# Tips and tricks
on using Zoom for teaching in higher ed

The most important: let students interact with you, let them do an activity every ~ 10 minutes.

1. Checklist for your Zoom setup

A. Instructors and students should have the [desktop version of Zoom installed](#) on their computers.
Using Zoom through the web browser is not good enough, for bandwidth and access to Zoom features.

B. Instructors and students should be logged in to the app.
Otherwise, your organization's setting might prevent participants from accessing all Zoom features.

C. Have the latest Zoom version installed, and so must your students
A recent version of Zoom is necessary to use breakout rooms in the most efficient way (see [below](#) on breakout rooms). Update Zoom by clicking on your profile picture in the Zoom app:
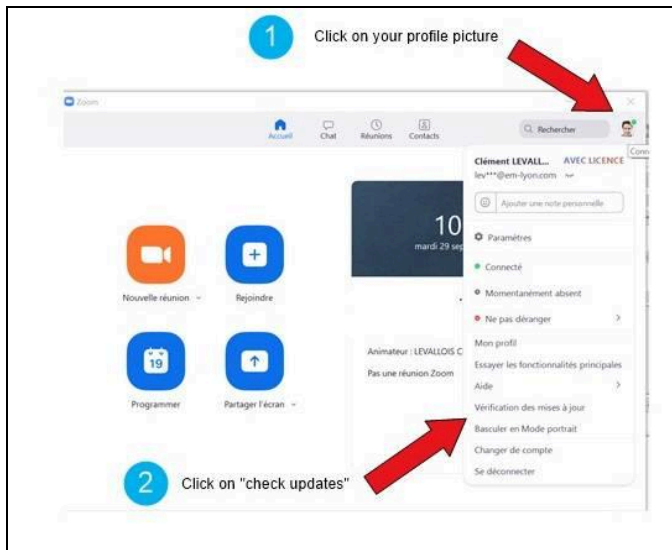
D. Make sure you have hosting rights for the meeting - that you are a host.
    If you are not a host, you may not be able to create breakout rooms, nor share your screen, etc. If you created the Zoom link, then you are the host by default. But if your organization created the link for you, you might need a host key that the org must share with you. Once you have it, in the Zoom meeting click on "Participants" then click on "Claim Host" here:
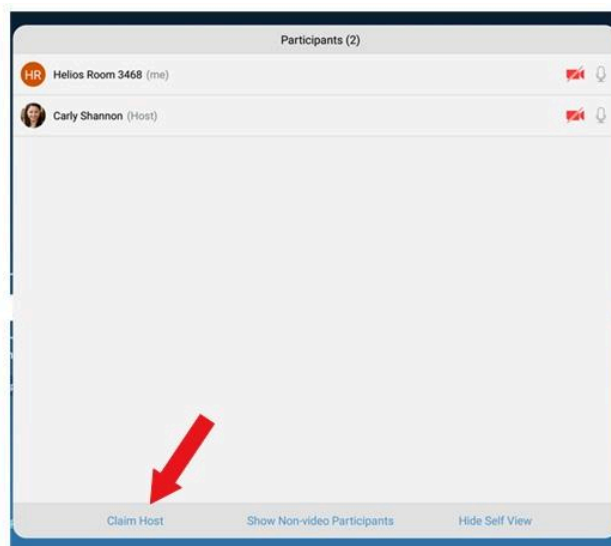
E. Make sure your participants can share their screen
    This parameter is especially important for breakout rooms: by default, students in a subgroup can't share their screens among their group! Simply unlock this like so:
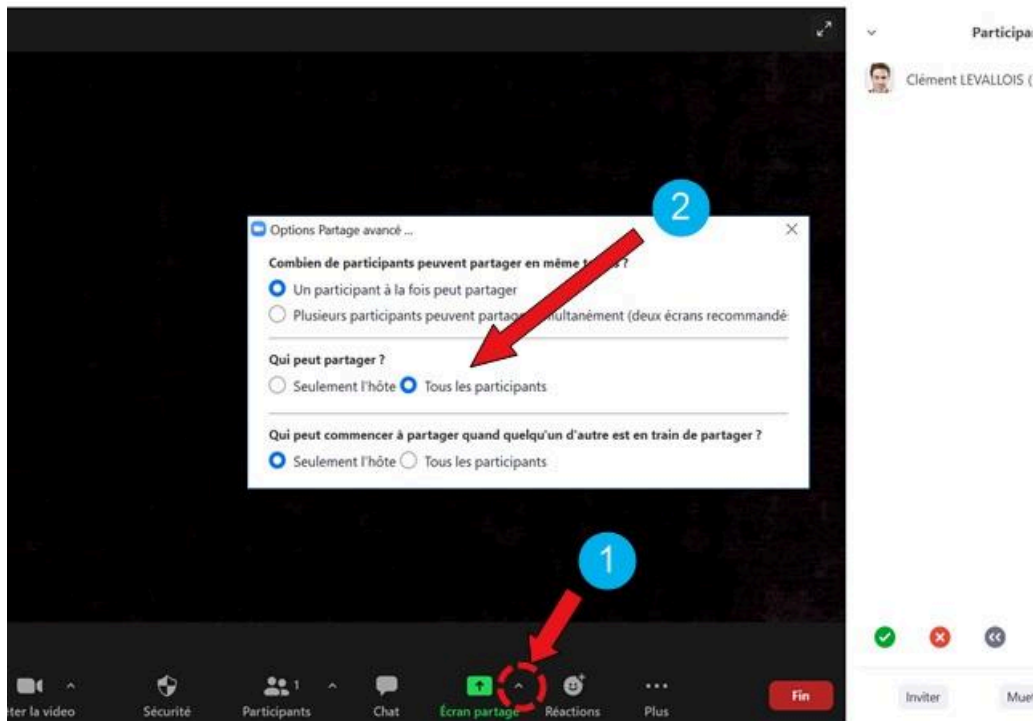
F. Having two computer screens

For the instructor giving the lecture, having two screens is really handy. One for the slides you share, the other to display Zoom controls, the mosaic of participants, your web browser, etc. For the participants, having two screens would be really useful as well: one to see the slides, the other to take notes.

2. Lecturing: take your time

Students don't benefit from your physical presence. They miss behavioral cues, emphases, gestures… that usually punctuate your lectures when you stand in the classroom. **They rely only on your voice and on the slides you share**. Speak slowly, don't be afraid to repeat as much as necessary. Make micro pauses to help students think and ask you questions. Use the red pointer of Zoom to point things on your slides:

Use a good microphone so that the sound of your voice is of the best fidelity and make you feel "present", rather than broadcasted from far away. If the students tell you the sound is not good enough, trust them and try to find a solution for the next time.

2. Activities: make them simple and frequent

The longer you talk, the harder it is for the students to stay engaged. **A rule of thumb is to give the students an action to do every 10 minutes or less. Activities can be short, but they must be frequent.** Examples of activities:

A. The chat window of Zoom

You prompt the students with a question. You can ask them for suggestions, examples, opinions, recollections from their experience, the correct answer to a precise question, …
Students answer by typing in the chat window. You react as the answers flow in the chat, calling students by their name so that they know you identified them. This lasts typically one minute to five minutes, and brings some fresh air. It can also prompt you to make an aside in your lecture, if one of the contributions in the chat opens a question you had not planned to address, and is interesting to discuss.

B. Opening mics

If you feel that students tend to be passive and don't spontaneously ask questions, it can be good to ask a question, requesting that it is specifically answered orally, not in the chat window. Simple and classic, of course. Make sure that it is not always the same student(s) who keep answering.

C. Working silently on their own

It can be useful to leave a couple of minutes for students to do a search on the web, or read a document you just shared with a link pasted in the chat window. In this case, don't make it too long as it would risk for disengaged students to drift even more (like, 2 to 5 minutes max).

Another activity consists in having students work in sub-groups, breakout rooms. This type of activity is described just below.

3. Using breakout rooms

Breakout rooms is a feature in Zoom allowing you to dispatch the participants of the class into subgroups, isolated from each other, all while staying in the Zoom session.

You need to make sure you and all your students have a recent (after Sept 2020) version of Zoom installed to have the "*students can self assign to rooms*" feature (step 2 in the figure below). This feature makes all the difference (compared to random assignment to groups) because students can relate to their friends.
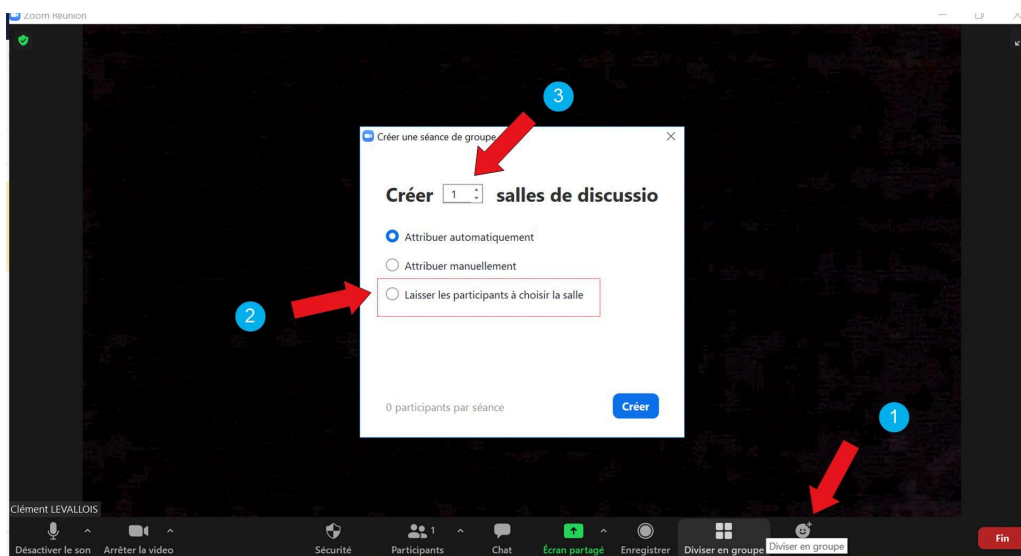
A. Breakout rooms: what use?
- You can use breakout rooms for 10 to 30 minutes activities in small groups. I recommend groups of 4 to 5 participants maximum, to maximize in-group participation. If groups grow to more than 5 members, I insist the students re-assign to balance numbers. Here is an example of an activity:

During the activity, you can join groups and check if they need your help. Students can call you for help, in this case a popup window appears on your screen. Zoom has a feature where you can broadcast short messages (~ 2 lines long) to all rooms. For example, for time keeping ("*2 minutes left!*") or for instructions ("*don't forget to prepare a slide for your results!*").

B. Ending a breakout room session

At the end of the allotted time, **you can close all groups at once**. Doing this leaves automatically one minute to all members before groups dissolve and they all join the main room, so that the interruption is not too brutal.

You can then select one or several groups to present their findings orally, or with a slide they prepared.

C. Breakout rooms for half day workshops

In-class lecturing used to include the possibility of workshop sessions: activities in groups for several hours, on business cases typically. Breakout rooms work well for this since small groups can remain cohesively together for the duration of the session.

Some key advice on this:

- Providing templates or canvases to the groups of students to help them understand what they are expected to do in practice, and the type of deliverables they must produce. It provides focus and clarity - otherwise as an instructor you will keep moving from room to room explaining what deliverable is expected, how the students are supposed to work, etc.

Tip: you can create a <u>view only</u> template with an online Google Doc or Microsoft 365 Doc. Share the link in the chat. Then, each team copies it (File -> Make a copy in Google Doc). As a result, each team has their own version of your doc, that they can edit and work on.

- The workshop should be cut in well defined sequences. Sequences of 20 minutes work well (+/- 10 minutes). 20 minutes is actually very, very short! But it helps put a time pressure on the activity, and as an effect teams don't lose focus. Students feel a bit rushed but when they look back they appreciate the high intensity of this (half) day.

- The professor must move from rooms to rooms as needed, and that can be quite intense. Making sure the groups are on the right tracks, are not too slow, etc. In my experience, an instructor can handle classes of 50 students split in 12 groups of 4 to 5 students, but ideally we would have 8 groups or less.