

You can try out examples of video interactions in this course:

<https://moodle-app2.let.ethz.ch/course/view.php?id=10644>

Self-Enrollement as a student: Password: video19

*If you would like to make a trial as a teacher and create your own interactions, please write to: pascal.schmidt@let.ethz.ch

Check understanding of theoretical principles

In *Multiscale Bone Biomechanics* by Prof. Ralph Müller, D-HEST

3. Which osteocytes would you expect to have a high sclerostin expression? Click on one of these osteocytes.

To answer the question, click directly into the video image. Please note that the click also submits the answer at the same time.

incorrect

repeat continue

Single cell protein analysis

resorbed volume
volume underneath resorption surface
volume underneath quiescent surface
volume underneath formation surface
formation volume

Trüssel et al, ICCB 2013

11:02:933/15:06 Create comment

Click-Zone (students must find a certain area in the image)

Single cell protein analysis

IgG 0 N 8 N

2. Which of the following statements about sclerostin expression is true?

- In quiescent bone lining cells, Sclerostin expression is usually downregulated.
- Sclerostin expression positively correlates with bone formation.
- Sclerostin is expressed ubiquitously, but can be downregulated by exercise or in newly formed bone.

correct

repeat continue

Students answer a single choice question (correct or best answer).

Examples of practice at ETH - questions within video

Check understanding of theoretical principles

In *Introduction to Electric Power Transmission* by Prof. Christian Franck, D-ITET



ETH zürich

Will there be a transient period when the switch is closed?

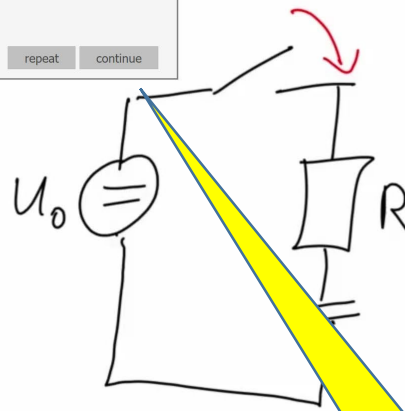
No

Yes

More feedback text for answer YES

correct

repeat continue



$Q_c(t \leq 0) = 0C$

High Voltage

13:54

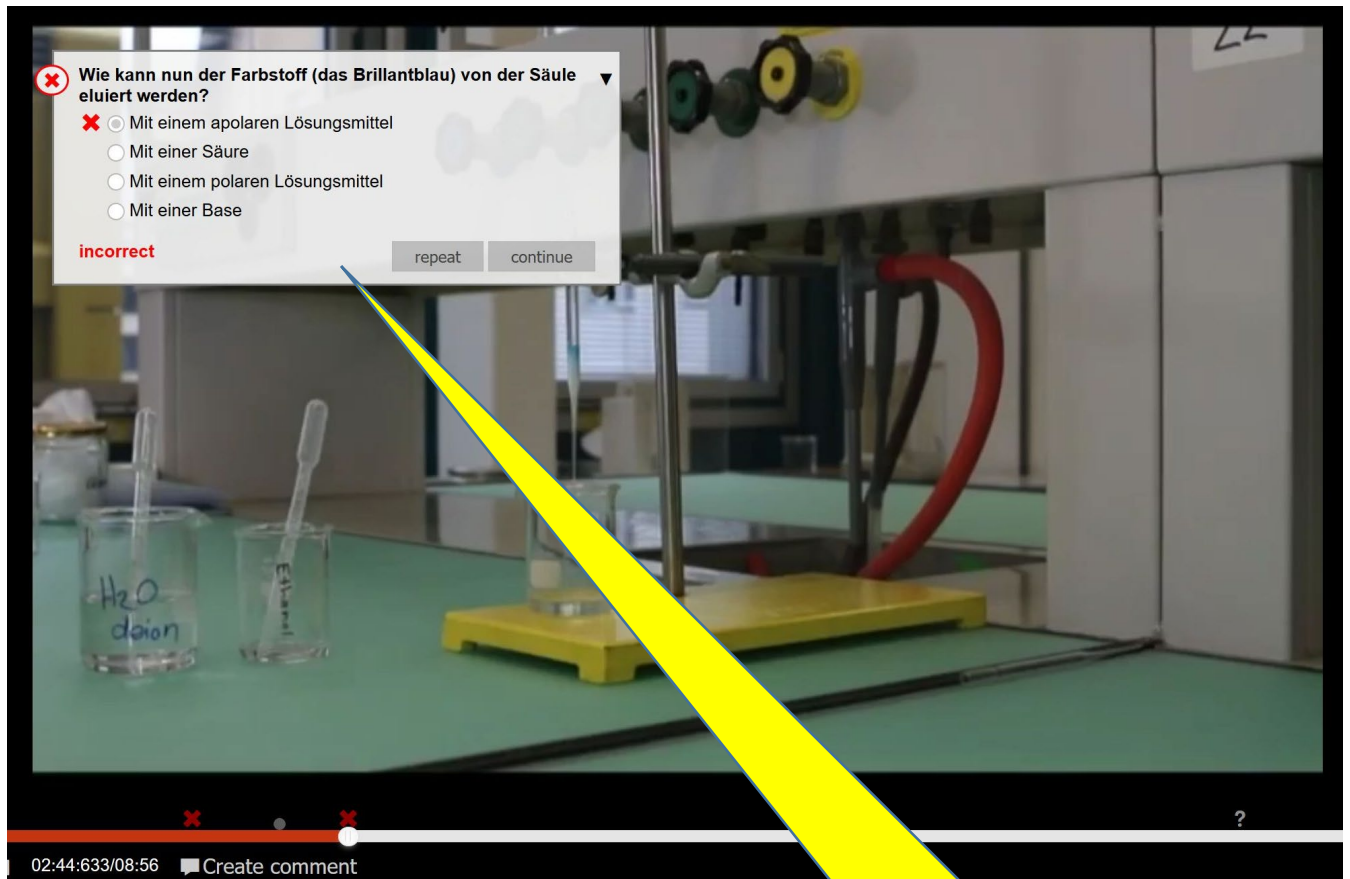
Create comment

Video stops, students answer a single choice question.

Examples of practice at ETH - questions within video

Reviewing typical Do's and Don'ts in a lab environment.

In *Food Chemistry Laboratory* by Prof. Laura Nyström & Dr. Melanie Erzinger, D-HEST



The screenshot shows a video player interface. The video content is a laboratory setting with a green countertop, glassware, and a metal stand. A white question box is overlaid on the top left of the video. The question is in German: "Wie kann nun der Farbstoff (das Brillantblau) von der Säule eluiert werden?" (How can the dye (brilliant blue) be eluted from the column?). Below the question are four radio button options: "Mit einem apolaren Lösungsmittel" (selected), "Mit einer Säure", "Mit einem polaren Lösungsmittel", and "Mit einer Base". The word "incorrect" is written in red below the options. There are "repeat" and "continue" buttons to the right of the question box. At the bottom of the video player, there is a progress bar showing "02:44:633/08:56" and a "Create comment" button.

Wie kann nun der Farbstoff (das Brillantblau) von der Säule eluiert werden?

- Mit einem apolaren Lösungsmittel
- Mit einer Säure
- Mit einem polaren Lösungsmittel
- Mit einer Base

incorrect

repeat continue

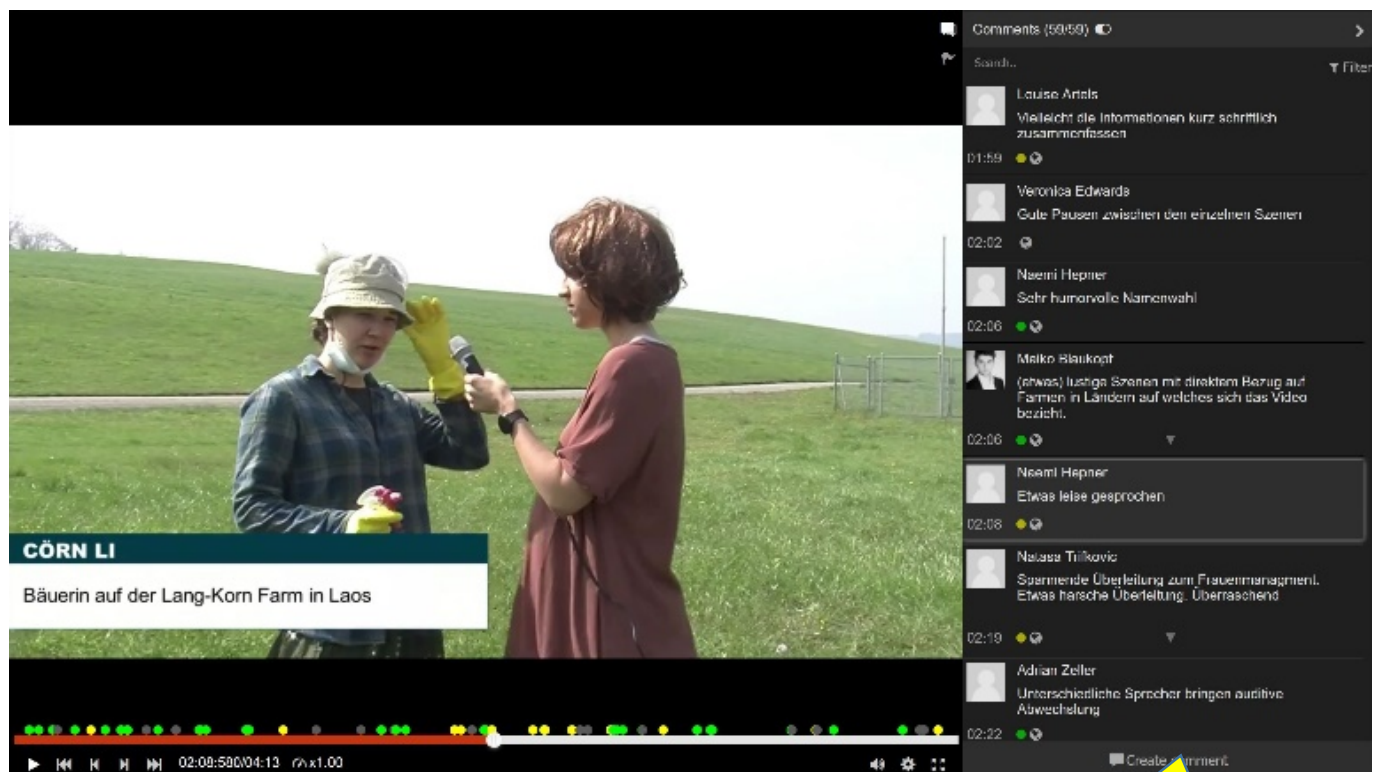
02:44:633/08:56 Create comment

Video stops, students answer a single choice question, i.e. about the next step in a procedure.

Examples of practice at ETH – students insert comments

Students create videos for their assignments and comment on videos of peers

In *Agrarökonomie im World Food System* by David Wüpper, D-MTEC

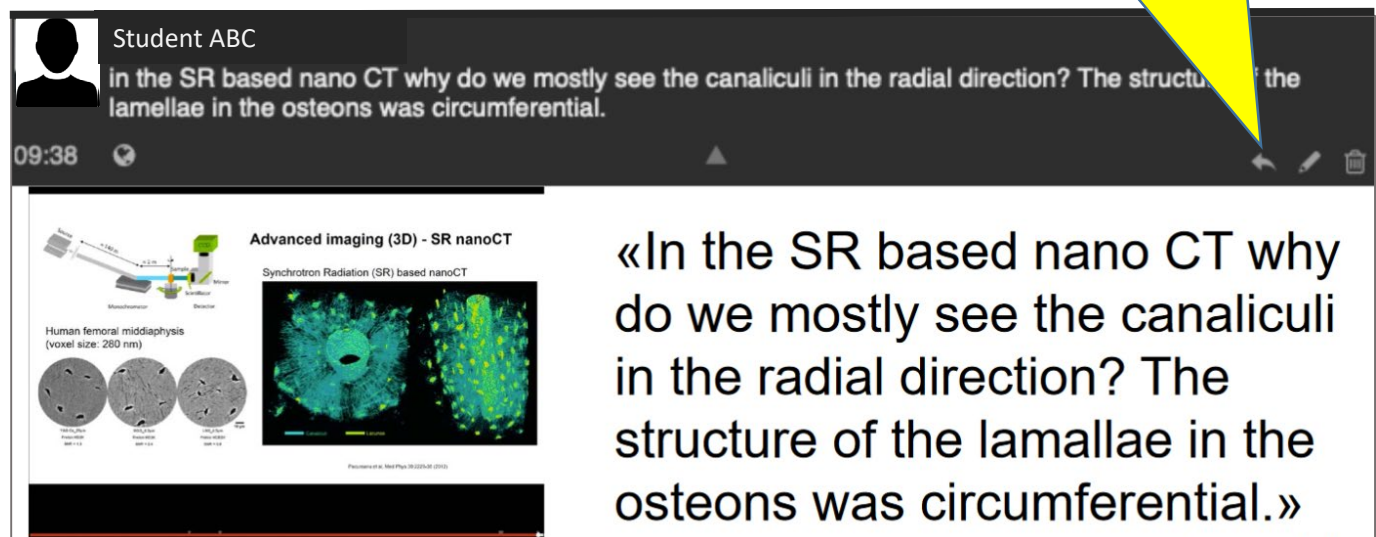


Students insert comments, answers & questions. Additionally they can insert markings onto the image and label their comments with green (good), yellow (not optimal) or red (critical).

Example:
A student has inserted his specific question in the video. It can now be answered by other students or by teaching persons.

Students can ask questions to specific video moments

In *Multiscale Bone Biomechanics* by Prof. Ralph Müller, D-HEST

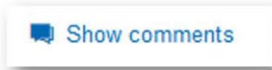


«In the SR based nano CT why do we mostly see the canaliculi in the radial direction? The structure of the lamallae in the osteons was circumferential.»

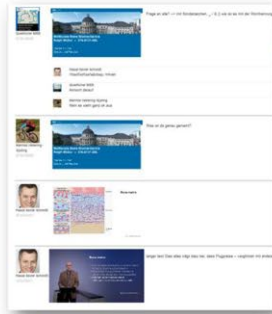
Reports

Show comments

- The comments given by students can be seen in detail in the report section



Show all comments of users



All comments and markings will appear, incl. the corresponding position picture of the video and possible re-comments by other users

Results of the in-built questions

Overview by questions

Question ID	Title	Question	Question type	First attempt: correct	Last attempt: correct	Participation
10		Where do you see a warning sign?	Click question	100 %	100 %	5 / 13
11		What do you expect? Where will the ball land?	Essay	N/A	N/A	4 / 13
141		Warum dieser Kamin?	Essay	N/A	N/A	0 / 13
12		Why was this idea dropped?	Single-choice question	75 %	75 %	4 / 13

Show overall results of questions

Show results

Wieviele Zahlen sehen Sie? ▾

Question ID: 4 Question type: Single-choice question Label: Wieviele Zahlen sehen Sie?

Question: Wieviele Zahlen sehen Sie?

Name	User-ID	First attempt		Retries	Last attempt: correct
		Correct	Selected answer		
[Redacted]	5	0	3	1	1
[Redacted]	33012	1	4	1	0
[Redacted]	29635	-	-	-	-
[Redacted]	69087	0	1	5	1
[Redacted]	5185	-	-	-	-

For each question there is detailed information about the users:

- First try correct?
- Number of repetitions?
- Last attempt correct?