



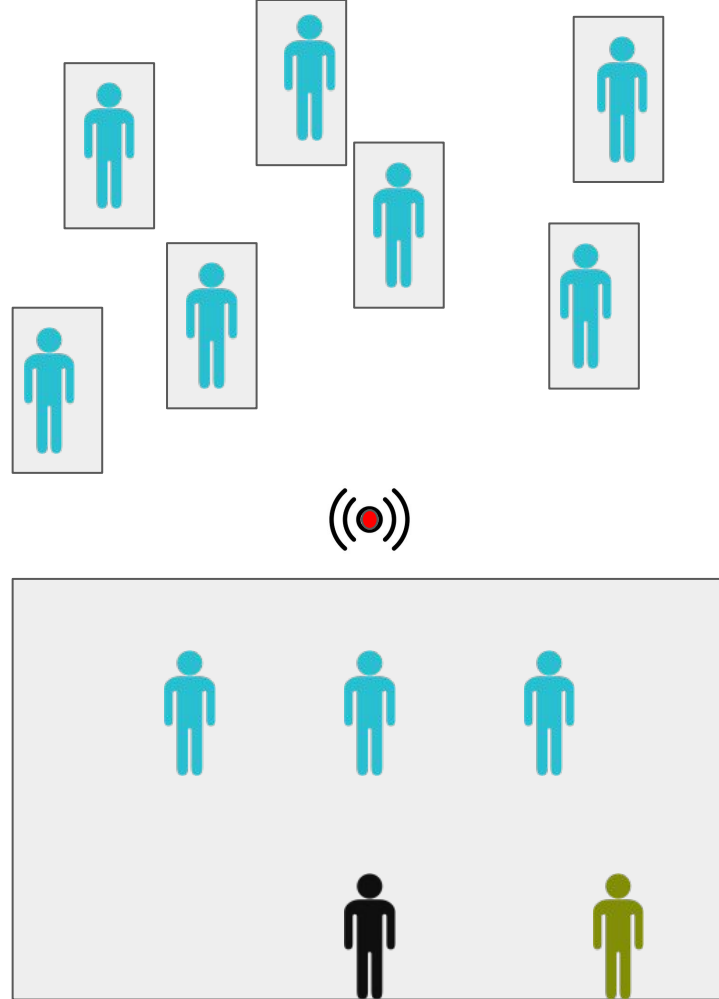
Quickstart guide

Live streaming a classroom with ZOOM

Center for Digital Education (CEDE) and Teaching
Support Center (CAPE)

Feedback and Support: flexible-teaching@epfl.ch

More information: <https://go.epfl.ch/flexible-teaching>

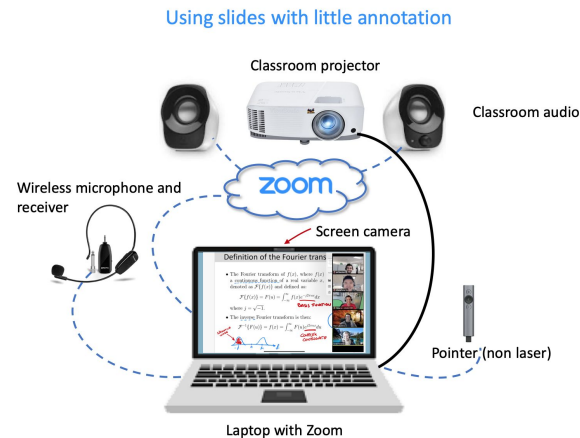
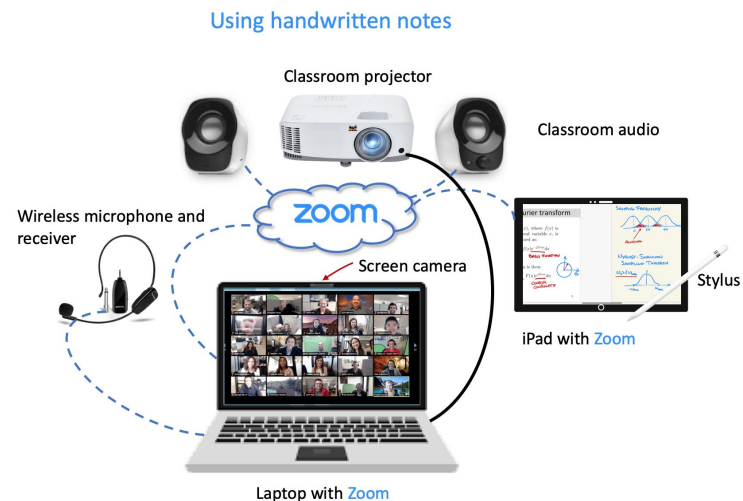


Context

- During a schedule class period, you may have $\leq \frac{1}{3}$ of your students physically present in the classroom and $\frac{2}{3}$ remote.
- Your priority should be providing high quality access to the audio and content (slides, writing on a board) and creating opportunities for **all students** to ask & answer questions.

Getting your technology ready

- Schedule a ZOOM (see [Zoom essentials](#)) meeting and communicate the link to students via the course Moodle page.
- Use a microphone to capture your audio (see [hardware essentials to stream and record](#)).
- An integrated laptop camera is sufficient for you to be visible to remote students.
- Teaching with handwritten notes (see [handwrite & annotate](#)):
 - Host Zoom meeting from your laptop
 - Connect with iPad to that Zoom meeting
 - Share screen from iPad, allow annotation
- Teaching with slides and some annotation:
 - Host Zoom meeting from laptop
 - Share screen from laptop
 - Use a mouse pen to annotate
- Use the same source to broadcast your material to both audiences by sharing the appropriate screen in the Zoom meeting.
- Record the Zoom meeting on local computer.



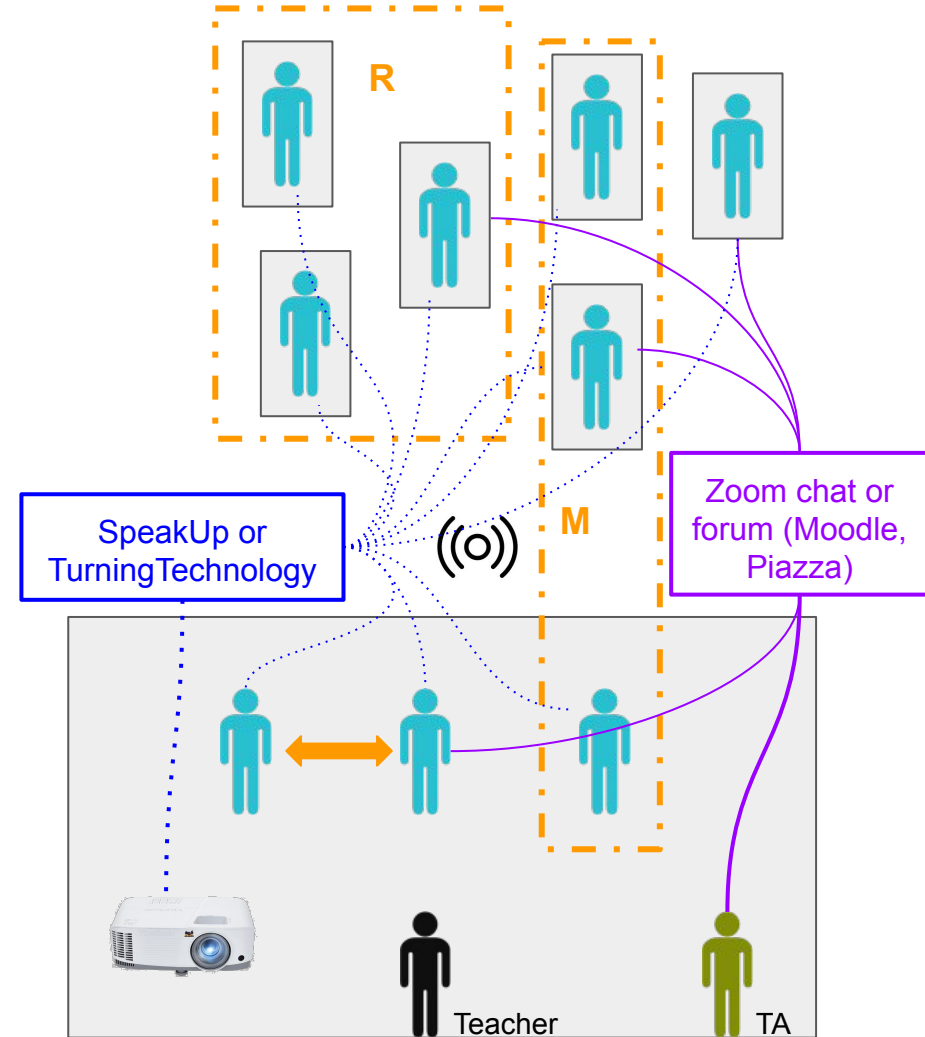
Plan your interactions

Whatever choices you make, it is essential to clearly communicate to students how to ask/answer/comment in your class, as it will be different for each of their classes.

- [Speak Up](#) or Clickers ([Turning Technologies](#)) are structured ways to collect answers and feedback from both remote and campus students. [Zoom polls](#) have fewer features but can be used if all students are connected.
- Creating small groups for students to discuss reduces their reluctance to participate. You can create either all remote (R) or mixed (M* consider available bandwidth) Zoom breakout rooms.
- Consider creating stable buddy-teams for the semester, such that one student of the group is on campus each lecture.

During the lecture

- Assign a TA to monitor Zoom chat/Moodle forum / Piazza and bring questions to your attention
- Focus attention by using non-laser pointer, mouse pen or iPad stylus to point at slides
- Use the Zoom annotate feature to add brief details to slides.
- Check in with remote students by looking at the camera and ensuring that you are getting their feedback.



Do's

- Repeat all questions that come from your on campus audience into your mic for the remote audience to hear
- Taking a breaks between slide presentations and Q&A will allow you to edit the recording into shorter videos
- Local students who are also participating in Zoom should use headsets or turn off mic & speaker
- Maintain distance from students if your mask is off and remind students keep their distance or their masks on.
- Be aware of the area where you are in the camera's line of sight

And don'ts

- Avoid sharing the Zoom gallery view over the projector - remote students don't want to appear on your classroom screen while they can't see who's watching
- Avoid connecting your iPad and laptop via Apple airplay due to the interference from multiple routers on campus. See other possibilities to connect your iPad in the [hardware guide](#).

Remote



Student

Campus



Student



TA



Teacher

Receives	Interacts
Teacher's audio Shared screen via Zoom Does not hear local students Zoom chat	Chats on Zoom Responds to SpeakUp, TurningTechnologies,... Verbally via Zoom mic Backchannels with other students via Whatsapp, Slack, Insta,....
Teacher's audio on classroom speakers Zoom screen via projector May NOT see Zoom chat	Direct interaction with teacher & neighbours Responds to SpeakUp, TurningTechnologies,... Backchannels with other students via Whatsapp, Slack, Insta,...
Teacher's audio on classroom speakers & through laptop Zoom screen via projector & laptop Zoom chat	Direct interaction with teacher Direct interaction with students in class Verbal interaction via Zoom mic with remote students Chats on Zoom
Shared Zoom screen via projector Responses to SpeakUp, TurningTechnologies... May NOT see Zoom chat	Direct interaction with students in class Pose questions to all students through SpeakUp, TurningTechnologies

Support

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