

Teaching From Home

Equipment, methods and systems to
support teaching delivery during
COVID-19



We will cover



TEACHING DELIVERY
(PANOPTO AND
MOODLE)



CREATING AND
CAPTURING CONTENT



COLLABORATIVE
TOOLS



MOODLE FEATURES
FOR ENHANCED
LEARNING



Q&A



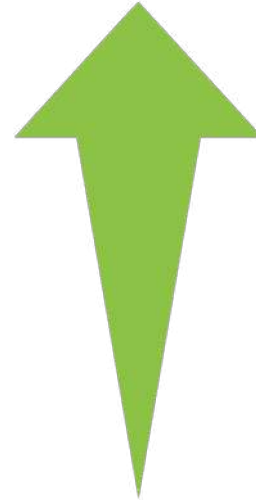
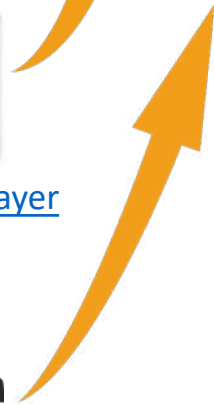
Delivery System



<https://www.vle.cam.ac.uk>



https://docs.moodle.org/38/en/VideoJS_player



Panopto™

<https://cambridgelectures.cloud.panopto.eu>



UNIVERSITY OF
CAMBRIDGE

Streaming Media Service

<http://sms.cam.ac.uk>



vimeo

<https://support.panopto.com/>



<https://cambridgelectures.cloud.panopto.eu>

You can...

Create your video content

- Panopto Recorder software
- Webcam, PowerPoint, screen-share etc.
- **Upload** existing videos

Store and provide online video access

- Cloud repository
- Enhanced web-based player
- Moodle integration
- Android/iOS apps

Manage your content

- Access control
- Video editing
- Bookmarks
- Captions
- Publishing
- Embedding

Panopto Web Player

Table of contents Discussion section Note taking Transcriptions/captioning Optimized for PowerPoint/Keynote

The screenshot displays the Panopto Web Player interface. At the top, the header includes the University of Cambridge logo, 'Powered by Panopto', and navigation links like 'My Folder' and 'Demo 2'. The main video area is split: the left side shows a 'PRIMARY VIDEO' of a man speaking, and the right side shows a 'SECONDARY VIDEO' titled 'Teaching From Home' with a blurred background of students. Below the primary video is a search bar and a 'Contents' sidebar listing video segments with timestamps. The bottom of the interface features a video player with a progress bar, volume controls, and a 'Screen' button. A thumbnail gallery at the bottom shows various video thumbnails, including one titled 'We will cover' and another 'Delivery System'.

UNIVERSITY OF CAMBRIDGE
Powered by Panopto
My Folder > Demo 2

PRIMARY VIDEO

SECONDARY VIDEO

UNIVERSITY OF CAMBRIDGE
Department of Engineering

Teaching From Home

Equipment, methods and systems to support teaching delivery during COVID-19

Search this recording

Contents

- Teaching From Home 0:05
- Discussion 0:10
- Notes 0:14
- Bookmarks 0:16
- <https://cambridgelectures.cloud.panopto.eu> 0:19
- <https://cambridgelectures.cloud.panopto.eu> 0:21
- Panopto Web Player 0:23
- Picture of embedded moodle video 0:25
- Panopto Recorder 0:27
- OSX 0:27

0:08 0:29 1x Speed Quality Slides Screen

We will cover

Delivery System

moodle

Panopto



Panopto downloads

<https://support.panopto.com/s/article/Enable-Podcast-Downloads>

Panopto video embed

Section 1

Demo 2

UNIVERSITY OF CAMBRIDGE
Department of Engineering

Teaching From Home

Equipment, methods and systems to support teaching delivery during COVID-19

1x

Table of Contents

Teaching From Home	0:00
We will cover	0:05
Delivery System	0:08

VideoJS embed

Loop

Show Controls

Open Video in New Tab

Save Video As...

Copy Video Address

Picture in Picture

Cast...

Podcast settings

Video Podcast

Type

View Podcast Download Podcast

Type

Quality

Primary Video Only

Secondary Video Only

✓ Picture-in-Picture

Side-by-Side

Tile All Streams

Panopto Block

1P1: Thermofluid Mechanics

Panopto

Live Sessions

No Live Sessions

Completed Recordings

- IA: Thermofluid Mechanics (Atkins/Hall_CA)
- IA: Thermofluid Mechanics (Atkins/Hall_CA)
- IA: Thermofluid Mechanics (Atkins/Hall_CA)

[Show All]

Links

Course Settings

Download Recorder(Windows | Mac)

Useful Links

Please find below links to



Creating Content

<http://help.eng.cam.ac.uk/audio-visual>

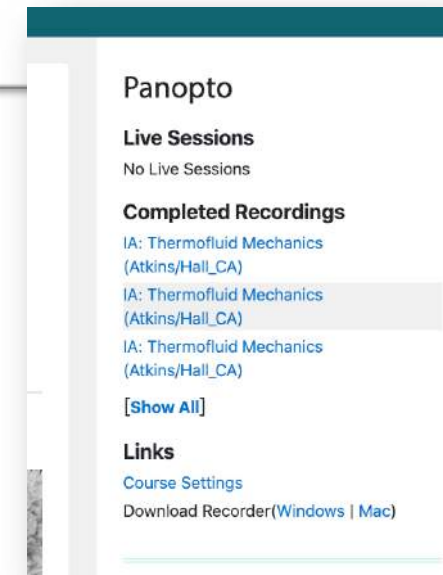
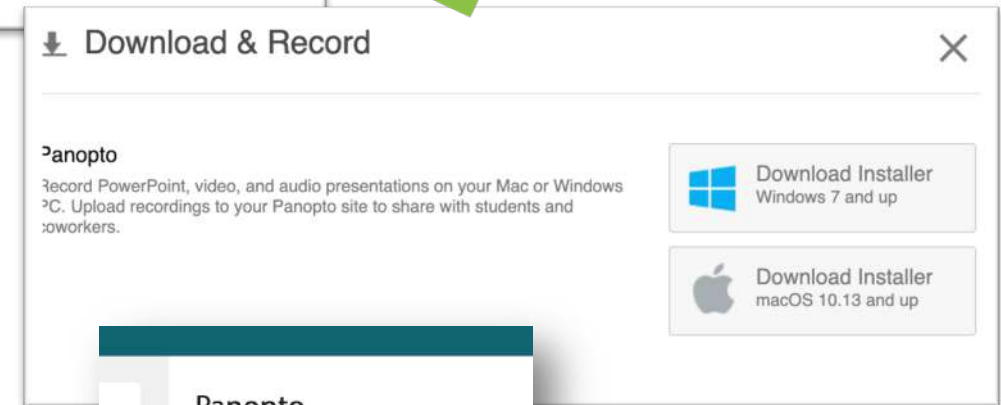
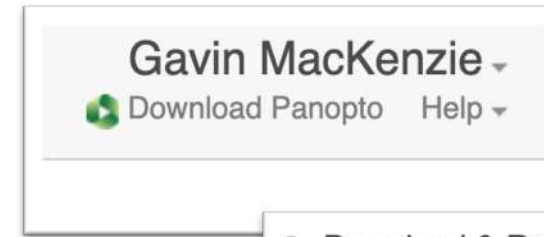
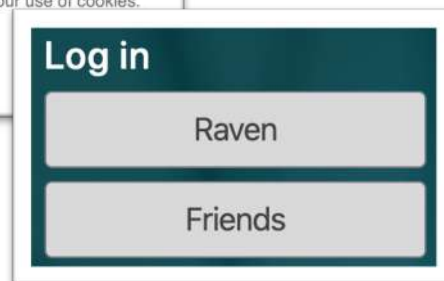
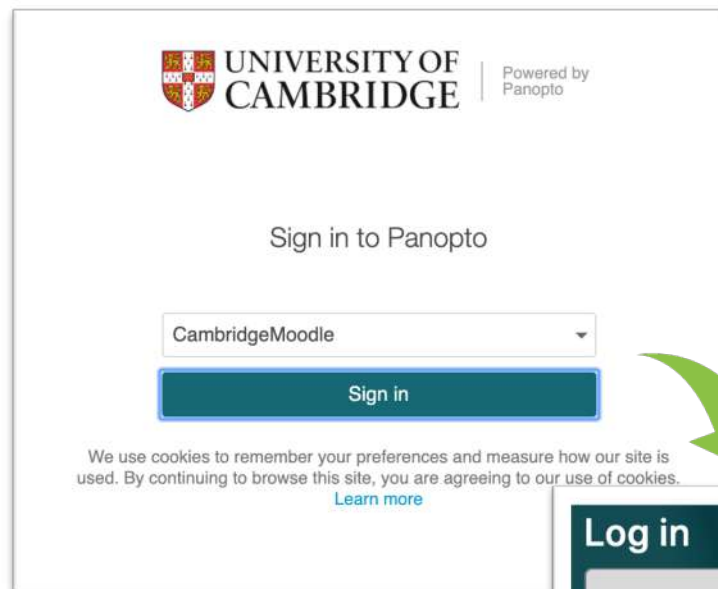
Recording Videos

	<i>WINDOWS (10)</i>	<i>OSX (CATALINA)</i>	<i>LINUX</i>	<i>iOS</i>	<i>ANDROID</i>
Panopto Recorder	✓	✓	✗	Upload only	Upload only
Open Broadcaster Software (OBS)	✓	✓	✓	✗	✗
MS PowerPoint Recording	✓	✗	✗	✗	✗
Native screen recording	Some models	✓	✗	✓	Developer mode
3 rd party screen recording	✓	✓	✓	✓	✓

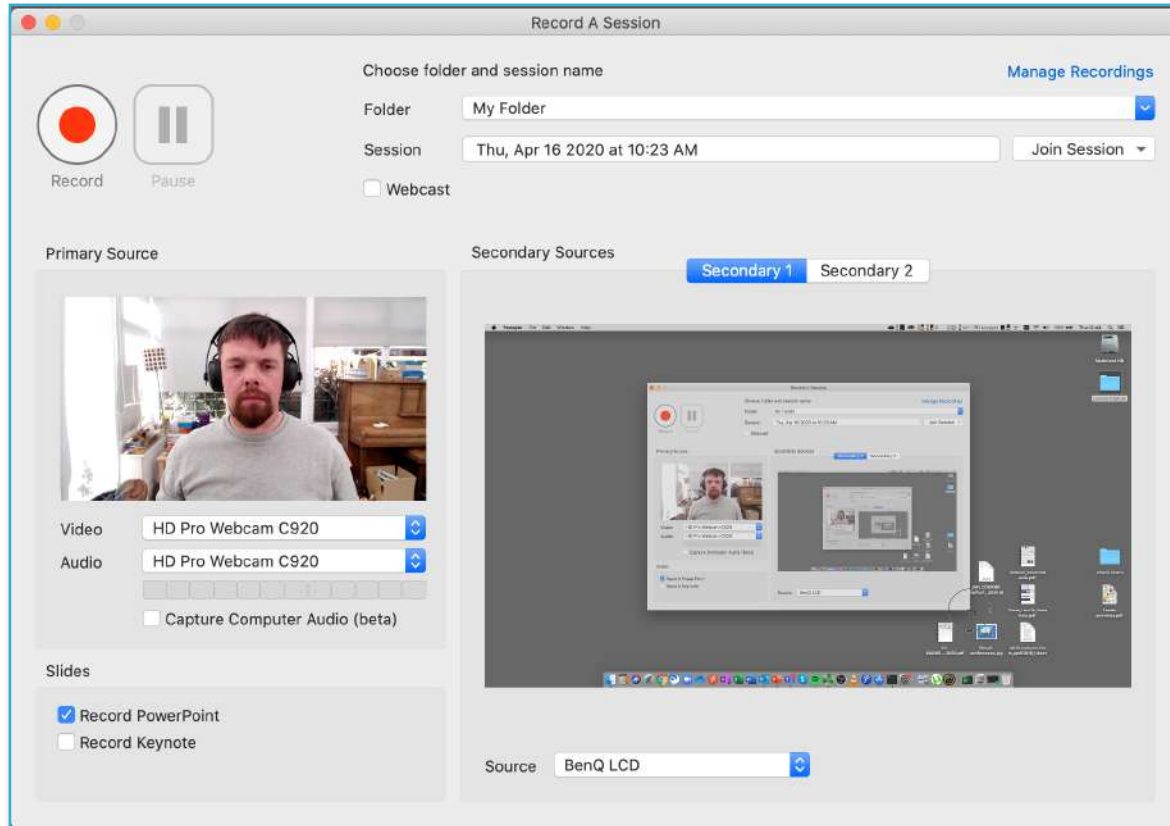
Downloading Panopto Recorder

<https://cambridgelectures.cloud.panopto.eu/>

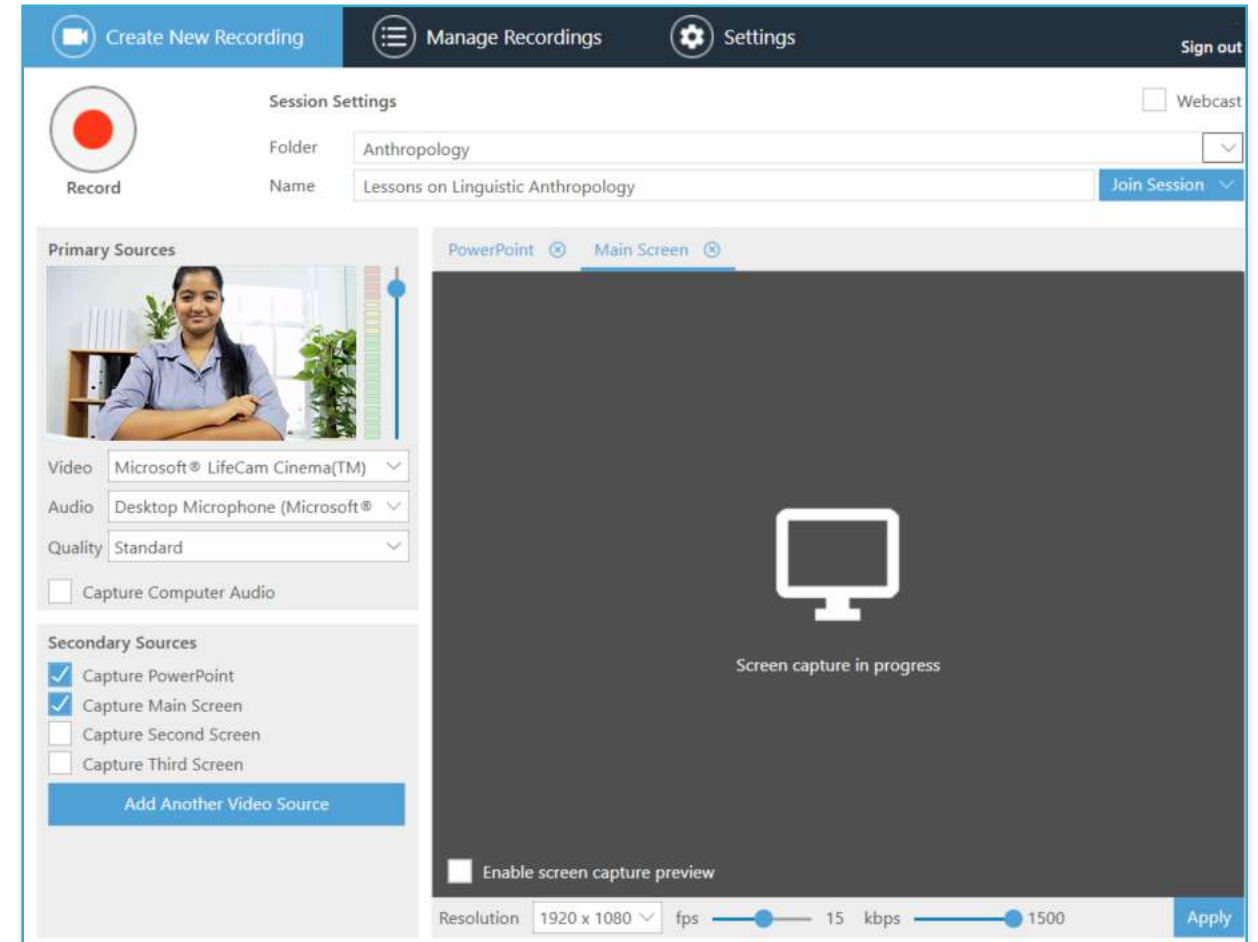
- Logging in



OSX

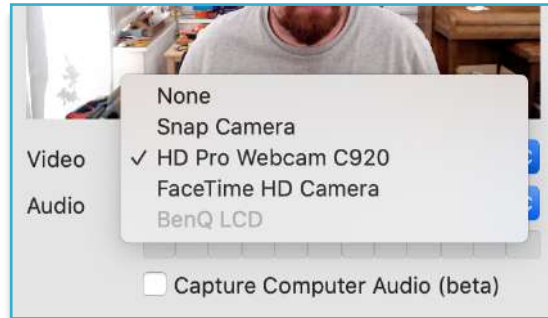


Windows

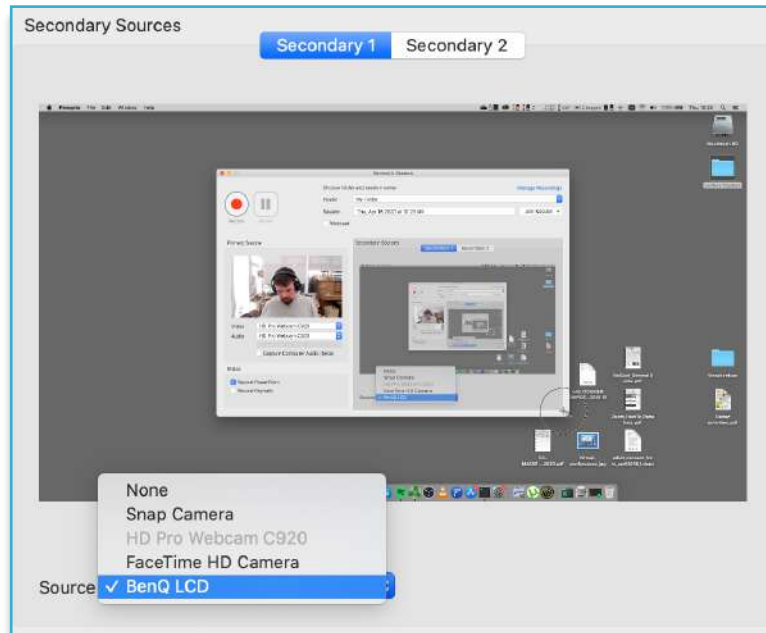


Panopto Recorder Features

Primary video (webcam)



Secondary video (screen)



<https://support.panopto.com/s/article/basic-recording-1>

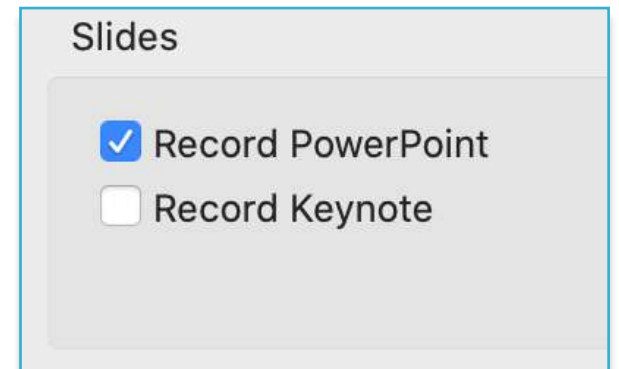
<https://support.panopto.com/s/article/Recording-with-Panopto-for-Mac>

<https://support.panopto.com>

Microphone/audio



Slide capture



Creates table of contents

Search this recording	
Contents	Teaching From Home 0:05
Discussion	We will cover 0:10
Notes	Delivery System 0:14
Bookmarks	https://cambridgelectures.cloud.panopto.eu 0:16
	https://cambridgelectures.cloud.panopto.eu 0:19
	Panopto Web Player 0:21
	Picture of embedded moodle video 0:23
	Panopto Recorder 0:25
	OSX 0:27

Panopto Video Folders

Direct access to your course folders from the recorder

Choose folder and session name [Manage Recordings](#)

Folder

Session [Join Session](#)

☐ Webcast

Choose folder and session name [Manage Recordings](#)

Folder

Session

☐ Webcast

Quick Access

- My Folder

All Folders

- Eng: Lecture Capture: Lecture Capture
- Engineering Archive
- IA: Thermofluids: 1P1: Thermofluid Mechanics

Offline Recording [Refresh List](#) [Create New Folder](#)

Linked to Panopto Moodle block

Manage Recordings

Create New Recording

Signed in to cambridgelectures.cloud.panopto.eu [Sign Out](#)

Session	Date	Length	Status
offline	Today, 10:48:16	00:00:06	Offline Recording
Demo 2	Yesterday, 14:45:17	00:00:37	Completed
Demo	Yesterday, 14:33:52	00:01:18	Completed
Wed, Apr 15 2020 at 2:24 PM	Yesterday, 14:25:21	00:01:03	Completed
Mon, Mar 30 2020 at 12:17 PM	30/03/2020, 12:19:42	00:00:24	Completed

[Manage Online](#)

Recording Details

Folder: Offline Recording

Session: offline

Streams: Primary, Secondary 1

Webcast: No

Status: Offline Recording

[Choose Folder and Upload](#) [Actions](#)

Preview [Primary Video](#) [Secondary 1](#) [Secondary 2](#)

****No approval required****

BUT

You must **manually** make the session available

Recording on Linux



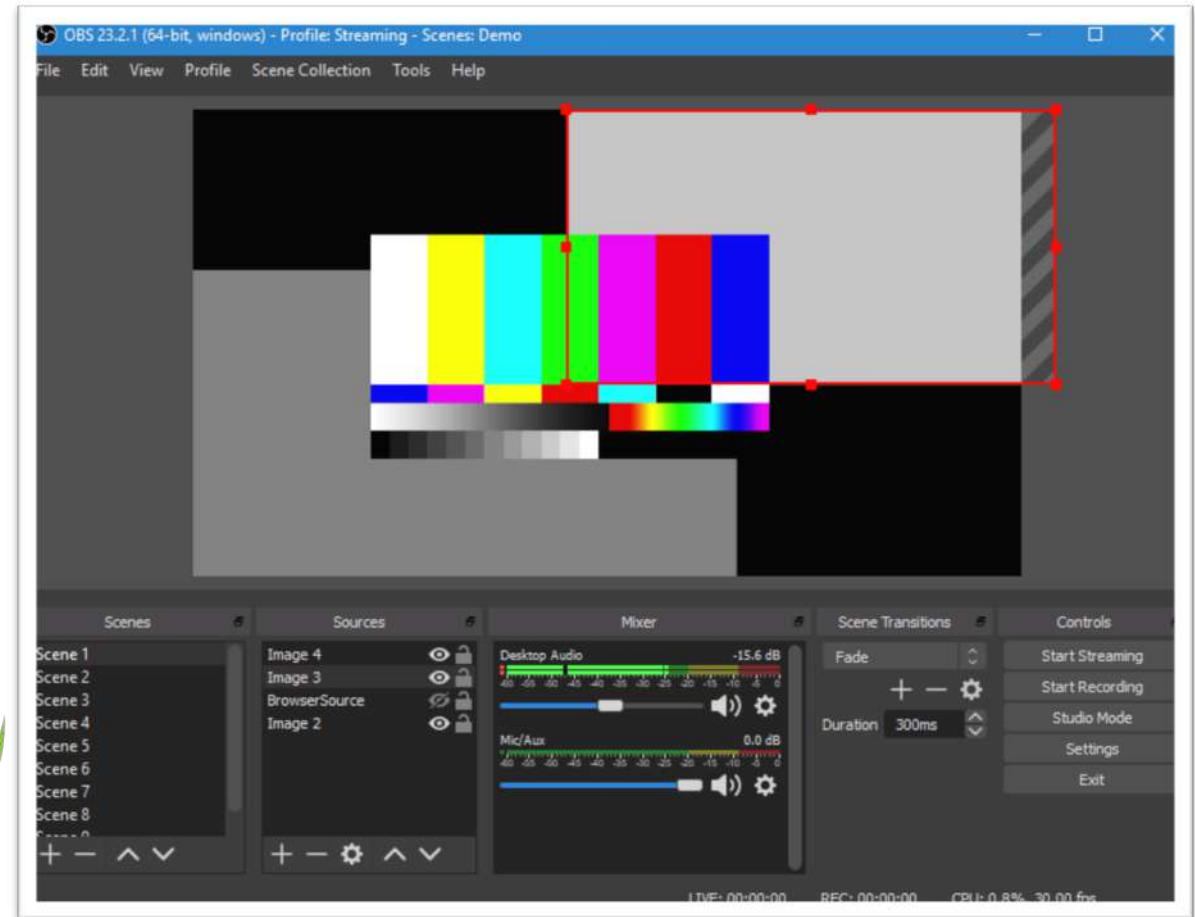
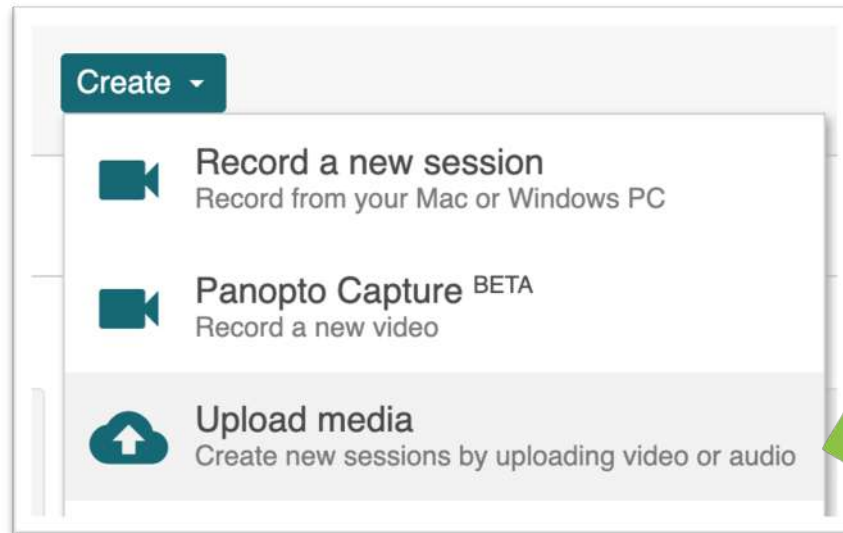
No Panopto recorder available so use:



<https://obsproject.com/>



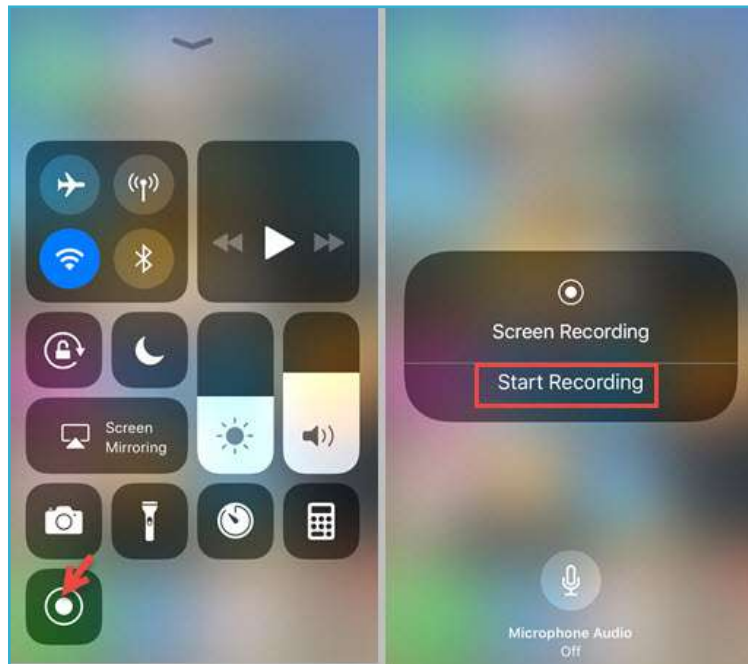
<http://cambridgelectures.cloud.panopto.eu>



Recording on Tablets

1. Capture

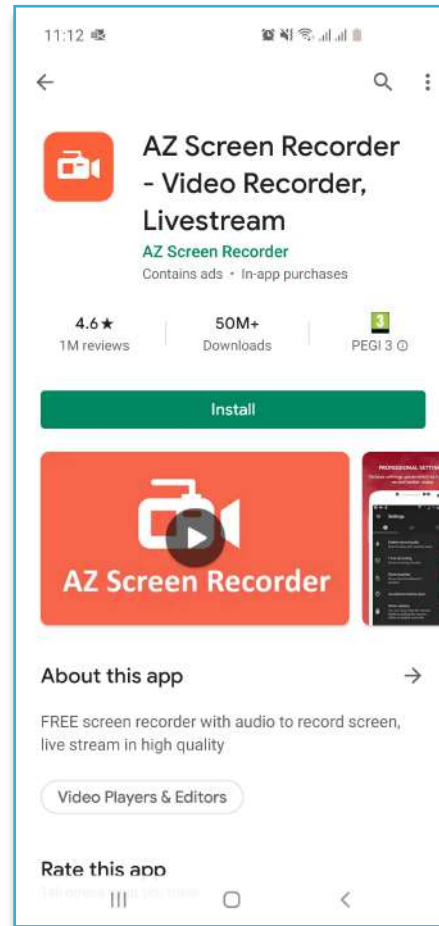
iOS



<https://www.panopto.com/blog/record-your-phone-screen-in-ios11-and-share-with-panopto/>

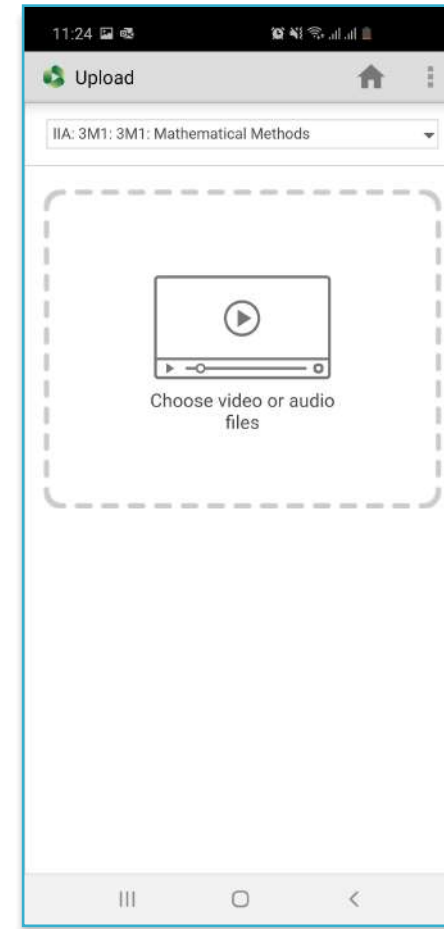
<https://support.panopto.com/>

Android



2. Upload

(via Panopto app)



Video Publishing Management

<http://cambridgelectures.cloud.panopto.eu>

The screenshot shows the Panopto web interface for the University of Cambridge. The top navigation bar includes the University of Cambridge logo, a search bar, and user information for Gavin MacKenzie. The main content area displays a folder named 'My Folder' with a list of video uploads. The first video, 'Demo 2', is highlighted with a blue arrow pointing to a larger view of the video player and its settings menu. The settings menu is open, showing options like 'Settings', 'Share', 'Edit', 'Stats', and 'Delete'. The 'Settings' option is circled in red.

No email reminders!

Availability

A session can be made available after a start date and before an end date. These settings replace any availability settings on the parent folder. A session can also be made available immediately by saving it in the editor.

Session becomes available

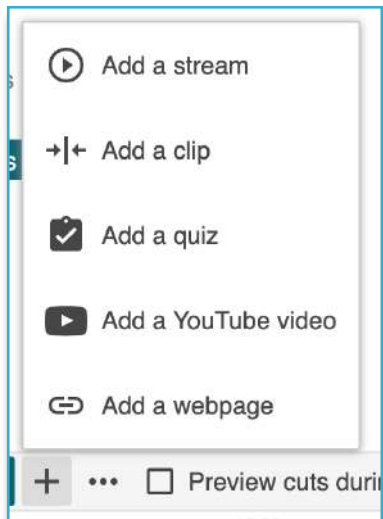
- ☐ now
- ☒ with its folder (never)
- ☐ starting

Session remains available

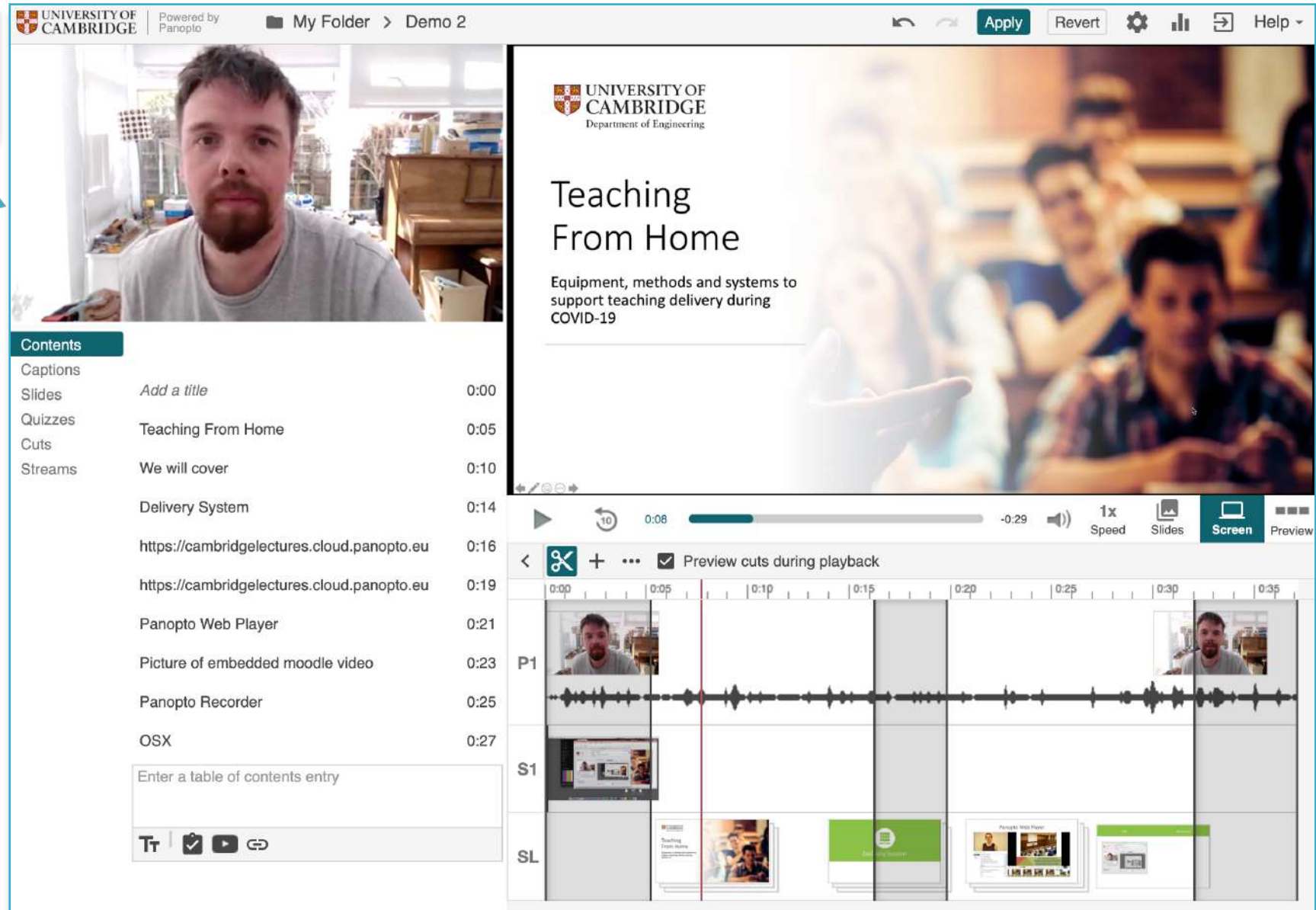
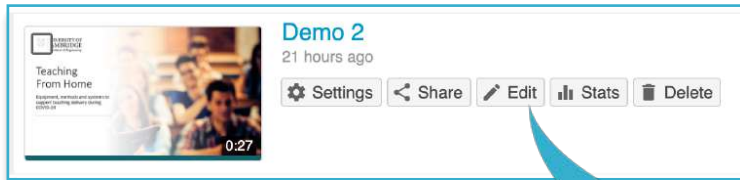
- ☐ forever
- ☒ with its folder (forever)
- ☐ until

Video Editor

- Simple editor
- Non-destructive editing
- Top/tail, cuts, inserts

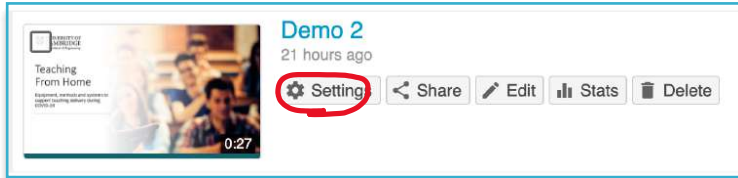


<https://support.panopto.com/s/article/Edit-a-Video>



Panopto "Video Podcast"

The video that is presented in **tablet/phone app, website embeds and/or downloads**



Demo 2

Overview
Share
Outputs
Quiz Results
Streams
Clips
Search
Captions
Manage
Log

These are the various output formats and ways of accessing them.

Panopto Web Viewer

[View Session](#)

Video Podcast

Type

[View Podcast](#)
[Download Podcast](#)

Type

Quality

Audio Podcast

[Play Audio Podcast](#)
[Download Audio Podcast](#)

Downloads restricted by default

<https://support.panopto.com/s/article/Enable-Podcast-Downloads>

Discussion

Downloads

☒ Allow viewers to post comments

☒ Use folder setting (Admins, videographers and creator only)

No one
Admins only
Admins, videographers and creator only

Description

Type

Quality

- Primary Video Only
- Secondary Video Only
- ☒ Picture-in-Picture
- Side-by-Side
- Tile All Streams

Contact av-
support@eng.cam.ac.uk to
enable **student downloads**

Publishing



Set availability

Availability

A session can be made available after a start date and before an end date. These settings replace any availability settings on the parent folder. A session can also be made available immediately by saving it in the editor.

Session becomes available

- ☐ now
- ☒ with its folder (never)
- ☐ starting Dublin, Edinburgh, Lisbon, London

Session remains available

- ☐ forever
- ☒ with its folder (forever)
- ☐ until Dublin, Edinburgh, Lisbon, London



Panopto block

1P1: Thermofluid Mechanics

Panopto

Live Sessions

No Live Sessions

Completed Recordings

IA: Thermofluid Mechanics (Atkins/Hall_CA)

IA: Thermofluid Mechanics (Atkins/Hall_CA)

IA: Thermofluid Mechanics (Atkins/Hall_CA)

[Show All]

Links

Course Settings

Download Recorder(Windows | Mac)

Useful Links

Please find below links to

Panopto video embed

Section 1

Demo 2

UNIVERSITY OF CAMBRIDGE

Department of Engineering

Teaching From Home

Equipment, methods and systems to support teaching delivery during COVID-19

30

1x

Section 2

Equipment

“Good enough is great.”



Minimum

- Laptop/computer/tablet/phone
- Webcam + mic
- Capture software
- Content e.g. PowerPoint, Keynote, screen

Enhanced

- Headsets
- Higher quality cameras/mics
- Touch screens/writing surfaces
- Virtual whiteboards
- Visualizers

-Support-

Divisional COs

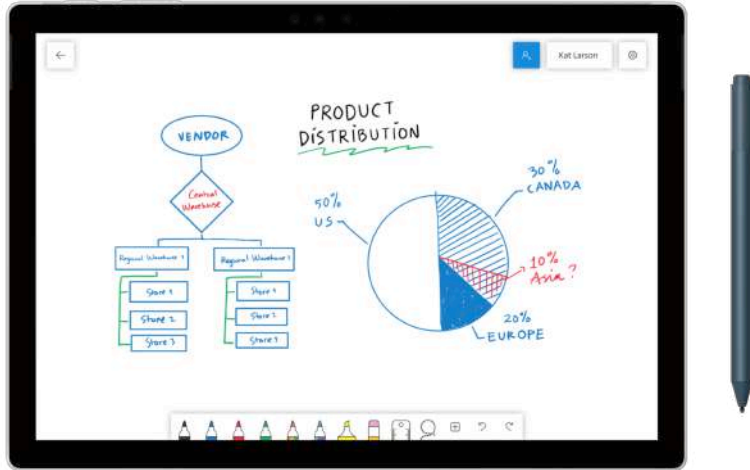
AV Support av-support@eng.cam.ac.uk

ICS Helpdesk helpdesk@eng.cam.ac.uk

Capturing Writing

Digital

TOUCH SCREENS/WRITING TABLETS

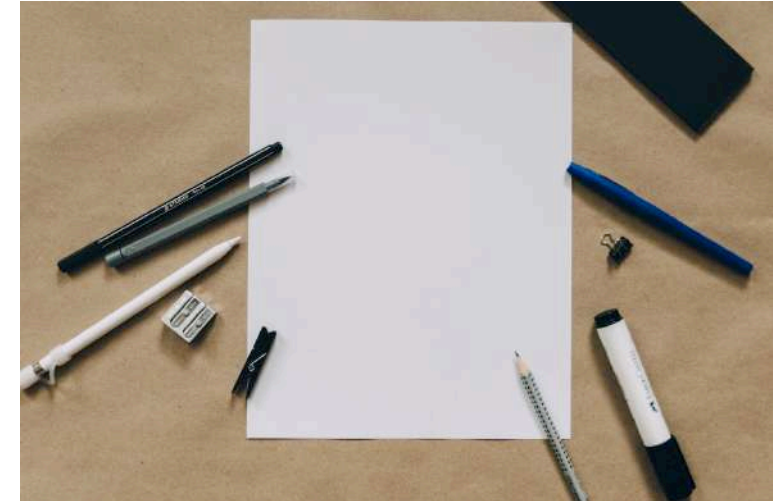


<https://openboard.ch/>
<https://whiteboard.microsoft.com/>
<https://jamboard.google.com/>
PowerPoint + Ink Tools

**TOUCH SCREEN/WRITING
TABLET/STYLUS RECOMMENDED**

Traditional

CAPTURING PEN AND PAPER

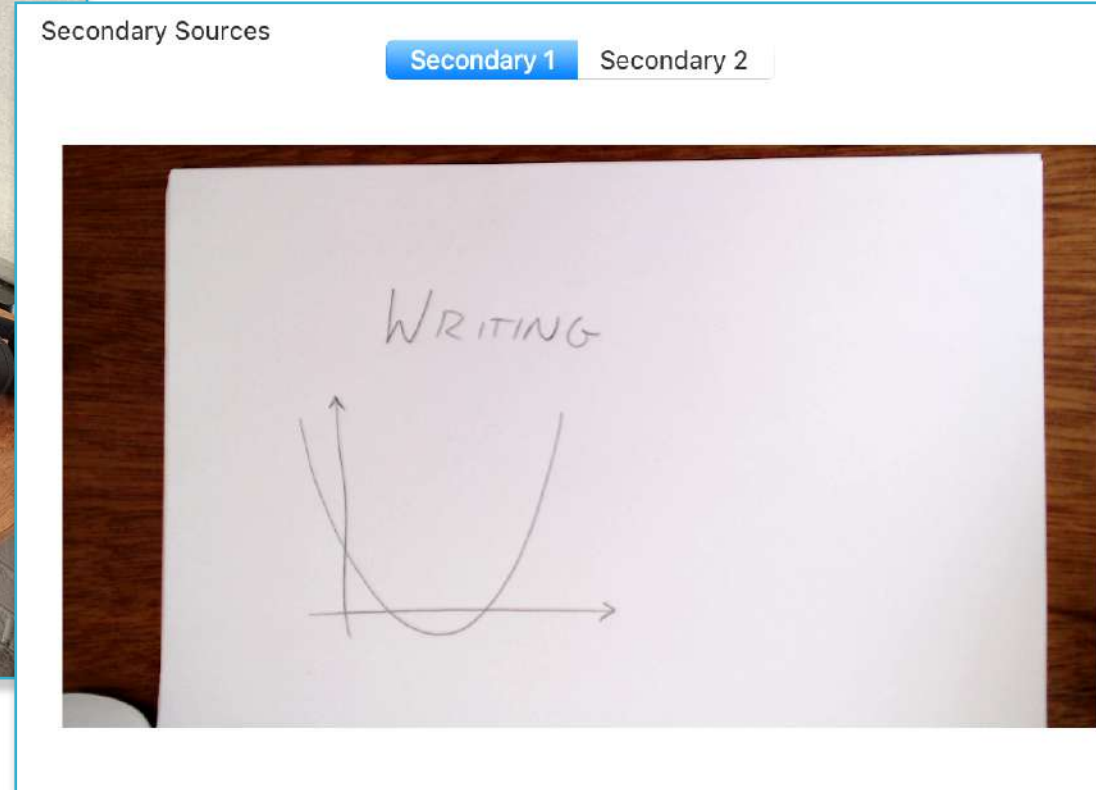
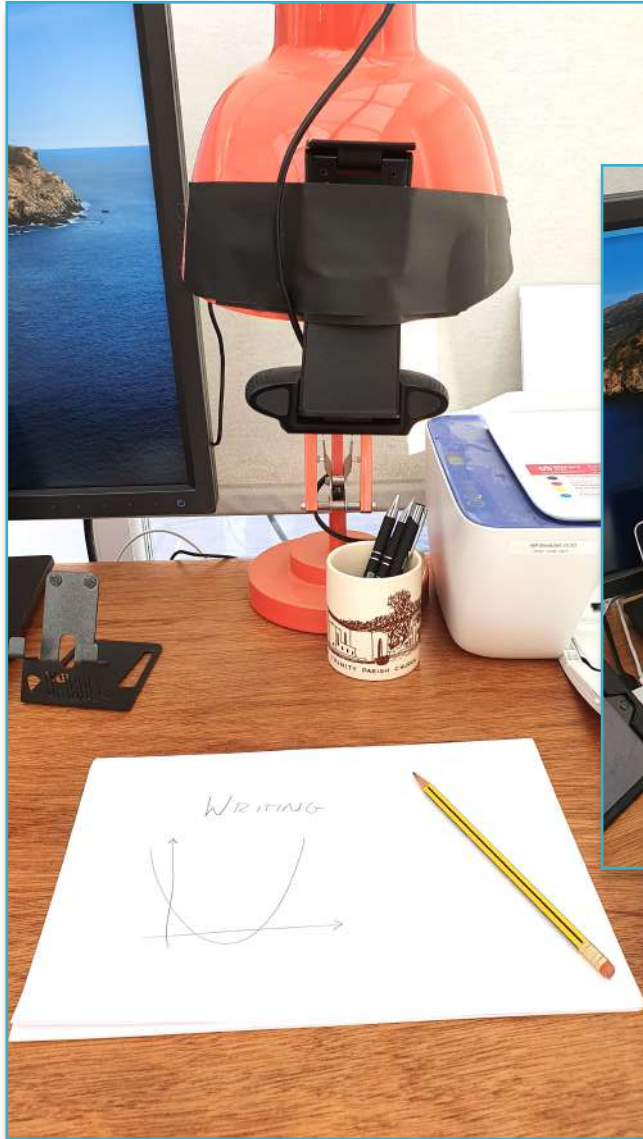


- Visualizer
- Webcam
- Smart phone

HOW TO CAPTURE?

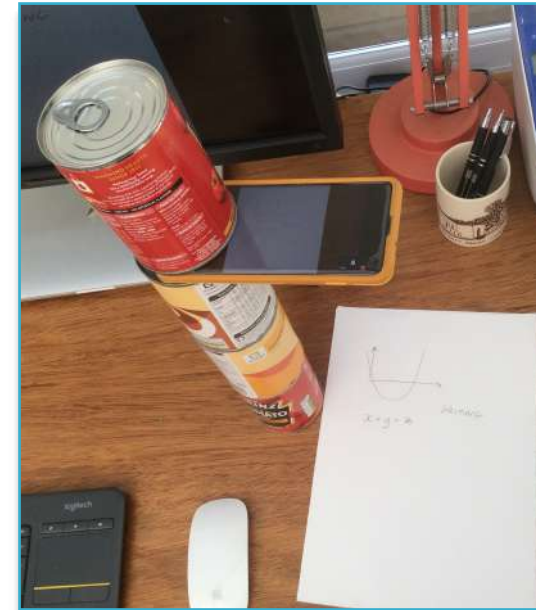
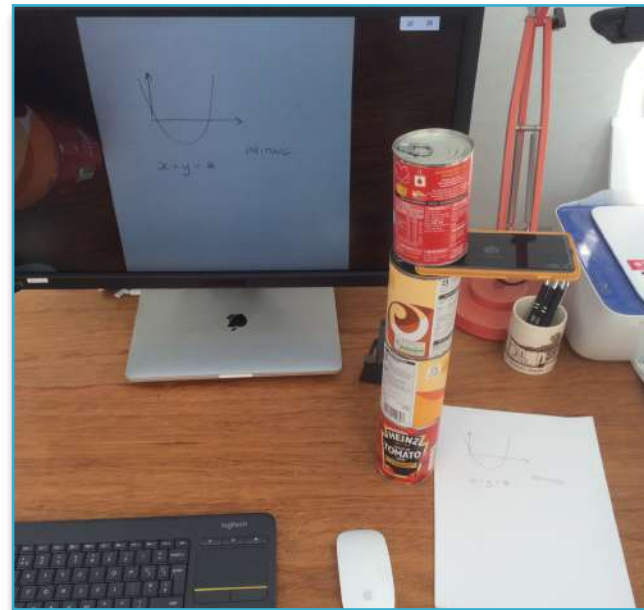
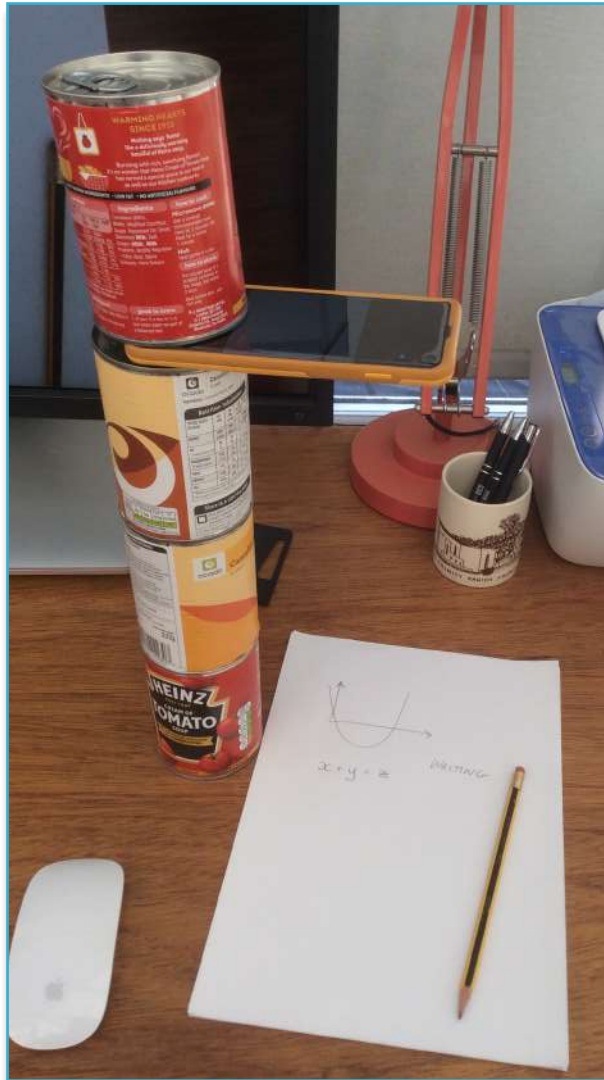
Capturing PEN AND PAPER

WEBCAM METHOD



Capturing PEN AND PAPER

SMARTPHONE METHOD



DroidCam

Android > Windows + Linux
<https://www.dev47apps.com/>



EpocCam

Android/iOS > OSX
<http://www.kinoni.com/>



iOS > Windows
<https://ndi.tv/tools/>

**Or VIDEO CALL +
SCREEN CAPTURE**



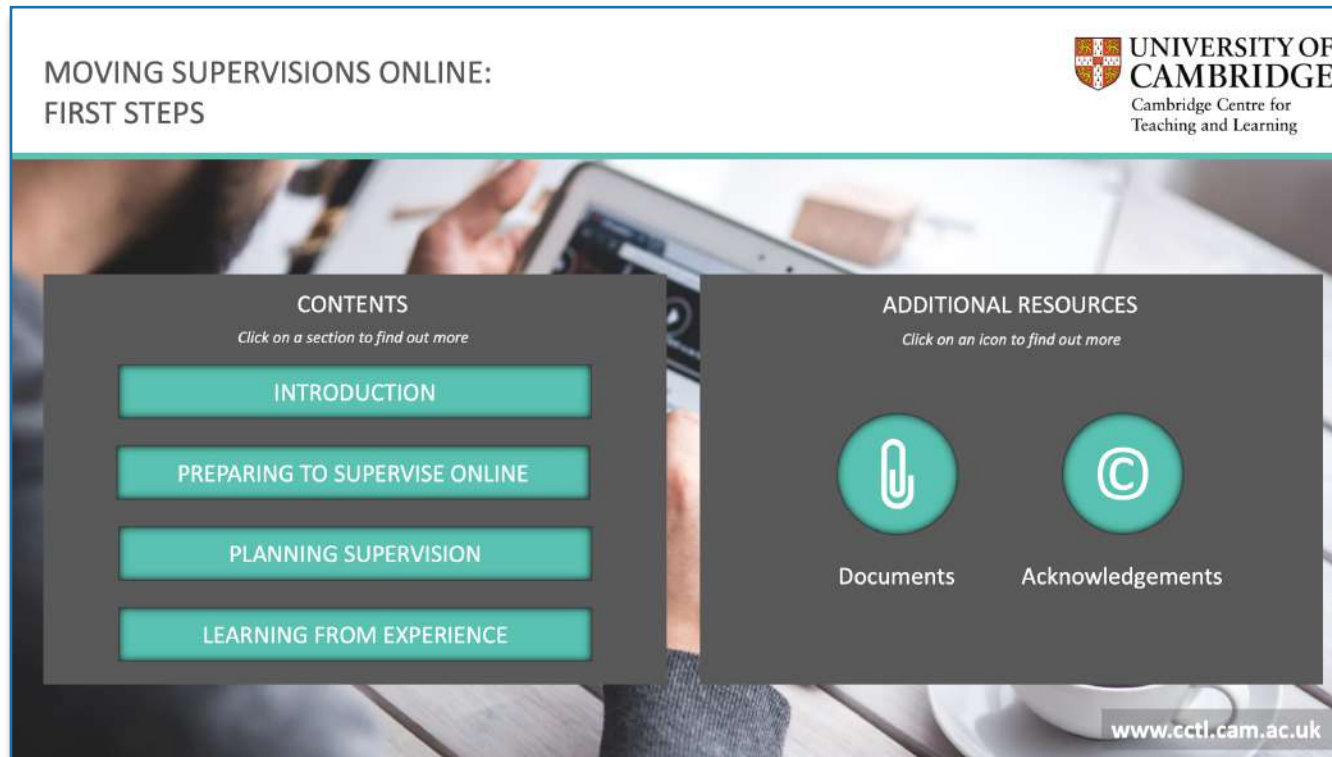
Collaborative Tools

Supervisions/Examples Classes

<https://www.cctl.cam.ac.uk/teaching-remotely>

https://www.cctl.cam.ac.uk/files/cctl_moving_supervisions_online.pdf

Key Messages



- The most obvious approach to supervising online is to replicate what you and your students would normally do, using video conferencing
- There are important considerations concerning the requirements of disabled students and staff including those with neurodiverse profiles
- Try to keep things simple and flexible, with fall-back options in case of difficulties

Video conferencing for teaching



Microsoft Teams

https://www.cctl.cam.ac.uk/sites/www.cctl.cam.ac.uk/files/conducting_a_supervision_with_teams.pdf



Google Meet

https://www.cctl.cam.ac.uk/sites/www.cctl.cam.ac.uk/files/conducting_a_supervision_with_google_meet.pdf



Zoom

<https://zoom.us>

NOTE 40 minute time limit on free version

Others

<https://www.skype.com/>

<https://talky.io/>

<https://appr.tc/>

Collaborative applications



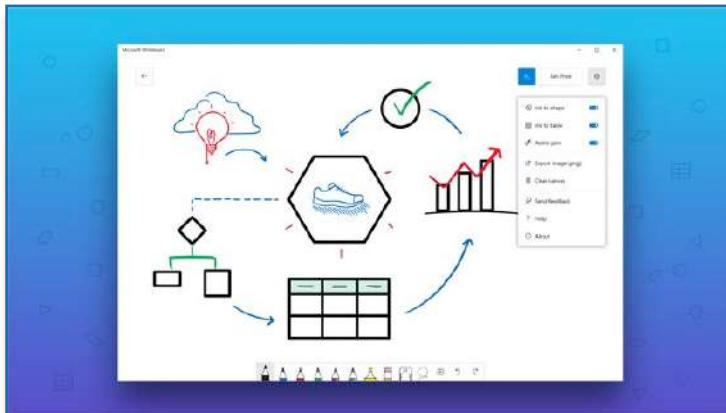
Google Jamboard

<https://jamboard.google.com/>



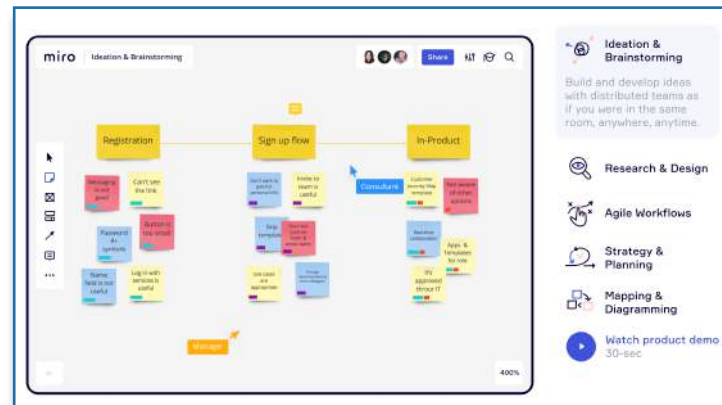
Padlet

<https://en-gb.padlet.com/>



MS Whiteboard

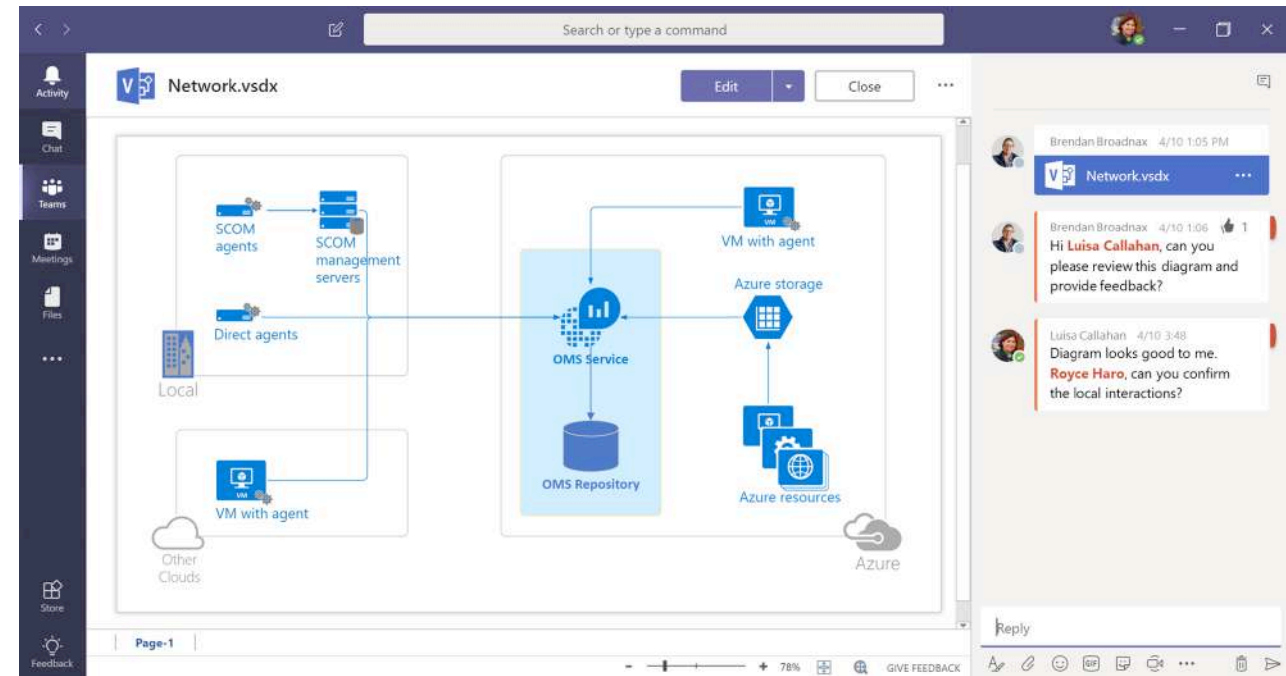
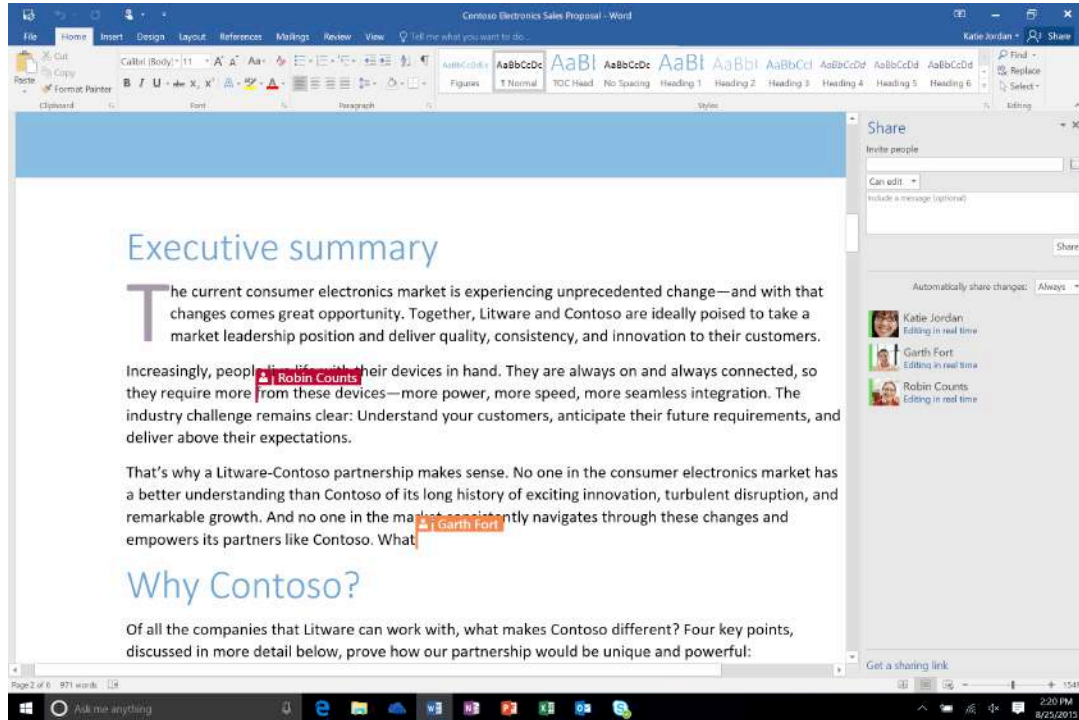
<https://www.office.com>



Miro

<https://miro.com/>
<https://help.miro.com/hc/en-us/articles/360017730473-Education-Plan>

Working together on documents



Microsoft OneDrive

<https://help.uis.cam.ac.uk/service/collaboration/office365>



Microsoft Teams

<https://help.uis.cam.ac.uk/news/teams-launch>



Google Drive

<https://help.uis.cam.ac.uk/service/collaboration/g-suite>



Moodle Tools for Enhanced Learning

<https://www.vle.cam.ac.uk/mod/page/view.php?id=3869561>

Forums

- Enables students to ask questions
- You to answer them
- Encourages discussions to develop



Forum

A standard forum for general use

Force student to get an email or not when someone posts (Forced Subscription vs Optional Subscriptions)

CAN NOT be anonymous



Open Forum

Standard forum for general use

Can allow private replies from teacher to student, not between student and student

Default is anonymous but anyone can choose to reveal their name

Can force students to get an email or not (forced vs optional subscription)

Forums

Open Forum

Standard forum for general use

Can allow private replies from teacher to student, not between student and student

Default is anonymous but anyone can choose to reveal their name

Can force students to get an email or not (forced vs optional subscription)

2 discussions

[Add a new discussion](#)



Search

Recent



Sort



Emma Etteridge

Non anonymously

Discussion point

10 mins ago



Emma Etteridge

Non anonymously

Lecture one

15 mins ago



[Manage forum subscriptions](#)

Forums

Emma Etteridge Non anonymously

Lecture one

21 hours ago

Was there anything that was unclear in this lecture, or anything that you might want to know a little more about?

Reply

Edit Delete

Pin

0 replies

Add your reply



Your subject

Type your post

Browse...

No files selected.

Submit

Private reply ☐

Reveal yourself in this post ☐

[Use advanced editor and additional options](#)

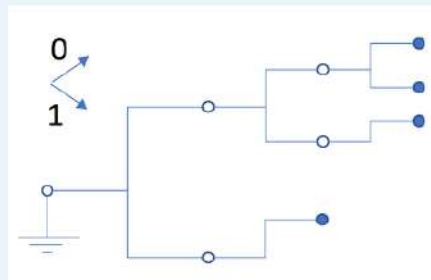
Quiz



- Test students learning/understanding

Started on	Wednesday, 8 November 2017, 12:41 PM
State	Finished
Completed on	Wednesday, 8 November 2017, 12:43 PM
Time taken	2 mins 22 secs
Marks	10/18
Grade	53 out of 100
Feedback	Please provide feedback on the lab and on the quiz via email (████████@cam.ac.uk), the forum on this site, or the anonymous feedback facility.

Question 1
Correct
Mark 1 out of 1
Flag question



Which of the tree lists (in linked list format) correspond to the tree above?

Select one or more:

- ☒ a. 0, 1, 1, 2, 2, 4, 4, 5, 3 ✓ This is correct!
- ☐ b. 0, 1, 1, 2, 2, 3, 3, 4, 4
- ☐ c. 1, 0, 1, 2, 2, 3, 3, 4, 4
- ☐ d. 0, 1, 1, 1, 2, 4, 5, 5, 4

Quiz navigation

Trees and Tables



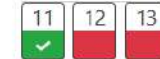
Shannon-Fano: only answer first two OR last question



Compressing a File



Huffman Coding



Arithmetic Coding



Overall Conclusions



[Show one page at a time](#)

[Finish review](#)

Choice



Subject to cover in this example class

- Pose simple voting type questions to help decide things

Subject to cover in this example class

Pick your top two subject to cover in the next session

Anonymous results will be published after you answer.

- ☐ Notation for stress ☐ Strain definition ☐ Complementary shear ☒ Mohr's circle of stress
☐ Mohr's circle of strain

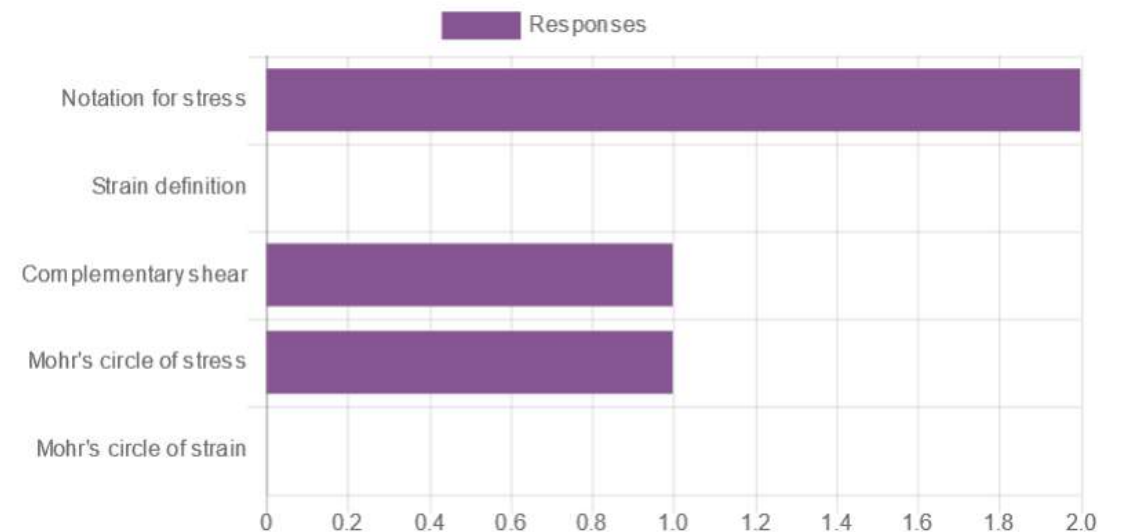
Save my choice

Subject to cover in this example class

[View 2 responses](#)

Pick your top two subject to cover in the next session

Your selection: Notation for stress; Complementary shear



Feedback



What detail shall we cover on the 6th May?

- For more complicated voting

What detail shall we cover on the 6th May?

Mode: Anonymous

What main area would you like more help with?

- ☐ Physical properties of structural materials
- ☐ Stress and strain
- ☐ Beam behaviour

There are required fields in this form marked .

Next page

Cancel

What detail shall we cover on the 6th May?

Mode: Anonymous

You chose Stress and strain, which sub area are you really struggling with?

- ☐ Stress-strain relations for isotropic elastic solids
- ☐ Planar transformation equations for stress
- ☐ Principal stresses in 3 dimensions

There are required fields in this form marked .

Previous page

Submit your answers

Cancel

Scheduler



Booking 1-2-1 appointments

- For booking one to ones or small group chats/meetings

Booking 1-2-1 appointments Slots

You can add additional appointment slots at any time.

Actions Add slots Delete slots						
	Date	Start	End	Location	Students	Action
<input type="checkbox"/>	Monday, 20 April 2020	10:00 AM	10:15 AM	MS Teams		(2)
<input type="checkbox"/>		10:20 AM	10:35 AM	MS Teams	<input type="checkbox"/> EmmaTest emmalouisejones27@gmail.com	(2)
<input type="checkbox"/>		10:40 AM	10:55 AM	MS Teams		(2)
<input type="checkbox"/>	Monday, 27 April 2020	10:00 AM	10:15 AM	MS Teams		(2)
<input type="checkbox"/>		10:20 AM	10:35 AM	MS Teams		(2)
<input type="checkbox"/>		10:40 AM	10:55 AM	MS Teams	<input type="checkbox"/> EAB RAES	(2)
<input type="checkbox"/>	Monday, 4 May 2020	10:00 AM	10:15 AM	MS Teams		(2)
<input type="checkbox"/>		10:20 AM	10:35 AM	MS Teams		(2)
<input type="checkbox"/>		10:40 AM	10:55 AM	MS Teams		(2)

After you have had an appointment with a student please mark them as "Seen" by clicking the checkbox near to their user picture above.

6 students still need to make an appointment

[Send invitation](#) — [Send reminder](#)

Schedule by student

Other Moodle Features

Glossary	Crowdsource term/ definition on terms in the module – to assess understanding
Wiki	Collaborative tool to create documents on subjects
OU Blog	Use blog posts to track and outline stages in a project
Lesson	A contained object that presents information and then tests that learning
H5P	HTML5 Package - create content such as interactive videos, quizzes and presentations.

Email



Not all students will have the bandwidth or the technology to be able to open or view everything you provide for them

There is always email

Recommended reading

Between the Cambridge University Libraries and publishers we have greater access to online resources

<https://www.lib.cam.ac.uk/research/librarysearch/university-libraries-are-all-open-online>

Rules have been relaxed for reuse of print resources

Contact the library for details

library@eng.cam.ac.uk



Q&A

av-support@eng.cam.ac.uk
moodle-support@eng.cam.ac.uk

Useful resources

- CUED AV Support Teaching from Home <https://help.eng.cam.ac.uk/audio-visual/teaching-from-home/>
- CCTL Teaching remotely <https://www.cctl.cam.ac.uk/teaching-remotely> reading the supervision guide is useful as a bases for preparing to teach online
- Capturing writing <https://openboard.ch/> <https://whiteboard.microsoft.com/> <https://jamboard.google.com/>
- Libraries access to online resources <https://www.lib.cam.ac.uk/research/librarysearch/university-libraries-are-all-open-online>
- Moodle Testing students' understanding <https://www.vle.cam.ac.uk/mod/page/view.php?id=3869561>
- Moodle support pages <https://www.vle.cam.ac.uk/course/view.php?id=115071>
- Panopto <https://cambridgelectures.cloud.panopto.eu>
- Panopto Support <https://support.panopto.com/>
- Panopto downloads instructions <https://support.panopto.com/s/article/Enable-Podcast-Downloads>
- Panopto basic recoding <https://support.panopto.com/s/article/basic-recording-1>
- Panopto recording with a Mac <https://support.panopto.com/s/article/basic-recording-1>
- Open Broadcast software <https://obsproject.com/>
- Panopto recording on your phone <https://www.panopto.com/blog/record-your-phone-screen-in-ios11-and-share-with-panopto/>
- Panopto editing a video <https://support.panopto.com/s/article/Edit-a-Video>
- Panopto enabling podcast download <https://support.panopto.com/s/article/Enable-Podcast-Downloads>
- Panopto tools to support learning <https://www.vle.cam.ac.uk/mod/page/view.php?id=12057121>

Acknowledgements

Cambridge Centre for Teaching and Learning

Andrew Gee

Tawfique Hassan

Seb Savory

Colm Durkan

Jossy Sayir

Meg Tait

CUED ICS Team

Lewis Grantham

Melissa Rielly

Jessica Comber-Chaney

Frank Wall

Abraham Martin

Dr Rich Wareham

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