



Teaching and Learning in a Digital World

VIRTUAL COURSE DESIGN GUIDELINES FOR OSHER@DARTMOUTH STUDY LEADERS

CREATED BY THE STUDY LEADER SUPPORT COMMITTEE (SLSS)

GOING FROM “LIVE” TO VIRTUAL? LET’S GET STARTED!

This guide explains how to reconfigure common teaching approaches for an online environment. It includes some general advice on virtual teaching, such as the importance of establishing a welcoming online environment and the need to become very familiar with the mechanics of a virtual teaching platform. In particular, however, it details how a lecture approach to teaching can be redesigned, using ZOOM features, to engage course participants and sustain their interest—a common challenge for online educators. The contents of this guide are based on information and best practices gleaned from the experiences of several well-established organizations and institutions who found themselves faced with preparing their faculty and students to operate virtually in a COVID19 context. It also contains insights from participants in recently taught OSHER online courses.

We hope this guide helps you make a successful transition to online teaching. It’s arranged in five parts which will give you a good grounding in understanding how to function in a digital classroom.

- Part 1: the benefits and challenges of online teaching and learning
- Part 2: a template for creating a course or moving an existing course online, including the appropriate protocols for using ZOOM features
- Part 3: tips on incorporating ZOOM features into your traditional teaching methods, specifically lecture as well as large and small group discussions.
- Part 4: nitty, gritty tips and tricks for conducting the first session of an online class
- Part 5: a short list of resources from which the information in this document was taken as well as citations of sources of more in-depth discussion of online teaching and learning.





A. BENEFITS AND CHALLENGES OF ONLINE TEACHING AND LEARNING

Whether you've taught online a lot or a little, you probably still prefer teaching in person. If you've never taught on line, you may be hard pressed to see how you will find it enjoyable. You're not alone; few educators would choose an online environment over a classroom experience. Most people enjoy teaching because it gives us the opportunity to interact with students, share our passion for a subject or topic, and witness interest and understanding dawn on the faces of class members. Teachers feed off the energy in a classroom.

There is a vast body of research that indicates online learning can be just as effective as the face to face learning in a classroom setting. But it takes more than simply moving course content to ZOOM and hoping for the best.

Teaching online poses its own unique challenges that are different from those you might encounter in a classroom. Virtual teaching

- requires some rethinking of how much and in what manner subject matter can best be presented in a virtual environment Some content or classroom activities do not transfer well to an online format;
- changes the dynamics of interaction between the instructor and the class participants. Fostering social presence is easier in a face to face context than in a virtual environment, even though ZOOM allows both parties to see each other's faces and communicate in real time;
- Some of your class members may need additional processing time, particularly when viewing something on line for the first time. Many participants may be technological neophytes and require more attention. Others may be in geographical areas where internet connections are weak and unreliable. Still others may be hampered by hearing or sight impediments.

On the other hand, the technology for online teaching offers some interesting opportunities to experiment with different methods of interacting with learners and they with each other.



**B. A TEMPLATE FOR
COURSE DESIGN---
STARTING BACKWARDS!!**

You've got a list of topics, a bunch of power point slides, and some great articles... you are ready to design your four-session course. *"What can I cover in four sessions?" "How should I divide up the topics?" "What audio/visual materials will I need?"*

But wait...that is *forward thinking*... and the most successful courses are **DESIGNED BACKWARD**. *"What do I want course participants to walk away with, be able to do by the time I finish teaching them?" is the first question you should be asking yourself.*



1. OUTCOMES/LEARNING GOALS: What will participants know or be able to do after this course or session?



2. CONTENT: What topics should be presented to attain each outcome?



3. TEACHING/LEARNING METHODS: How should each topic be delivered? What participant activities may be appropriate to the topics?

STEP 1. LIST DESIRED LEARNING OUTCOMES/GOALS. Articulating the desired learning outcomes/goals will establish a clear focus for your course, guiding your choice of content and teaching methods. In other words, **what key information (facts, concepts, principles, relationships, etc.) would you like participants to understand and remember after taking your course? What key insights or perspectives would you expect participants to develop as a result of experiencing your course?**

There are no set number of learning outcomes/goals required for a course or session, but developing them is a critical first step. Learning goals take the following form: “At the end of this course/session, class participants will be able to ...” followed by a specific action verb and learning or skill set or change in behavior.

SAMPLE LEARNING OUTCOMES FOR A SESSION

Participants will be able to explain the operation of economic institutions such as the Federal Reserve and stock markets.



Participants will be able to apply the watercolor technique of wet on wet after sketching an abstract landscape scene.

STEP 2. IDENTIFY AND CLUSTER TOPICS ASSOCIATED WITH EACH OUTCOME/GOAL.

Start by creating an outline of the entire course with the list of desired outcomes/goals for the course on top. The process of creating an outline will force you to separate the “must-have” topics from the “nice-to-have” elements in the recognition that online sessions are shorter, incorporate more student participation, and incorporate elements of technology that you may not have used in your traditionally taught course.

STEP 3. REVIEW YOUR TEACHING TOOLKIT. For each outcome, what learning activities will generate the kind of learning you envision (watching, listening, reading, writing, doing, discussing, reflecting, or some combination of activities)?

What resources do you already have to support each of the learning outcomes (such as readings, videos, tutorials, websites, etc.)? What resources do you need to find or create to support each of the learning outcomes?

What ZOOM features (polling, shared screen, whiteboard, breakout room) can be used instead of or in addition to those you might use in a classroom setting?

Refer to **Appendix A** at the end of this document for a simple worksheet for designing your course using the three steps we’ve just explained.



C. ENGAGE PARTICIPANTS AND ENRICH LECTURES WITH ZOOM FEATURES

Important Note: A series of short videos on ZOOM teaching tools have been created specifically for OSHER@Dartmouth Study Leaders. Go to this link to access:

<https://docs.google.com/spreadsheets/d/1o11uxgz4-FkV0-hamKS3Z6KtNeYLvpEGzbwinpXUTFY>

LECTURING WITH ZOOM

LECTURE is the most frequently used instructional method for teaching adults. The one issue to avoid, however, is a presenting a lecture that leaves little time for student interaction during your presentation. Here are some comments made by OSHER course participants about their recent online course experiences where Study Leaders relied heavily on straight lecture .

- **Disappointed in lack of participation; no discussion or exchange among participants; leader did not engage class but plowed through a lot of dense material**
- **Lecturer more concerned with getting through his slides than making connection to the class; can't cover as much material on zoom if engagement of participants is to happen**
- **Some things could have been assigned as homework before class so class time can be spent on debate/sharing.**
- **Too much lecture; not enough discussion**

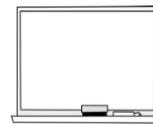
These comments point to issues that can arise if a straight lecture approach is taken in a virtual class. To avoid such feedback, **RETHINK YOUR LECTURE FORMAT AND WHAT ZOOM FUNCTIONS TO INCORPORATE** that will enhance the learners' online experiences . Here are some suggestions.

PREPARE A PRE-RECORDED LECTURE

If you want to allow more time for student interaction but have a good deal of content to cover, consider pre-recording all or part of your lecture. Then, invite class members to view the pre-recorded video before participating in your virtual class session.

Here are some tips to help you be more effective if you decide to pre-record a lecture.

- ⇒ Provide an explicit roadmap at the beginning.
- ⇒ Break down the lecture into shorter segments. A long, pre-recorded lecture can be deadly to watch.
- ⇒ Intersperse the lecture clips with reflection questions for the students to consider
- ⇒ Speak to the student, not to the camera.
- ⇒ Insert yourself – a personal story, humor, or editorial commentary – into the lecture.



INCORPORATE WHITEBOARD INTERACTION INTO YOUR LECTURE.

An online **whiteboard** is where both study leaders and students can write and interact with each other in real time via Zoom. What might be some ways that you can integrate whiteboard use into your virtual lesson plans? Into a discussion? Here are some examples from the website, *Teaching at Tufts*. <https://sites.tufts.edu/teaching/2020/03/17/ways-to-engage-students-when-teaching-remotely-with-zoom/>

- ⇒ Post an open-ended prompt such as “What if...” about a topic or reading which is important for them to consider. Invite participants to respond on the whiteboard to begin a discussion.
- ⇒ Sketch a grid on the whiteboard with four quadrants. Ask participants to consider a different aspect of a topic or question and have them type their responses into the appropriate quadrant.
- ⇒ Use the whiteboard as a reflection space, inviting them to respond to questions like: “What assumptions can you make based on the reading?” “What solutions might you offer to a stated problem?”
- ⇒ Summarize participant learning at the end of a class with Whiteboard question. For example, divide the whiteboard into three different sections of for responses to questions such as: What do you know now that you didn’t before this session? What can

you do now that you couldn't prior to participating in this class? What could you teach a peer that you couldn't prior to this class?



CREATE A PLAN TO INCREASE PARTICIPATION, ENHANCE DISCUSSION

Have you ever noticed that a class member hasn't said anything in a discussion or the same people are jumping in for every discussion while others sit silent, even though you know they probably have good insights to share? Studies have shown it is important for online instructors to actively and visibly engage with students in the teaching and learning process—probably with even greater intentionality than in face-to-face courses. Here are some methods that encourage class member participation.

- ⇒ A quick and easy way to start participant involvement is to ask YES/NO questions to which class members can respond by tapping their choice using the ZOOM feature.
- ⇒ In face to face discussions, you can use eye contact and maybe a nod in a person's direction to invite someone to participate. However, as a facilitator of a virtual group discussion, you can be more explicit in extending an invitation. It's important in a virtual discussion to pull in people by asking specific questions to specific participants.
- ⇒ Initiate a **“step up, step back” rule**, which asks participants to step up (use Raise Hand Zoom tool) and speak when they have something to say, but also to step back if they have already raised their hands and to give others a chance to contribute. This is perhaps the most important rule for a facilitator to enforce. When a participant starts taking up all the airspace, only the Study Leader is in a position to step in, and ask them to step back.
- ⇒ Try the **Whip-around** technique. Ask every person the same question to get a diversity of perspectives on the same topic from everyone. Alternatively, if the class is small enough, participants can all write their answers on the Whiteboard Zoom tool.
- ⇒ Don't be afraid of **awkward silences** that sometimes follows a question we've asked of a group. No one steps up with an answer. Seconds pass. We experience the urge to fill in

the space ourselves. Better to quell that urge and sit tight. Let the participants mull through their thoughts. Eventually someone will speak up.



AVOID ZOOM CHAOS: MANAGE DISCUSSION TOOLS

What might have been a great discussion can turn into chaos if you and your class participants aren't quite sure how to manage the various features on ZOOM that promote good discussions. This issue surfaced in some of the feedback from OSHER participants in recent virtual courses.

- **Instructor used a background making it difficult to see his face**
- **Audio seems to work better if everyone uses headphones.**
- **Cross talk got in the way of hearing**
- **Study Leader needs someone to recognize students who have hands up.**
- **We need clarity about muting and other participatory strategies ahead of time, especially with a large class.**

On the other hand, several participants commented on the things a Study Leader did to leverage the ZOOM features effectively.

- **Encouraged getting on ZOOM prior to class to iron out kinks**
- **Study Leader contacted everyone before the class and did a test zoom which helped**
- **Having a specific format to follow is more important with ZOOM. A few minutes of presentation with everyone on mute and then a stop for questions seemed to work best**
- **Appreciated slides and articles posted in advance so we could be prepared for his lecture and discussions.**
- **Had a fair and balanced protocol for taking and responding to questions on ZOOM**

A lot of issues that crop up in discussions are related to the use of the MUTE function. It's probably a good idea in a large class to have everyone stay on mute when they're not speaking. This prevents unexpected background noise when someone in the house slams a door, or the phone rings. This calls for some instructions on using ZOOM hand tools to ask questions or give opinions in a discussion. Tell participants to raise their hand when they have a question and use the "thumbs up" hand gesture when they agree with someone.

If the group is small, however, it's better to have participants be unmuted and visible. It's not always possible for everyone, depending on the strength of their internet connection and willingness to be on video, but it will make the discussion so much more intimate if you and others can see people's faces and read their body language.



BREAKOUT ROOM DISCUSSION TIPS

Small group discussions in virtual breakout rooms are one way for class participants to delve more deeply into a given problem or issue. You can pose an open-ended question or problem, or describe a scenario or case study to work through. Groups can then present their results for class discussion.

Be sure to prepare for this teaching strategy by selecting a learning objective that would **most** benefit from small group discussion. From this learning objective, create a discussion prompt to start off groups. For example:

- **Learning Objective:** Analyze a set of assumptions in an assigned reading.
- **Discussion Prompt:** How does the information contained in the assumptions support the author's conclusions?

Because these discussions are occurring online, it's best not to have too many people in a group; 3-4 individuals per group for a 10-minute small group discussion allows each person to contribute substantially to the discussion.

Let your class know that you may be dropping into each breakout room periodically to check their progress and answer any questions, but that they do not have to stop their discussion if they do not need anything from you. Tell groups they can clicking the **Ask for Help** button, which alerts you to their request and prompts you to join their breakout room.

After providing participants with both verbal and written instructions, give them a minute to ask you any clarifying questions before you send them to their breakout rooms.

When the class is ready, use Zoom to automatically split people up into breakout rooms or manually assign them. You can set the breakout rooms to close automatically after a set duration. This adds a countdown timer in the breakout rooms informing the group of the remaining time they have.

The biggest problem with small groups in breakout rooms is letting them run without a facilitator to moderate the discussion and keep time. Even if you set ground rules and establish an agenda, chances are some group will suffer a participant who takes control of the conversation and doesn't allow time for others to speak. So, for every time you move participants into breakout rooms, make sure each room has a facilitator. In addition, suggest a discussion protocol for groups to use and clarify expectations for discussion results.

When time is up, if you did not set the breakout rooms to automatically close, manually close them so all students return to the main room at the same time.

A SAMPLE LESSON PLAN INTEGRATING LECTURE AND ZOOM FEATURES

OPENING	<p>Welcome. Participant introductions.</p> <p>State the purpose of the session and what participants can expect to learn. Connect the session to previous one, if applicable.</p>
GROUND RULES	<p>Explain discussion protocol. Questions during the presentation? After? Zoom features to use?</p> <p>Clarify muting and unmuting expectations.</p>
DELIVERING THE PRESENTATION	<p>Get participants' attention by posting on whiteboard a surprising statistic or a provocative statement about the topic to be addressed, or ask a question to ascertain prior knowledge or positions held.</p> <p>Involve learners by asking questions throughout or taking periodic polls. If using slides, break up your presentation with an activity every three minutes. Also, be aware that viewers will read the slides first and listen second. Be sure to give the participants enough time to absorb the contents of a slide before you ask a question.</p> <p>Give students opportunities to share opinions either through class discussion or working in breakout rooms.</p>



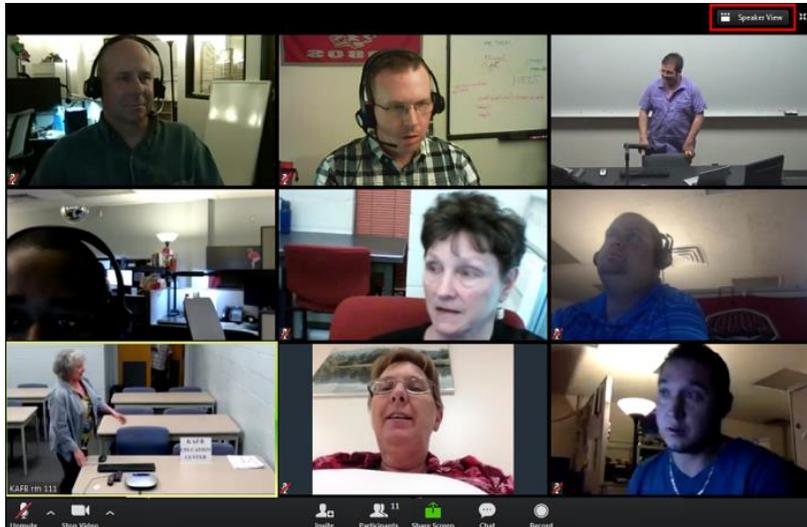
D. NITTY, GRITTY TIPS AND TRICKS FOR YOUR FIRST ONLINE SESSION

Everyone will be learning and adjusting to the virtual learning space in general and the ZOOM platform, in particular. To avoid the chaos that comes with the typical start-up problems experienced by new ZOOM users, schedule a 15-minute “try it out” session either the day before or at the start of your actual class session. During this time, you can walk participants through some of the ZOOM tools, particularly the “mute,” “hand raise,” and “gallery view” functions.

KNOW THE HARDWARE AND SOFTWARE YOU WILL BE USING

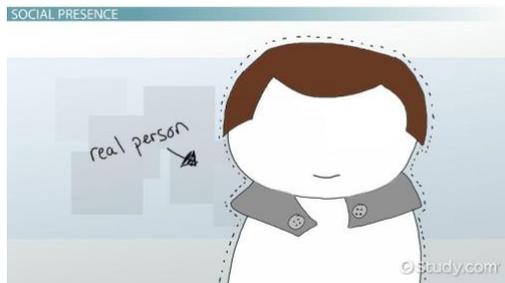
- Practice using the camera on your computer, phone or laptop.
- Familiarize yourself with the meeting software and its features. Download ZOOM for free onto your computer. You can try out the various tools and practice them until you feel comfortable using them.
- Turn off any program or device that will compete for your bandwidth. This includes things like Google Drive and Dropbox that automatically update.
- Try wearing a headset to see if it cuts down on external noise.
- Mute/silent mode landlines and cell phones to eliminate distractions and interruptions.
- Bring up any documents or browsers on your screen in advance to be able to access them easily.
- Open the meeting early so that you can make sure that your video and audio are working properly
- If possible, see your meeting space as your participants do. To achieve this, try logging-in twice, as a host and as a participant. Use your main computer to log-in as a host, and use a spare screen device if you have one, such as a tablet, laptop or smartphone. This method also is helpful when you are trying to test accessibility: what does a person who uses a smartphone actually see when you are sharing a document?

YOUR ZOOM PRESENCE: WHAT DO PEOPLE SEE???



Consider the people in the screenshot above. Note the impact of lighting, background, clothing and the positions of people with respect to their computer screens. To avoid projecting a distracting or ineffective screen image, review the following suggestions.

- Plan your lighting so that your face is well lit. Avoid sitting with your back to a window or other source of light and be aware that some overhead lighting can also make it difficult to see you clearly
- Position yourself so that your upper body is visible, not just your face. This will allow you to be more expressive when speaking
- Position the camera so that it is at eye level when you are looking forward. This makes for better “eye contact” with the viewers. If you are using a laptop, consider putting it on top of some books or other platform so it brings the webcam up to eye level
- If you wear glasses, be aware of reflections and glare that may be distracting. You may be able to eliminate this by adjusting your seating position, the angle of the camera, the angle of your glasses or making the source of light more diffuse
- When speaking, make “eye contact” by looking directly at the camera lens. This can feel uncomfortable at first and takes practice, but it makes a significant difference to the effectiveness of your online communication



PREPARE CLASS MEMBERS FOR A VIRTUAL LEARNING ENVIRONMENT BY PROMOTING SOCIAL PRESENCE

The job of an OSHER online Study Leader is the job of an offline OSHER Study Leader is the job of a Study Leader. No matter the medium, you simply want to connect to people and help them to feel connected to you and to the facets of the subjects you are leading them to experience. You want to connect your course participants to one another in a way that enables them not only to learn subject matter from one another, but also to share life experiences—to shape one another in the way that only peers can. It's that simple ... and it's that complex. (from "A letter to educators teaching online for the first time" in by Reshan Richards and Stephen J. Valentine; [Edsurge](#), Mar 13, 2020.)

Unlike teaching in a classroom, teaching online leaves you without many of the social connections and context with which to engage students. You can't really look around the room and notice when class members are listening or confused, bored or engaged. And similarly, they will have more difficult connecting with you, the Study Leader. Therefore, forming a sense of community, or social presence, is even more important in a virtual environment. Taking time to do so has been shown to improve learners' perception of their learning and satisfaction with a class.

Teaching online requires a Study Leader to put some time and attention into building a community of learners to capture and sustain interest and encourage participation. You can begin to establish a sense of presence by asking class members to show their faces via their webcam and inviting them to introduce themselves, perhaps even respond to a quick question, such as "what do you hope to take away from this course?"

REFERENCES

The information in this guidebook was gleaned from the following sources.

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APPENDIX A

Worksheet for Designing a Virtual Course

Learning Outcomes/Goals for Course	Session Topics for Each Outcome/Goal	Actual Teaching-Learning Activities including Zoom Tools to Use	Helpful Resources (internet sites; Readings, YouTube clips)

NEED MORE HELP OR DIFFERENT RESOURCES??



GO TO THE OSHER@DARTMOUTH WEBSITE