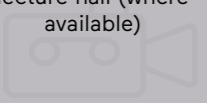
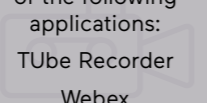

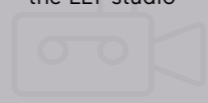
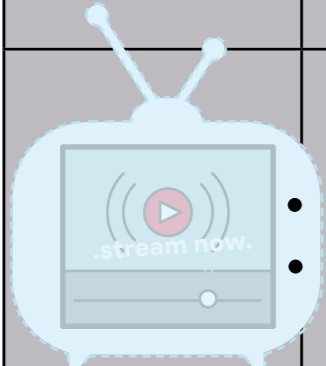
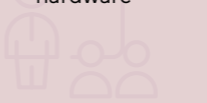

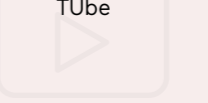



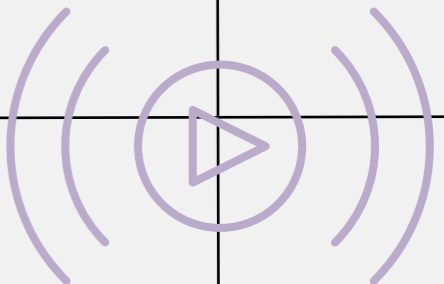


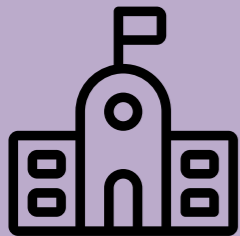
#05 SERVICES FOR TEACHING AT THE TU GRAZ

Recording – Hybrid Teaching – Streaming – Video Conferences

Higher Education


Options	1 Recording via the infrastructure in the lecture hall (where available) 	2 Recording with own computer and one of the following applications: TUBE Recorder Webex OBS 	3 Recording with mobile TU equipment 	4 Recording by VA Team / Studio recording at the LLT studio 
	LLT (VA): Request support in using the system, if necessary LLT (ID): To have TUBE Drop activated in the TeachCenter, contact tc@tugraz.at	LLT (ID): TUBE Drop Have TUBE Drop activated in the TeachCenter by writing an email to tc@tugraz.at	ZID, LLT VA: Lending of mobile equipment (different options, depending on the setting) LLT (VA): Request on-site support by the VA team via email to tube@tugraz.at	LLT (VA): In any case, contact the VA team via tube@tugraz.at
	Face-to-face: Depending on the size of the lecture hall and the number of participants allowed	Depends (can also take place in a lecture hall)	Face-to-face: Number of students depends on the number of participants allowed in the lecture hall	Not possible to have students participate directly
	Face-to-face: As usual, by raising your hand, feedback etc. Online: No interaction with students; adding interactive elements with H5P possible upon request	No interaction with students, adding interactive elements with H5P is possible	Face-to-face: as usual via raising your hand, feedback, etc. Online: No interaction; adding interactive elements with H5P is possible	No interaction with students, adding interactive elements with H5P possible
		Editing videos with Camtasia is possible (request license from ZID via email)	Not connected to LLT streaming servers. Use: Recording the whiteboard in smaller rooms. Editing videos with Camtasia license possible (request license from ZID via email)	Availability of this option depends on available resources
Services Needed (LLT/ZID)				
Number of Participants				
Interaction				
Other				

5 Hybrid Teaching using Webex or ZID hardware 	6 Livestreaming from the lecture hall using TUBE 	7 Livestreaming from home using OBS via TUBE 	8 Videoconference with BigBlueButton via TeachCenter 	9 Video conference with Webex 
ZID: Hardware and software support, Cisco or Avaya system installed in the lecture hall	LLT (VA): Request livestreaming via VA form	LLT (VA): OBS software with configurations, see manual on TU4U	LLT (ID): Have activated in the TeachCenter via email to tc@tugraz.at (please include date, time and number of participants); Support during use = ZID, technical support	ZID: Software Support
Face-to-face: Depending on size of lecture hall and number of participants allowed Online: see Webex	In theory no limit, in practice restricted by server streaming capacities	unlimited (see option 6)	max. 100 (didactically recommended 50)	For large events, max. 1000 participants; with more than 350 participants, livestreaming or recording is recommended
Face-to-face: as usual, by raising your hand, feedback etc. Online: via chat, video or audio; feedback	Face-to-face: as usual, by raising your hand, feedback, etc. Online: No interaction; possibly via lecture hall telephone or parallel Webex meeting (requires support of second person)	possibly using feedback or a chat channel  <small>More information on feedback can be found in the article „Feed-back“ in the TOOL section.</small>	via chat, video or audio; feedback; breakout rooms for group work	via chat, video or audio; feedback
	Due to the bandwidth, the number of participants is limited to a maximum of five livestreams	Due to the bandwidth, the number of participants is limited to a maximum of five livestreams		



#05

SERVICES FOR TEACHING AT THE TU GRAZ Recording – Hybrid Teaching – Streaming – Video Conferences

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Definitions



Streaming

Live transmission in real-time via TU's own streaming server.



Recording

Recording a course or parts of a course.



Video conference

Synchronous exchange of information for image and sound transmission. In addition to suitable software, at least a camera and a microphone as input devices as well as a screen and a loudspeaker or headphones as output devices are needed.

Hybrid Teaching vs Blended Learning



Hybrid teaching means teaching face-to-face, but where a part of the students is connected online via a video conferencing system and thus actively participates in the event. Blended learning refers to a complete teaching concept or a form of learning that takes place over the course of a semester or several courses. It is a didactically meaningful combination of traditional face-to-face teaching with online units. The concept combines the effectiveness and flexibility of electronic forms of learning with the social aspects of face-to-face communication and, where applicable, practical learning.



H5P

H5P is the abbreviation of HTML5 Package, a free and open source software for creating interactive (learning) content for teaching. This TeachCenter feature can be used to create interactive videos, tests and presentations.

Service centers



LLT - Educational Technology
(elearning@tugraz.at)

ZID - IT services
(it-support@tugraz.at / videokonferenz@tugraz.at)

LLT (VA) - Team Video and Animation / Educational Technology (va@tugraz.at / tube@tugraz.at)

LLT (ID) - Team Instructional Design / Lehr- und Lerntechnologien (tc@tugraz.at)

¹ Definitions based on and translated from this article: <https://elearningblog.tugraz.at/archives/6005>