



Teaching online in Vietnam

Tips and tools from Delft University of Technology for remote learning and teaching at HUNRE

OKP Climate Proof Vietnam

In this document we will try to collect best practices for various forms of online teaching, provide advice and in general try to make having to switch to online education easier.

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Acceptance, reprioritizing and simple production

Acceptance

No one is expecting you to directly replicate your course. **The key is ensuring that students don't fall too far behind during the shutdown.** Although it is better to mingle theory and practice normally, if you have the choice between teaching something and teaching nothing, you should teach them master key theory. In most cases, we will need to let a few things go, and that's okay.

Re-prioritize

- You might be tempted to first focus on **how** you teach now, but arguably **what** you teach is more important. Now is **not** the time to tackle practical/lab work (unless you teach programming), but to focus on **theoretical concepts**, which lend themselves to (online) lectures and discussions.
- You can't convert everything online, so prioritize the **1 or 2 core theoretical concept/s** that students *have* to know for your course and/or those that take the longest to learn/sink in (i.e. the things that students would find the hardest to theoretically master if you just postponed your course for 6 weeks and shortened your course time).

Keep production simple

Quickest approach:

- If nothing else, select **1 or 2 key readings**, and start a **discussion forum** below so that students can ask you (and each other) questions.
- Even better, provide a **quiz with 3 questions** you want the students to answer,

2nd quickest approach: Record a short video using 1 of 2 methods:

1. You have existing lecture powerpoint slides which you want to explain
 - a. Download a video recording/screen capture software (see tools below, for example Camtasia)
 - b. Record your voice talking over your powerpoint.
 - c. Save as mp4 and share with students.
 - d. Allow students to ask questions via an email thread, google docs etc.
2. If you either don't have slides, you prefer more structure or have not given this theoretical concept before:
 - a. Start with a script. You can find our [quick tips here](#) .
 - b. Decide whether you want PowerPoint or not. If so, [here are our tips](#).
 - c. Download a video recording/screen capture software like Camtasia

Moving classes online

Getting started

- . Decide how you communicate with your students.
- . Provide clear instructions to guide students what to do, and when.
- . Decide what really needs synchronous communication (students and instructors are gathered at the same time)
- . Select only 1 or 2 interactive tools and master them.
- . Try to keep online lectures to no more than 20 minutes – or break them into short self-standing chunks with activities for students.

Tip 1: Split up your lecture in a series of activities

This is the preferred way. Many online courses don't even have synchronous activities/classes. You can use a combination of e.g.:

- . Watch a video or listen to a podcast;
- . Read an article;
- . Do an assignment with interactive tools;
- . Discuss / ask questions / give feedback on a discussion board online. Use specific, structured questions, and let students know expectations for their responses.
- . If really needed you can add a chat or short online Live video conference for office hours.

Tip 2: Reuse content or even an old lecture

Share content which you have already made or has already been made. You can find some content and examples here:

- . Open Courseware from technical universities:
 - o TU Delft: <https://ocw.tudelft.nl/>
 - o MIT: <https://ocw.mit.edu/index.htm>
 - o SDG Academy: <https://sdgacademy.org/>
 - o Videos and Online Resources for Teaching Hydrology: <https://hydro.vwrrc.vt.edu/videos-and-online-resources-for-teaching-hydrology/>
 - o Earth sciences: <https://www.geo.uu.se/student/waterinsoil/?languageId=1>
- . MOOCs (edX; Coursera), Youtube,
 - o Coursera: <https://www.coursera.org/>
 - o edX: <https://www.edx.org/>
 - o Youtube
- . Online libraries for articles and e-books

Tip 3: Replace (part of your lecture) by recording your own video.

- Keep videos short and lively. It is better to create several short videos than 1 long video.
- There are several types of video: screen recording, slides with audio, 'talking head' etc. Keep it simple. See Tools to create and upload video below.



- Audio is the most important aspect of a video, so test the audio first and consider using a headset with external microphone.
- Upload the video to a streaming server so your students don't have to download very large files.
- Integrate interaction with a quiz, discussion forum, chat.

Tip 4: Replace (part of your lecture) with a short live video conference / webinar

- If you don't have time to prepare anything before your next lecture, then you could replace it with a live video conference, using the chat for questions.
- Try to keep it short or include activities. Send an email to your students with the time and the link. See **Tools** for live video conference software.



Moving other activities online

Lab work

On campus, courses often have labs or objects students need to physically see or touch. We are aware that this is not easy to do remotely. Try to think of what is possible. For instance:

- Make a quick video (tour and zoom in on objects) and take pictures of on campus objects as needed.
- Share these and include assignments.
- Add a forum for questions and discussions.
- Further tips to Run Lab Activities by Stanford University:
 - <https://teachanywhere.stanford.edu/best-practices#run>

Student presentations

- Ask students to record a video of themselves using a web camera or mobile phone and if possible to capture both their faces as well as the slides on the screen.
- Ask students to use one of the Live video conference tools to give a live presentation for their peers. If the instructor organizes the online presentation, he/she can share the screen with that student.



Tools

Live video conference

There are tools such as Youtube Livestream (large audiences), Skype (free version), etc. Read about how to set up Youtube Livestream in this [Guide for Live video conference](#).

Tip: Split your class in groups for online video conferencing if the maximum number of participants does not allow to have all students in one group.

Google Hangouts

A simple hangout without recording

- . Go to: <https://hangouts.google.com>
- . Check that your microphone and sound are working and that the relevant plug-ins are installed
- . Click 'Video Call'
- . Invite people of whom you know the Google account or share the link with them via email/social media/Google Plus Community
- . Start the discussion!

You can also create a permanent link to a certain hangout, so that all participants can get back to the session with the same link. This can be done by creating a Hangout event in Google Calendar.

Excellent tips and FAQ can be found here: <https://support.google.com/hangouts/>

Guide to 'Youtube Live' formerly 'Google Hangouts on Air' including recording

Using Youtube Live, you can do a Google Hangout session and record it. This can be handy in case students indicate they have other engagements on the same day as you have planned the session. It is also nice to record the session when you plan to discuss new course material or relevant topics during the session. This way students have the opportunity to rewind and take another look at the material.

1. Check Sound and Microphone on your device
2. Open the platform you use to announce the hangout (Brightspace, edX,...), Powerpoint and [Youtube Live](#)
3. In Youtube Live, log in with your Google Account, click on your account profile picture and click 'Creator Studio'
4. Click 'Live Streaming', then click 'Events'
5. Make a new live event with the time set to 'Now'. Make sure to use the 'Quick' setting
6. Click 'Go Live Now!'
7. You are now in the Hangout. Click 'Invite people' at the top. Copy the link you get and publish it on the community. Now your students can start to join.
8. Wait a bit until all your students have arrived, ask them for permission to record the session and click 'Start Broadcasting' on the bottom. Wait a few second before starting.
9. You are now broadcasting with your student in the Hangout. If you want to share your screen to show a powerpoint or make a drawing, click the green 'screenshare' button on the left in the hangout. Make sure to stop screensharing if you don't need it anymore. Also remember to make the powerpoint large enough to read, but don't make it full screen.



10. When you have discussed enough and said goodbye to you students, stop broadcasting, but **don't close the window!**
11. Click 'Links' in the bottom right corner, and copy and save the links to your session. Post them in Brightspace / profed / google community. Now you can close the window.
12. Have fun!

More tools to create and/or upload videos

- . **Camtasia:** Camtasia is a screen recording program, fully equipped with its own editing component for post-production. It includes a PowerPoint plugin for you to easily incorporate your presentations into your videos.
- . **VideoScribe:** VideoScribe is a whiteboard video animation software that allows users to create highly dynamic and interactive animation videos on a virtual whiteboard interface.
- . **TouchCast:** TouchCast Studio is an iPad app that allows users to record videos and annotate them directly from their iPad. The app has plenty of basic editing features, including TouchCast's "vApps", which can be used to insert web pages, polls, maps, and more into your video.
- . **FinalCut Pro/iMovie:** FinalCut Pro and iMovie are video editing software applications for the MAC and iOS.
- . **Screencast-o-matic, Snagit, and Quicktime:** Tools to record your screen while you teach, and is also useful to screenshot record tutorials.

Tools per activity

- . Recorded "Traditional" Lectures
 - o If you do not yet have a lecture recording but wish to make one, here are some tools you can use:
 - **OBS Studio:** open source (free) software for both recording and Live Streaming (Interactive Lectures)
 - **Quicktime** (available on Mac by default)
 - **Camtasia:** paid software with Education Pricing for €182.60 (these is a free trial available for 30 days which puts a big watermark over the output video)
- . Interactive Lectures
 - o If, instead of a prerecorded lecture, you would prefer to host a live online lecture where students can actively interact with you and ask questions, we have discovered **Twitch** to be useful for this purpose. Being an online streaming platform, it offers you the possibility to hold a large scale lecture for a huge number of students. Another possibility would be **YouTube** where you can also keep the videos available after the live stream on your channel.
 - o In case you have a very small lecture with only a handful of students, you could also consider conferencing alternatives such as:
 - **Jitsi** (self hosted)
 - **Skype for Business**
 - **Zoom.**
- . Student Presentations
 - o For the purpose of students presenting, **Skype** and **Skype for Business** seem to do the job fine, provided that the number of students is not too large (Skype for Business might be



easier to set up for bigger groups as it does not require "befriending" everyone on the platform, unlike Skype).

- They provide the possibility for all except the speaker to have muted microphones and for one participant to share the screen.

· Lab Sessions

- Consider using **WebLab**
- It is possible to set up voice/video chat with students using **Talky.io** and the **Queue**.

In summary:

- **Live Streaming:** Twitch, OBS, YouTube
- **Uploading Videos:** Yukon, YouTube
- **Online Conferencing:** Talky.io, Zoom, Skype for Business, Discord, , WebEx, Google Hangouts
- **Teams:** Mattermost, Discord, WebEx, MS Teams
- **Other:** Queue

service	live	audience size	price	GDPR compliant
YouTube	Yes	unlimited (lecture size)	free	No
Yukon server	No	unlimited	free	Yes
Twitch.tv	Yes	unlimited (lecture size)	free	No
Zoom (Basic)	Yes	conference size	multiple plans	*
Skype for Business	Yes	conference size	part of MS Office 365	*
Jitsi	Yes	conference size	free	Yes
talky.io	Yes	project group size	free	*
Discord	Yes	conference size	free	No
WebEx	Yes	conference size	multiple plans	No

(*) grey area



Useful Links and further reading

- <http://teachremote.mit.edu/>
- <https://teachremotely.harvard.edu/>
- <https://www.chronicle.com/article/Going-Online-in-a-Hurry-What/248207>
- <https://www.insidehighered.com/views/2020/03/10/prepare-move-online-continuity-planning-coronavirus-and-beyond-opinion>
- <http://www.moseswrites.org/onlineeducation.html>
- See worldwide trends: <https://twitter.com/hashtag/connectuniversitiesNL?s=08>

Sources of this document:

<https://gitlab.ewi.tudelft.nl/eip/online-education-support/-/wikis/home>

<https://brightspace-support.tudelft.nl/remote-teaching-learning/>

https://docs.google.com/document/d/1S3GKUmc1wpJs0cQbDRGzk4Clw8cxEHc_V-oOby6ZLpg/edit#