or institutions far away. The natural format of the digital space offers a flexible approach that might not be as available in the F2F environment.

**First Steps**
The first steps to any new approach often seem the most challenging to take. At the most basic level, effective online teaching requires the same skill set as effective F2F teaching. The first
step is to critically examine the components of your course. By looking intentionally at the design of your course, you’ll have an opportunity to ensure that the critical components and experiences translate into this new modality. This shift will not require you to become a technological expert. As Ko & Rosen (2017) explain, “Techies don’t necessarily make the best online instructors. An interest in teaching comes first, technology second (p. 19).” Your subject matter expertise is what will make this course an engaging and impactful experience for your students. The digital assets and strategies that you employ will highlight this expertise. Taking this task one step at a time will help to keep the focus on progress. The next step is to dig into the selection of relevant digital assets and instructional strategies.


Design adaptations for fully online courses

Engaging Students: Community of Inquiry Framework
As you think about engaging students in your online courses, it is important to consider the wide range of factors that lead to the overall learning experience. The Community of Inquiry (CoI) framework is a social constructivist model of learning processes in online and blended environments designed to help explain these factors. The framework is built upon three dimensions:

**Teaching presence** is defined as the design, facilitation, and direction of cognitive and social processes for the realization of meaningful learning. This involves the (1) instructional design and organization of the course and activities, (2) facilitation of the course and activities, and (3) direct instruction.

**Social presence** refers to the ability to perceive others in an online environment as “real” and the projection of oneself as a real person. Social presence involves open communication, affective expression, and group cohesion.
Cognitive presence is the extent to which learners are able to construct and confirm meaning through sustained reflection and discourse. The ultimate goal of the Community of Inquiry is to build a solid foundation of social presence and teaching presence to stimulate cognitive presence in a course.

Why is it important to engage students in all three areas?
Research has shown that there is a relationship between the three presences and students' perceived learning, satisfaction with the course, satisfaction with the instructor, actual learning, and sense of belonging (see Akyol & Garrison, 2008; Arbaugh, 2008; Richardson, et. al., 2017).

As depicted in Figure 1, the CoI framework explains deep and meaningful learning online as occurring at the intersection of social, teaching, and cognitive presence.

How do I do this?
Establishing teaching, social, and cognitive presence in an online course can be accomplished in a variety of ways. Here are some examples to get you started:

Teaching Presence

- Facilitate students’ learning activity.
- Provide students with timely & supportive feedback.
- Provide students with explicit and redundant instructions for all course activities.
Social Presence

- Project your teaching persona through announcements, emails, videos, etc.; these types of activities also model behavior for students. (See Online Teaching Persona)
- Offer virtual office hours for students. This would be a good way for you to answer students’ questions and address students’ concerns throughout the course.
- Create weekly check-in videos or announcements to recap the learning content and preview the course content for the following week.
- Develop initial course activities (e.g. icebreakers) to encourage the development of swift trust.
- Model & encourage the use of verbal immediacy behaviors in interactions with students (self-disclosure, share values, use salutations, self-reference for examples, acknowledgment, approval).
- Encourage students to share (related) anecdotes, experiences, and beliefs in online discussions.
- Design collaborative activities – problem-solving tasks, projects, small group discussion.

Cognitive Presence

- Identify big ideas you want students to take away from your course and develop major course activities around the assessment of those activities.
- Provide frequent opportunities for testing & feedback.
- Use self-testing, practice assignments, simulations & other interactive activities to support skill development & convergent thinking.
- Provide multiple representations of the knowledge you want students to learn and multiple activities for practicing desired skills.
- Encourage experimentation, divergent thinking & multiple perspectives in online discussion through provocative, open-ended questions; encourage diverse points of view.


Developing an online teaching persona

What is an Online Teaching Persona?

A teaching persona is the sense of self that an instructor presents to and establishes with students (Richardson & Alsup, 2015). Your teaching persona is essentially who you are, what your beliefs are personally and professionally, and how you present (project) yourself in the online classroom. Some instructors new to online teaching are concerned about transferring their personal teacher attributes to this new environment, translating their classroom management techniques, or even how to communicate or be “social” in an online course. This is all tied to your teaching persona.

Why is it important?

When moving to an online classroom, a shift in your teaching persona may occur as you realign your beliefs about teaching and learning in a different environment. For example, with a move from face-to-face to online teaching, some instructors also make a shift from teacher-centered to student-centered learning and/or from passive to active learning, in addition to dealing with new understandings of time management, the use of visual materials and cues, and online communication and presence. Your online teaching persona will in at least some way differ than your traditional teaching persona (Richardson and Alsup, 2015).

Moreover, a teaching persona is important because it gives both the student and the instructor a sense of connectedness in and to each other and a course. One of the benchmarks of effective online education is instructor to student interaction. Establishing a teaching persona or a representation of instructor self, aids in developing this interaction.
How do I develop an Online Teaching Persona?

An instructor's teaching persona is a unique representation of self, making it difficult to prescribe a fixed “How to” list. Consequently, when trying to develop your online teaching persona, consider the following seven areas:

- **Teaching and Humanism**: Teaching face-to-face is strongly linked to developing interpersonal relationships. However, when you are teaching online, developing and building this relationship is more about written discourse and closely following the evolution of your students' thinking over time. Remember, while developing rapport with your online students may look and feel different, it is just as possible and as important.

- **Unique Identity**: You should utilize technology tools that capitalize on your unique identity. For instance, if you prefer written discourse, then encourage students by sending emails and posting comments on discussion boards. If you prefer face-to-face interaction, set up synchronous virtual office hours using video conferencing tools.

- **Time Management**: There is a perception of a much higher workload for teaching online courses. This can certainly be true when you begin to teach online or are teaching a new course online. However, it is also important to be cognizant of your course design and how many assignments you have - to balance your workload and that of your students. Moving from face-to-face to online does not mean you need to increase assignments to ensure student participation! (Hopefully you have some control over content). You should also be aware that questions will come at any time: day, night, or weekend; so consider establishing a daily or weekly routine for managing your class and let your students know what that looks like.

- **Projecting Presence**: You should look for timely, consistent ways to project your presence - as an expert, as a facilitator, and as a mentor - in the course. Weekly announcements, video recaps of course content, or discussion board posts are all effective ways to project your presence.

- **Communicate Effectively**: The asynchronous nature of online instructions means that there is less immediate two-way communication. So be consistent and timely with responses. Also, remember that some things, such as humor and sarcasm, do not often translate well into asynchronous communication.

- **Course Control**: Tailor instructional material and course content to your persona; if you are teaching a course developed by someone else, tailor the course as much as the program/institution will allow. Maybe you cannot modify instructional materials, but you can most likely provide additional resources, individualize your announcements (“last weekend my family went swimming…”), and share your own experiences via feedback and discussions (“When I am working with colleagues on a project as large as the one...”)
you are describing, we find that the use of XX software for project management is very helpful).  

● **Role of Mentors:** Seek out a mentor(s) from within your department/college/university who has experience with online instruction. Having someone you trust with whom you can share the successes and failures of teaching online is an indispensable resource.

**Tips and Tricks**

● Your actions, thoughts, and commentary -- in short, all your interactions with students work together to form your persona.

● Use the Announcement and Discussion Board forums in Sakai, and even consider how you provide Feedback as a way to project your persona. Look for training opportunities to improve your online instruction or knowledge of educational technology tools.

**Additional Resources**

● [Six Myths About a Teaching Persona](#)

● [Developing a Teaching Persona](#)

● [Crafting a Teaching Persona](#)

**References**

Purdue Repository for Online Teaching and Learning.


**Using asynchronous effectively**

● **What is Asynchronous Content?**
  ○ Asynchronous content is consumed by learners at a time and place of their choosing.
  ○ Asynchronous learning does not require learners’ presence in the same place (physical or virtual) at the same time.
  ○ Asynchronous content may be text or audio when those formats meet the instructional need. Video is **not** required.
● **How much asynchronous material is enough?**
  ○ As there is no hard and fast rule on this, we encourage you to use your best judgment.
  ○ When replacing a face-to-face class session with asynchronous content, we encourage you to plan a set of activities for the students that will take roughly the same amount of time to complete. This can actually be somewhat less (60 minutes for a 75-minute class session) due to the lack of introductory / closing activities. The type and amount of homework you assign between sessions should not change due to modality.
  ○ For an estimate on time, there are some useful tools that can be helpful starting points for discussion. The Course Workload calculator offered by Rice University provides a useful means of generating a rough estimate: https://cte.rice.edu/workload

● **Types of Asynchronous Materials:**
  ○ **Text-Based:** Books, Articles, Case Studies, Annotated (Using Speaker Notes View) PowerPoint Slide Decks
  ○ **Discussion-Based:** Discussion forums in Sakai, Collaboration via Google Suite
  ○ **Video-Based:** Recorded video lectures (screencasts), links to external videos (YouTube, TedTalks, documentaries available online), recorded Zoom calls with guest speakers, white board recordings

● **Things to Remember:**
  ○ Directions for use need to be clear.
  ○ Use descriptive file names to aid in organization.
  ○ The more engaging the resource or prompt, the more engaging the response from students.

● **Where to Store Asynchronous Materials:**
  ○ While asynchronous material can be shared in a variety of ways, we recommend using Sakai as the main resource for storing course materials. This provides a singular pathway to finding ND courses online.
Synchronous and Asynchronous Teaching with Zoom

What are the different synchronous and asynchronous course delivery possibilities for teaching with Zoom?

If technology is the solution, what was the question? Be sure to use Zoom for the right purpose at the right time, by asking yourself before you teach with it: a) Does this need to be live? b) Could it be on-demand? Zoom can be used as a video conferencing tool for synchronous interaction, or it can be used asynchronously as a lecture capture tool for creating and sharing pre-recorded lectures. The matrix below has two rows for time (asynchronous and synchronous) and two columns for place (in-person and online), creating 4 quadrants of possible modality combinations. The left half describes typical activities in a traditional face-to-face classroom. The right half describes possible activities when using Zoom as a lecture capture or video conferencing tool.

<table>
<thead>
<tr>
<th>Asynchronous (Different Times)</th>
<th>Synchronous (Same Times)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Appointments/Meetings</strong></td>
<td><strong>In Person</strong></td>
</tr>
<tr>
<td>Office Hours</td>
<td>(Same Place)</td>
</tr>
<tr>
<td><strong>Traditional Face-to-Face Class</strong></td>
<td><strong>Online</strong></td>
</tr>
<tr>
<td>Lecture</td>
<td>(Different Places)</td>
</tr>
<tr>
<td>Lab/Tutorial Studio</td>
<td></td>
</tr>
</tbody>
</table>

**Share a Past Recording**
- Share last class session recording (absent student makeup)
- Email a Video Class Announcement
- Create a Mini-Lesson Video Lecture Podcast (talking webcam head w/ slides)
- Video Feedback of Group Project
- Audio Critical Reading of Text

**Host a Live Video Conference**
- Live Stream in Remote Students/Expert
- Hold Sync Class Meeting
- Virtual TA Tutorial/Review Session
- Discussion Breakout
- Virtual Office Hours
- Group Project Collaboration
- Proctor an Exam

What live instructional activities can I do through Zoom with my class?

Although Zoom was originally created as a video conference tool for the business sector, many of its features and functionalities can be adapted for education. The table below outlines a list of activities that can be done in the platform, with a list of the tool features, and instructional examples of how you might incorporate some of these functionalities into your classroom. Experiment with some of these advanced features/techniques, but take it slow and don’t try to use all the features at once.
What situational factors should I consider when using Zoom?

- At the start of the course, privately survey students to make sure they all have sufficient internet bandwidth and minimum computer system requirements (including webcam and microphone) to participate in remote Zoom sessions.
- Explore and inventory what technology (webcams, mics, screens) and seating/spacing you have in your assigned classroom.
- Be sure to check with OIT and the Knowledge Base for Zoom how-to tutorials, tips on setting customization, security/privacy recommendations, updates, and integrations.