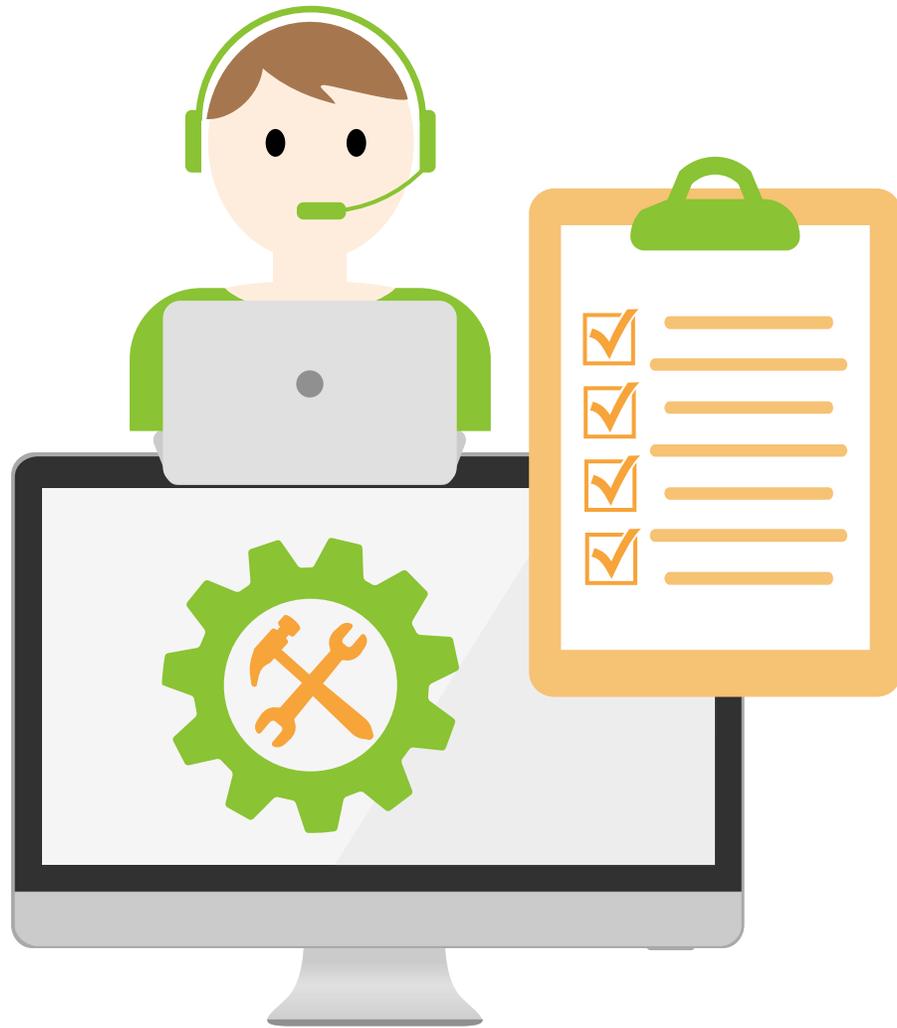


# BASIC ONLINE LEARNING



<https://olc.utm.my/>

**O N L I N E**  
**L E A R N I N G**

## PLANNING

**An online learning session**

<https://olc.utm.my/online-learning-platform/>

<https://olc.utm.my/>

# ONLINE LEARNING



## Technical requirement

A computer/laptop  
Microphone & head/earphone  
Stable internet connection



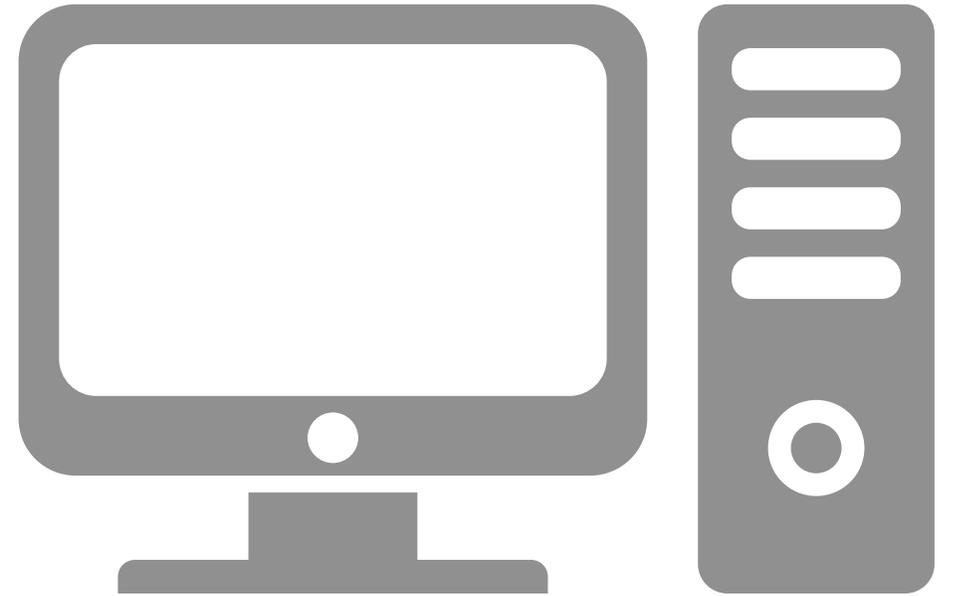
## UTM eLearning account

<https://my.utm.my/iportal.php>  
<http://elearning.utm.my/19202>



## Software

Install the necessary software  
Example Zoom Meeting/  
Webex Meeting



# ONLINE LEARNING IMPLEMENTATION @ UTM



**ALTERNATIVE 1 - ASYNCHRONOUS ONLINE LEARNING**

**ALTERNATIVE 2 - SYNCHRONOUS ONLINE LEARNING**

**ALTERNATIVE 3 - TASK-BASED ONLINE LEARNING**



[olc.utm.my](http://olc.utm.my)



## ALTERNATIVE 2 - SYNCHRONOUS ONLINE LEARNING

Delivery

Online learning as a delivery tool for virtual learning between students and lecturer

- ✓ Live learning session
- ✓ Online learning activities and interaction occurs in real-time but only at different geographical location
- ✓ Lecturer and students interact in specific virtual space through specific online medium and at a specific time
- ✓ It includes video conferencing, teleconferencing, live chatting or live streaming lectures.



### Examples of Student-centered Activity Tools:

- ✓ Schedule chat room time for student to share information and ideas on the subject : e-Learning UTM forum, Whatsapp or Telegram
- ✓ Video conferences & Live stream lecture : Big Blue Button, Google Meet, Zoom, Webex

Activity

Assessment

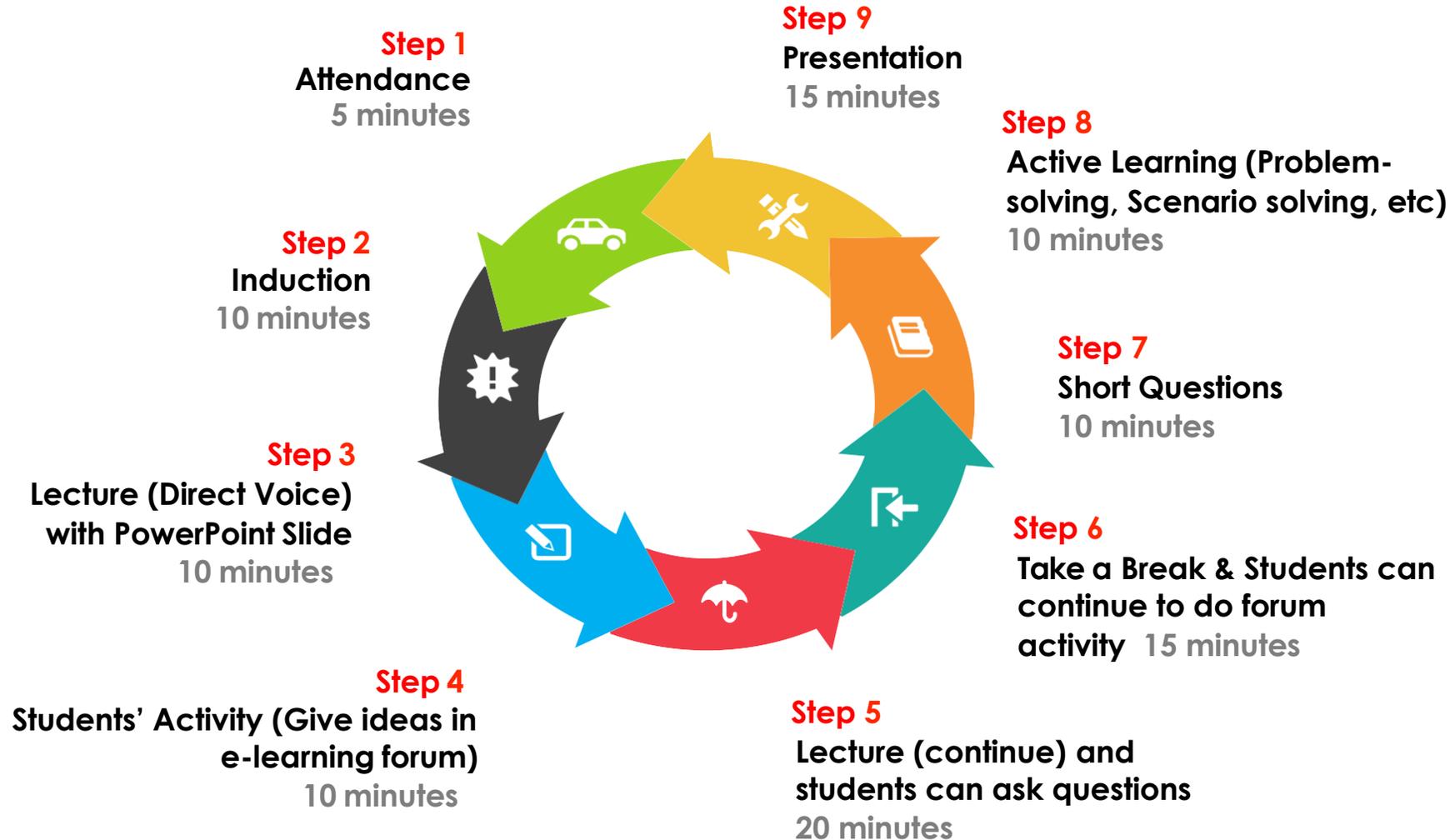
### Example of Online Assessment Tool:

- ✓ \*\*Online test : e-learning UTM Quiz Tool
- \*\* Online assessment guideline available at [olc.utm.my](http://olc.utm.my)



ONLINE LEARNING  
IMPLEMENTATION @ UTM

# EXAMPLE FOR TWO HOURS LESSON : SYNCHRONOUS ONLINE LEARNING



# Step 1: ATTENDANCE RECORD (5 minutes)



## Step 2: INDUCTION (5-10 minutes)

Prepare  
Use **Youtube**  
Video (URL)



Students answer  
question **Through**  
**Poll**

Ask question  
Through **Public Chat**

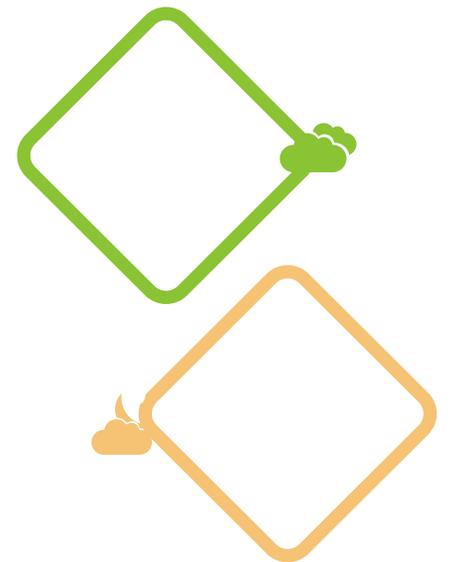
Do you understand that video?

# 3: Lecture (10 minutes)



Lesson topic – (Direct Voice) with  
Presentation Slide

Open chatting for any questions from  
students

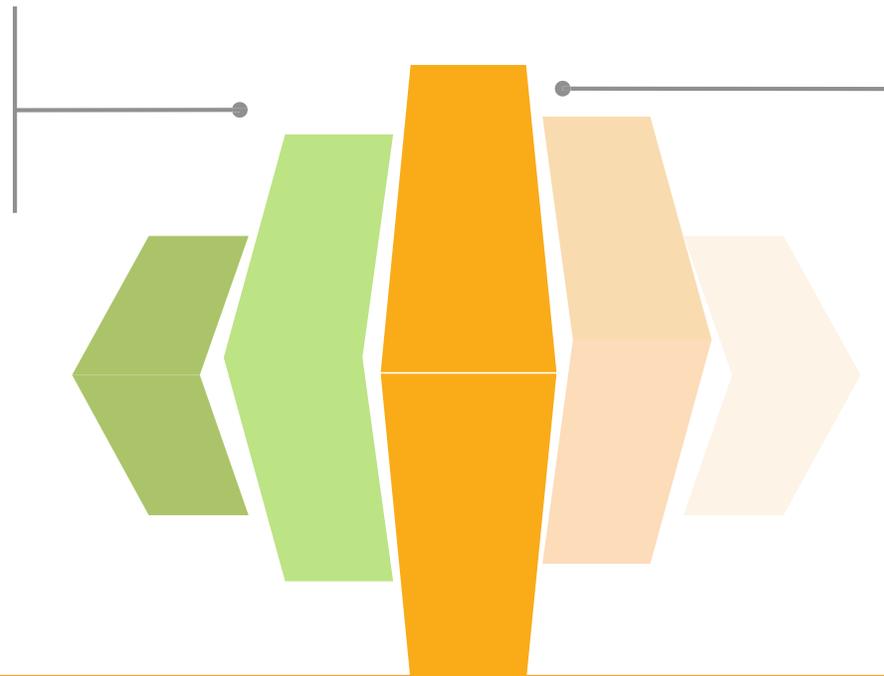
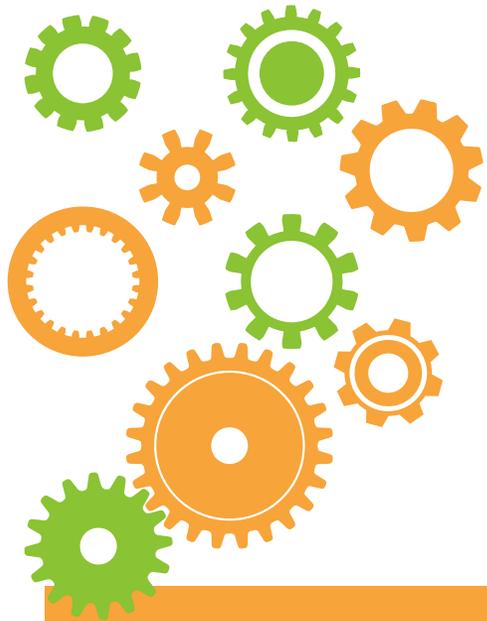


# Step 4: Students' Activity(10 minutes)

- Give ideas in e-learning forum

1. Create forum topic

2. Students in group discuss and answer the question



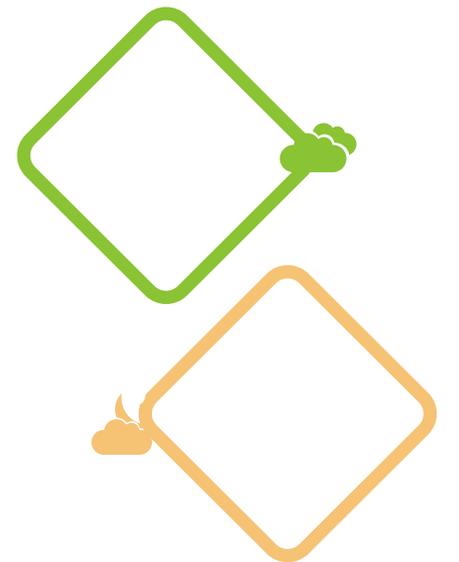
# Step 5: Continue Lecture (20 minutes)



Lesson topic – (Direct Voice) with Presentation Slide

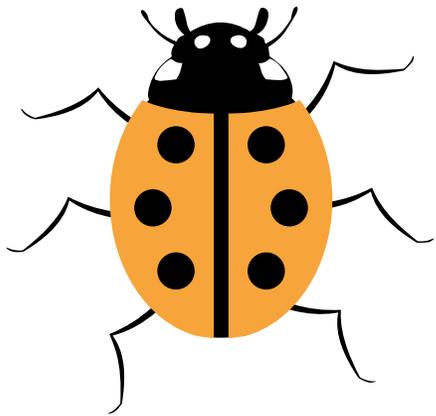
Open chatting for any questions from students

Students are allowed to give/answer questions – Direct Voice



**Step 6: Take a Break &  
Students can continue to  
do discussion in e-learning forum  
activity**

15 minutes



# Step 7: Short Questions (10 minutes)

- Prepare the **questions in the slides**
- **Multiple Choice/ True or False**



- Use **Poll** for students to answer the questions

## Step 8: Active Learning (Problem-solving, Scenario solving, etc)



- E-learning forum
- Prepare discussion topic for students to do
- Discussion in group (**Breakout room**)
  - Format: **Standard forum for general use**



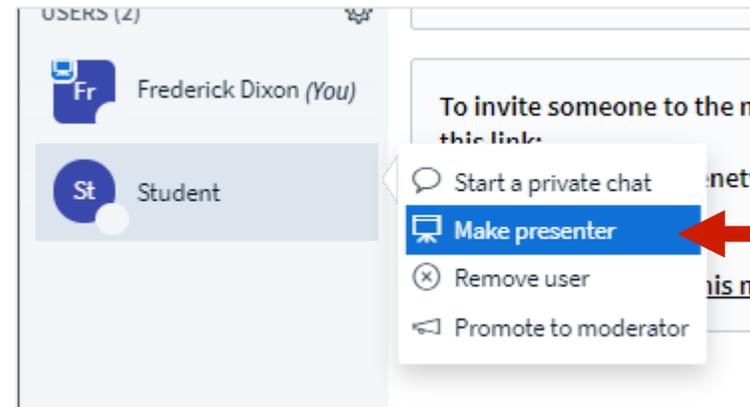
# Step 9: Presentation (15 minutes)

## BigBlueButtonBS

Randomly choose the presenters

## Set presenter

Present the ideas



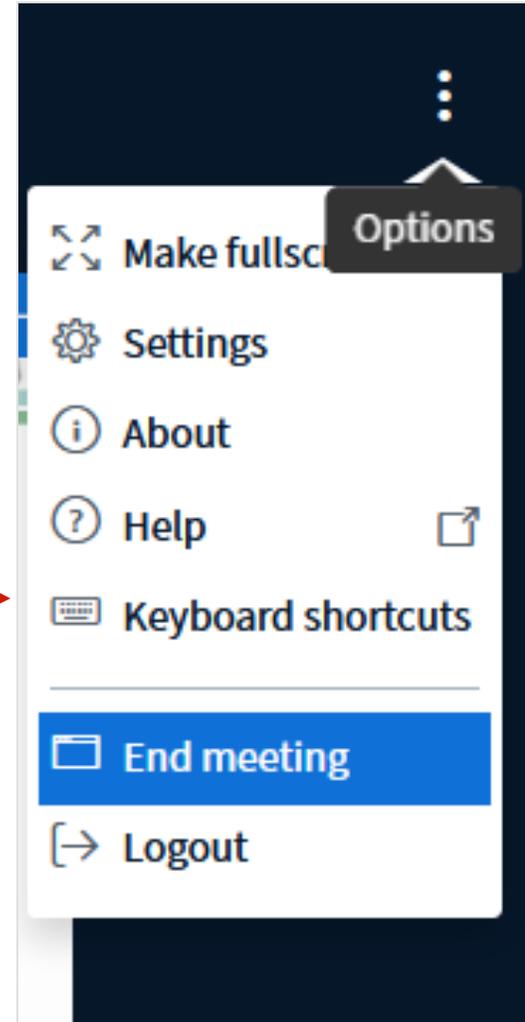
Select student as presenter





# CLASS ENDS

**Click End Meeting**



Q&A

The image features the text "Q&A" rendered in a 3D, blue, sans-serif font. The letters are thick and have a slight shadow on the surface below them, which is reflected on the white background. The ampersand is a stylized, light blue color, contrasting with the darker blue of the letters. The overall composition is clean and modern.

## ALTERNATIVE 1 - ASYNCHRONOUS ONLINE LEARNING

Technology as a supporting tool for learning online



✓ No live session

- ✓ Lecturer will provide materials, lectures and assignment
- ✓ Should include self-guided lesson modules, streaming content, pre-recorded video, and interactive asynchronous activities

Delivery

### Examples of Student-centered Activity Tools:

Course presentation : H5P in e-learning UTM, NearPod, EdPuzzle

Discussion board : forum e-Learning UTM

Social media interaction : Padlet, Trello, FlipGrid

Recorded presentation : Jing, MOOC videos

Collaborative writing in Cloud : e-Learning UTM Wiki, Google Doc, Dropbox, Zoho

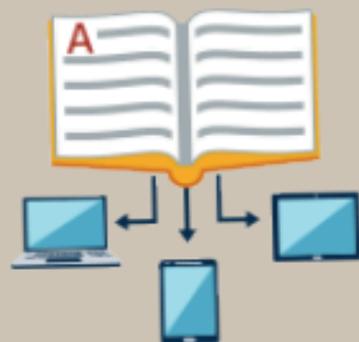


Activity

### Examples of Online Assessment Tools:

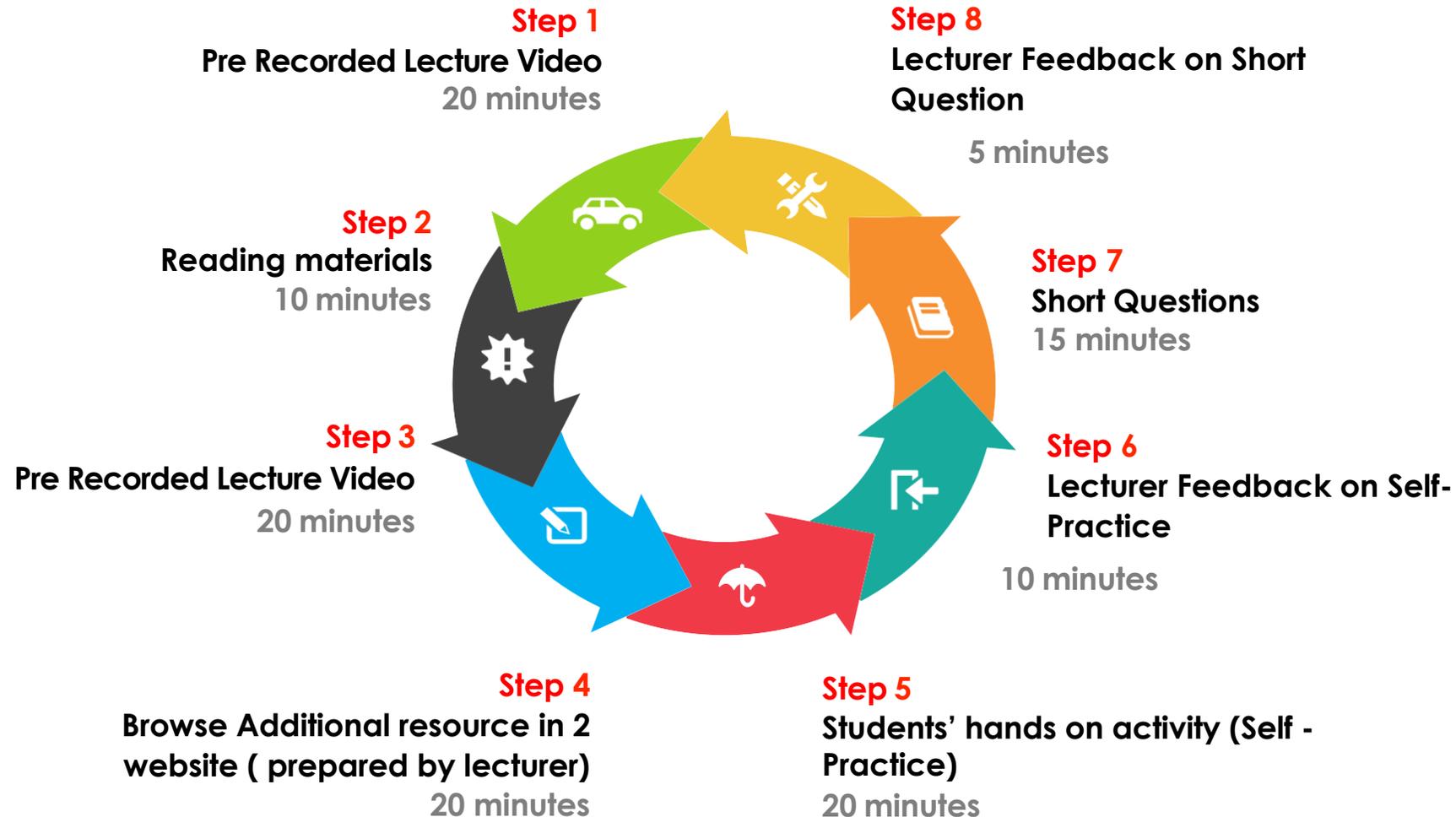
Self-reflection : Online Wiki, Blogs Entries in e-Learning UTM, Wordpress, Blogger

Quiz : Quiz e-Learning UTM, Quizizz, Socrative



Assessment

# EXAMPLE FOR TWO HOURS LESSON ASSUMPTION : ASYNCHRONOUS ONLINE LEARNING



# Online class should be designed to have a good balance between **synchronous** and **asynchronous** learning

## Synchronous

Mode: Live online session (relatively high bandwidth)

Online classes that require students and facilitator to be online at the same time (real time)

Real time interaction occurs between students and facilitator during the online session

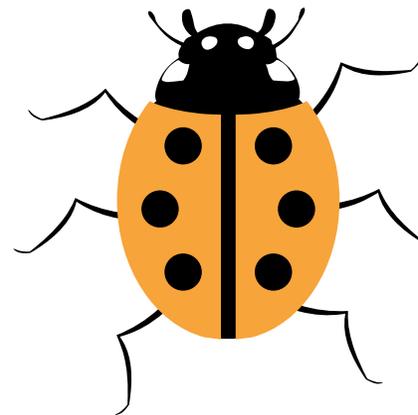
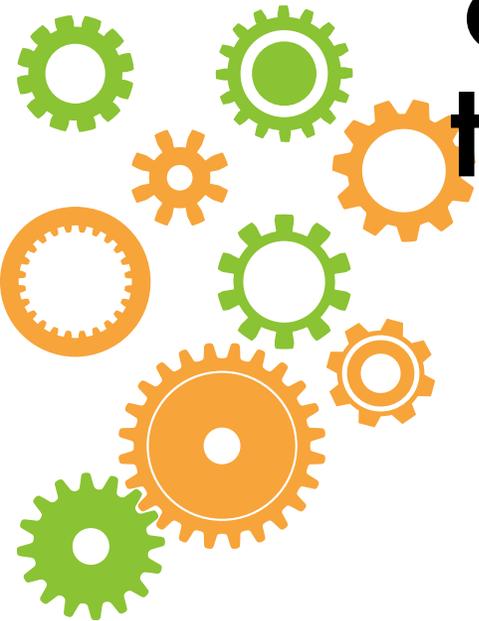
## Asynchronous

Mode: Learning on demand (relatively low bandwidth)

Students have access to the online class at anytime and learn at their own pace

Designed mainly for self- directed study (facilitator not present)

The choice of **synchronous** or **asynchronous** mode would depend on the bandwidth and devices accessible to the students and facilitators. The course facilitator should be able to decide which mode is best for a given situation.



**Total SLT**  
**180 minutes**



**Students answer short online quiz**

Type of time spent  
Time spent for instructional activities

Estimated Time	Total Time
30 minutes	30 minutes



**Live interaction with students to discuss students' work**

Type of time spent  
The time spent in synchronous live interaction

Estimated Time	Total Time
20 minutes	20 minutes



**Live Interaction with students**

Type of time spent  
The time spent in synchronous live interaction

Estimated Time	Total Time
15 minutes	15 minutes



**Students read a 5-page article online**

Type of time spent  
The time required to consume content

Estimated Time	Total Time
2 mins x 5 pages	10 minutes



**Time spent calculation for an Asynchronous Online Learning**



**Students carry out 1 collaborative learning task in online discussion board for separate groups based on article reading**

Type of time spent  
Time spent for instructional activities

Estimated Time	Total Time
40 minutes	40 minutes



**Students write group findings on Padlet**

Type of time spent  
Time spent for instructional activities

Estimated Time	Total Time
15 minutes	15 minutes



**Students spent time on average 10 screens for all the activities**

Type of time spent  
The average time on 'screen' and the number of screens viewed.

Estimated Time	Total Time
5 mins x 10 screens	50 minutes



## ALTERNATIVE 3 - TASK-BASED ONLINE LEARNING



Online learning as a monitoring tool for student's assignment and activities

- ✓ Plan your lesson where you upload these plans (in the form of tasks) in e-Learning UTM
- ✓ Require your students to access e-Learning@UTM to upload the product of learning based on the tasks that you gave online.
- ✓ Carry out activities such as Project-based Learning, Problem-based Learning, Collaborative Learning and other Active Learning activities

Activity

Examples of Student-centered Activity Tools:

Course presentation : H5P in e-learning UTM, NearPod, EdPuzzle

Discussion board : forum e-learning UTM

Social media interaction : Padlet, Trello, FlipGrid

Recorded presentation : Jing TechSmith, Screen-O-Matic, Camtasia Studio, PowerPoint and WPS Presentation

Collaborative writing in Cloud : e-Learning UTM Wiki, Google Doc, DropBox, Zoho



Delivery

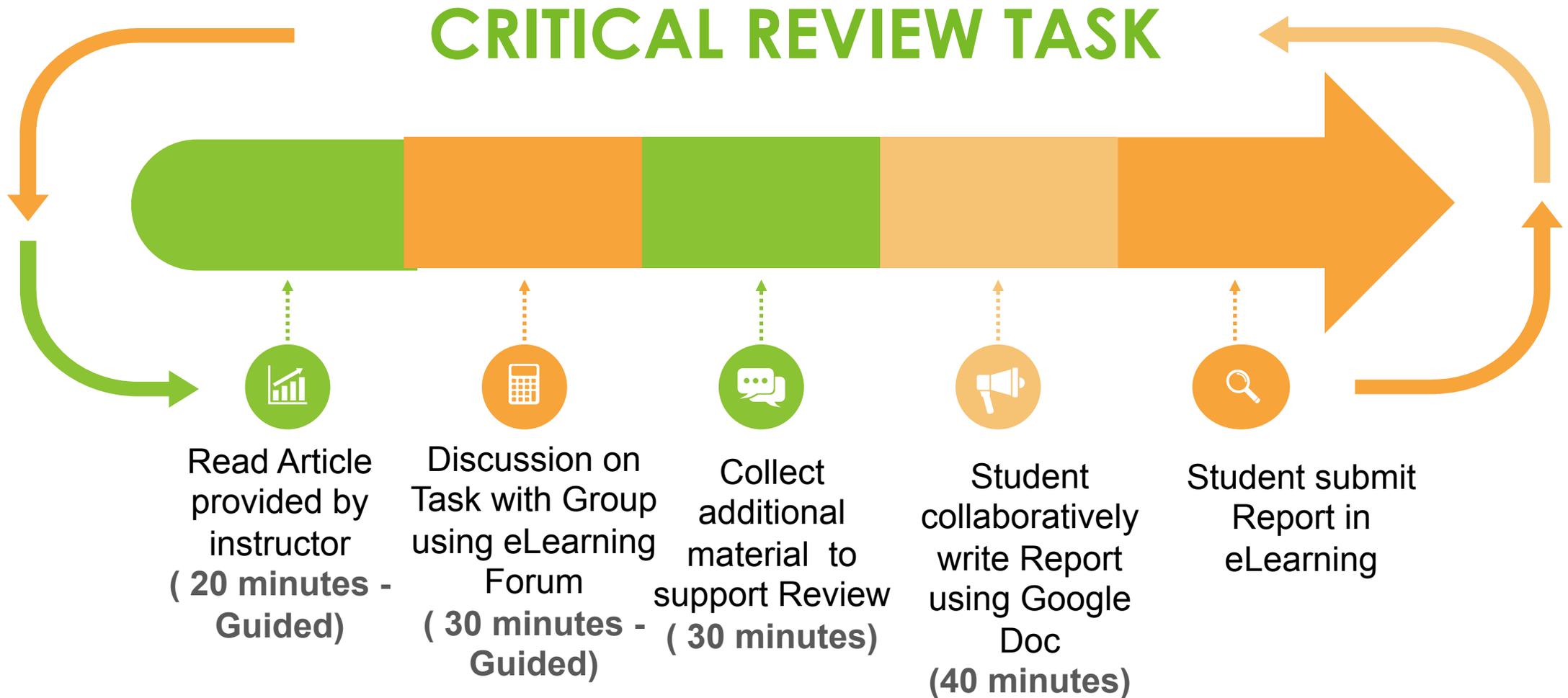


Examples of Online Assessment Tools:

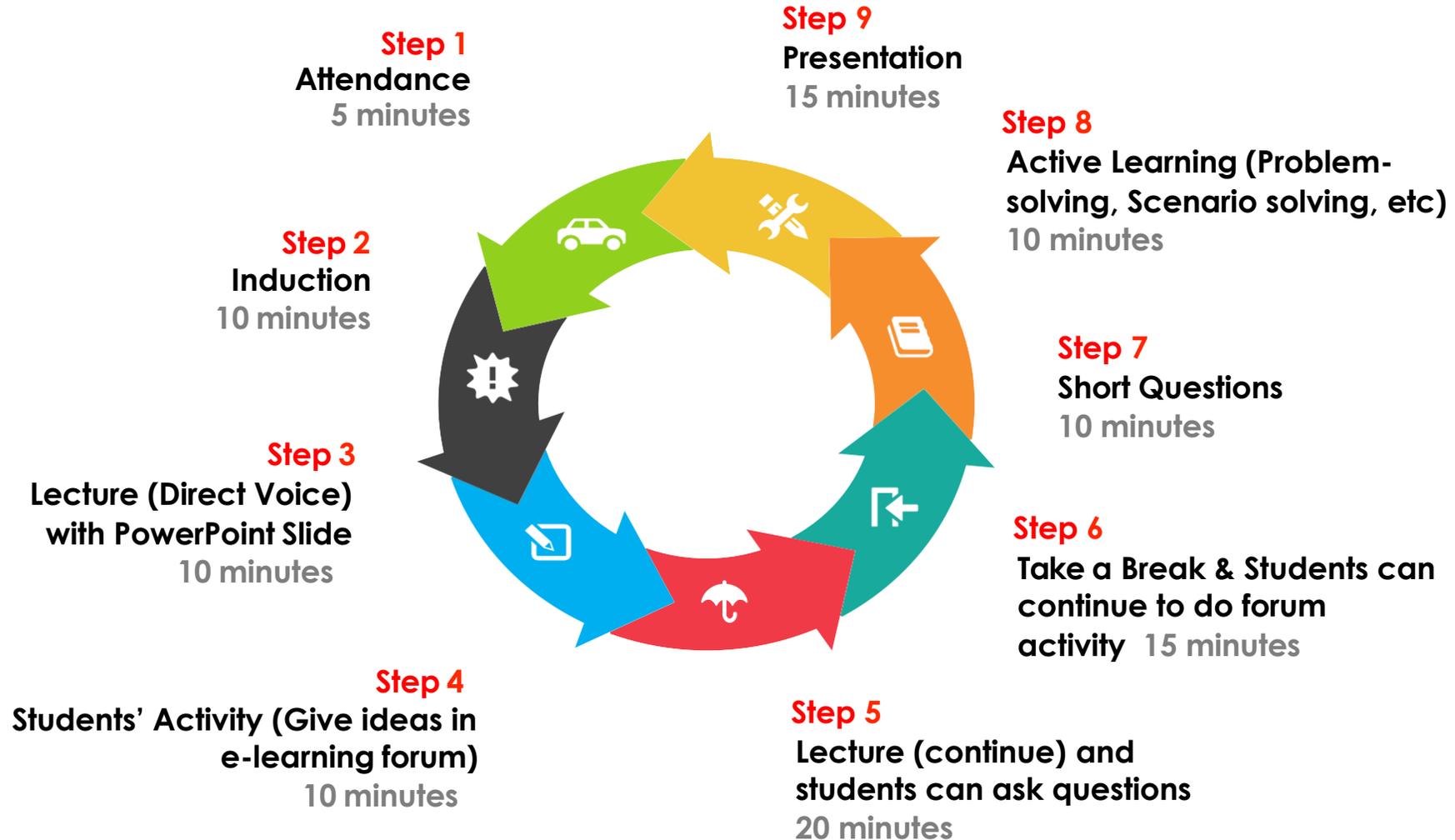
Students submission at : e-Learning UTM/ Youtube/Padlet/ Trello

Assessment

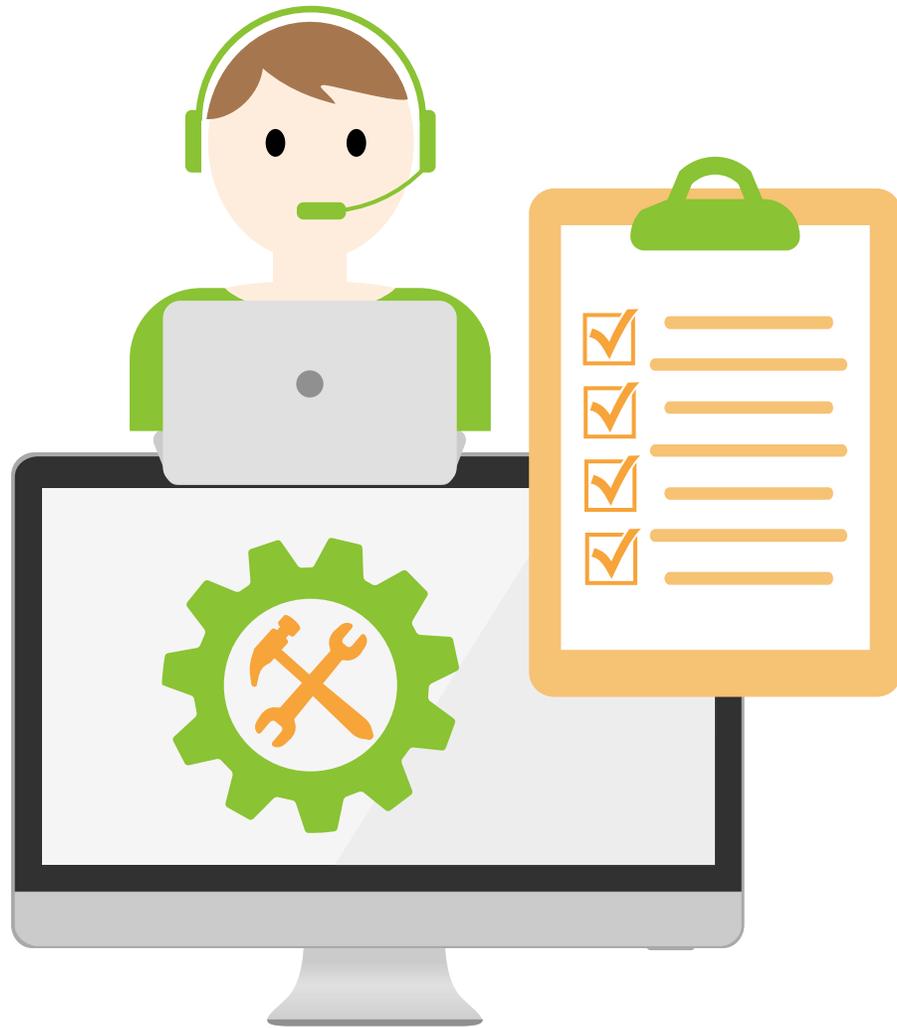
# EXAMPLE FOR TWO HOURS LESSON : TASK BASED ONLINE LEARNING



# EXAMPLE FOR TWO HOURS LESSON : SYNCHRONOUS ONLINE LEARNING



# MANAGING ONLINE LECTURE TOOLS



<https://olc.utm.my/>

## ONLINE LEARNING

**USING**

**BIG BLUE BUTTON** for  
online lecture

**USING**

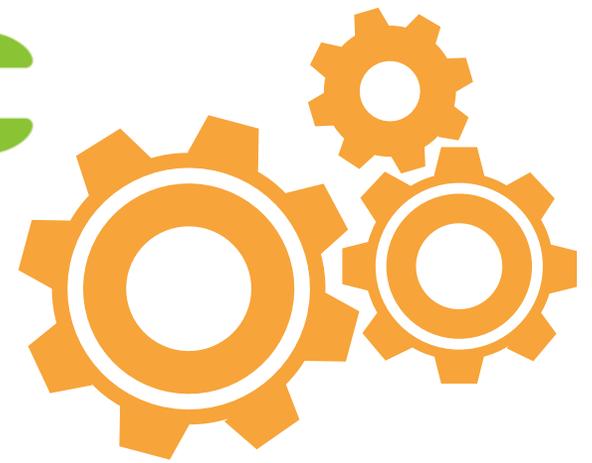
**ZOOM MEETING**  
for online lecture

**USING**

**WEBEX MEETING**  
for online lecture

# BIG BLUE BUTTON

## in e-Learning@UTM



live learning session with up to  
**100 number of students**

Allow screen sharing  
Allow break-out rooms  
Allow polling activities

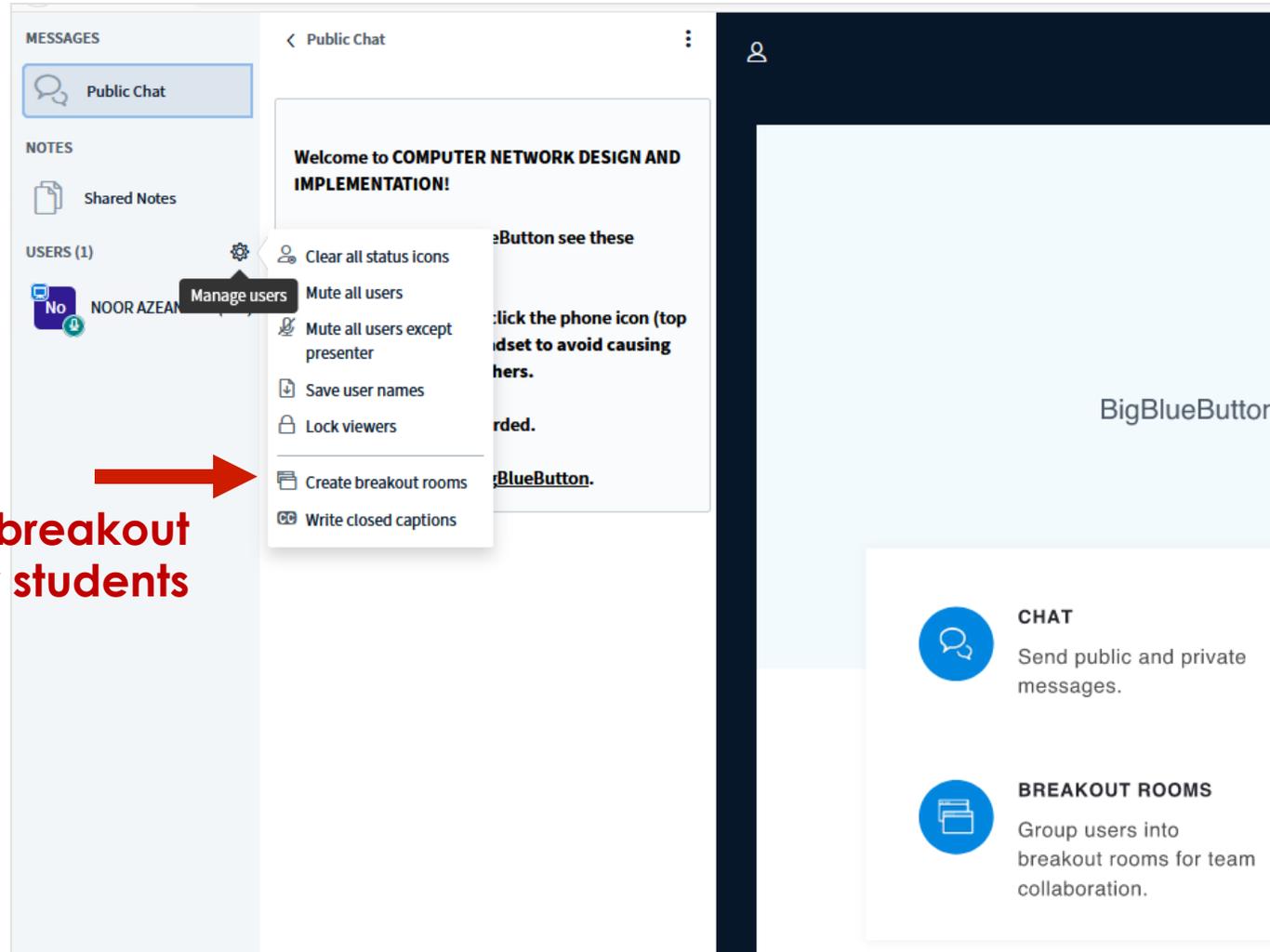
| Allow slide presentation upload  
| Allow live session to be recorded  
| online whiteboard

# BIG BLUE BUTTON

An open source web conferencing system for online learning

The screenshot displays the BigBlueButton interface. On the left is a 'Public Chat' sidebar with a message history and a 'Send message to Public Chat' input field. The main area shows a presentation slide titled 'COMPUTER NETWORK DESIGN AND IMPLEMENTATION' with a 'Start recording' button. The slide content includes a UTM logo, the text 'ONLINE LEARNING', and a main heading 'How can you create an innovative learning environment?'. Below the heading are two bullet points: 'New technology has drastically changed the way we learn, **technology can be said to be directly proportional with Innovation in learning.**' and 'A decade ago we use to read from physically available books to learn → now most of the reading has shifted from physical Books/News to **E-books and digital content.**'. A small video window in the bottom right shows a participant named 'NOOR AZEAN BINTI ATAN 8969'. The footer of the slide features 'UNIVERSITI TEKNOLOGI MALAYSIA', 'innovative • entrepreneurial • global', and the UTM logo. A navigation bar at the bottom indicates 'Slide 3' and '100%' zoom.

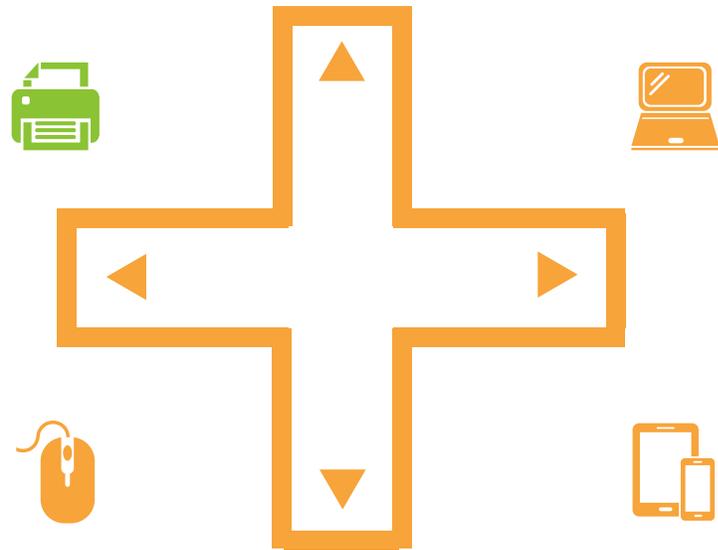
# CREATE BREAKOUT ROOM in BBB



Create breakout room for students



# CREATE BREAKOUT ROOM



## Breakout Rooms

Close

Create

Tip: You can drag-and-drop a user's name to assign them to a specific breakout room.

Number of rooms

Duration (minutes)

4

10



Randomly assign

Allow users to choose a breakout room to join

Not assigned (1)

Room 1

Room 2

NOOR AZEAN BINTI ATA...

Room 3

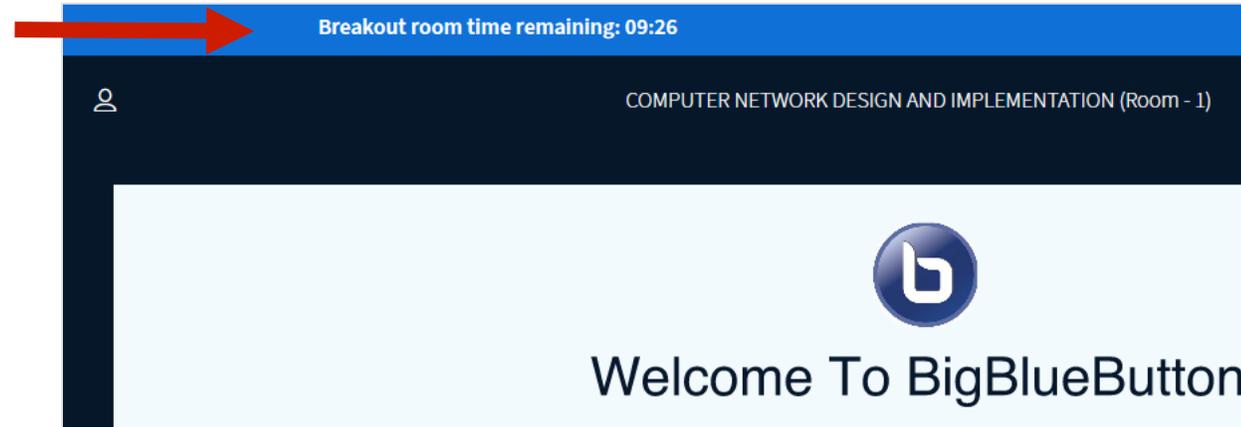
Room 4

Create the discussion room for students

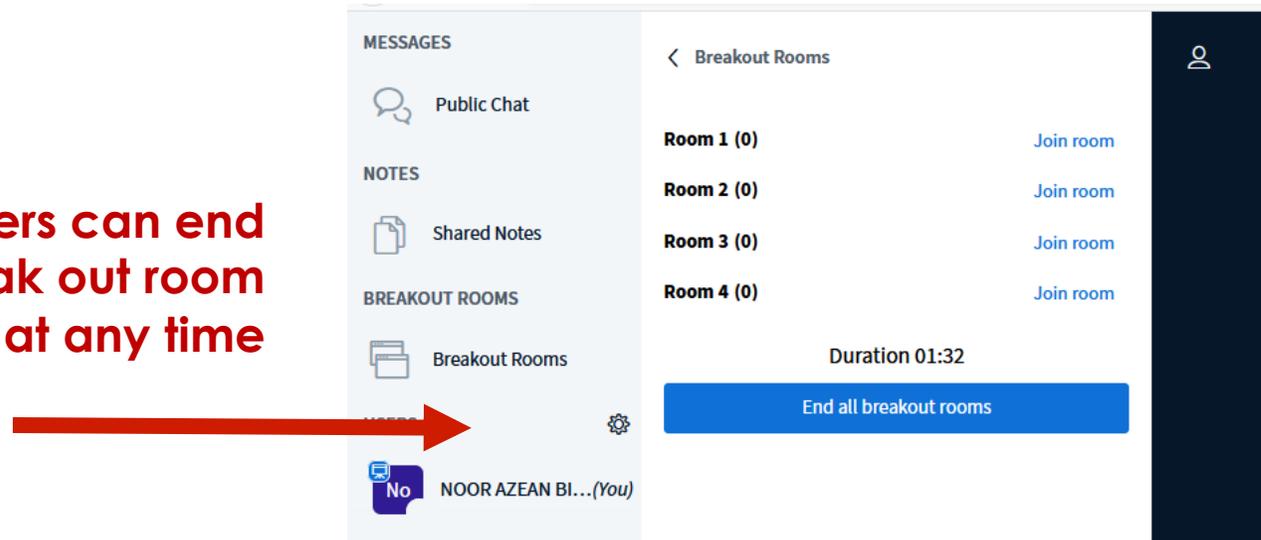


# CREATE BREAKOUT ROOM

Breakout room time is shown to students



Lecturers can end the break out room at any time



<https://olc.utm.my/>



# W E B E X M E E T I N G



**Up to 200 students**

Allow live session to be recorded.



**carry out live lecture  
with your students**

Allow screen sharing | file sharing | polling



# GUIDELINE WEBEX SCHEDULING ONLINE MEETING

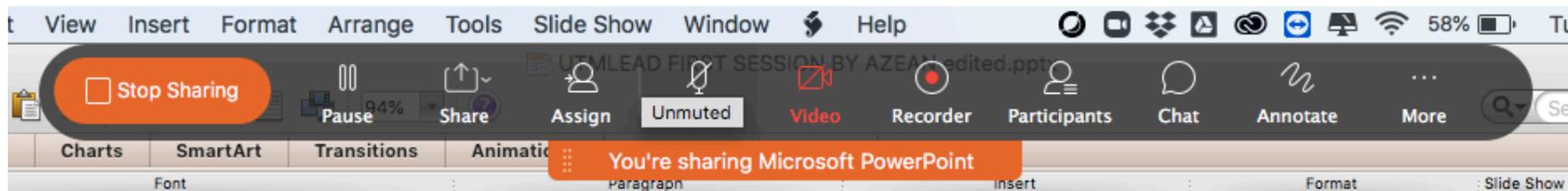
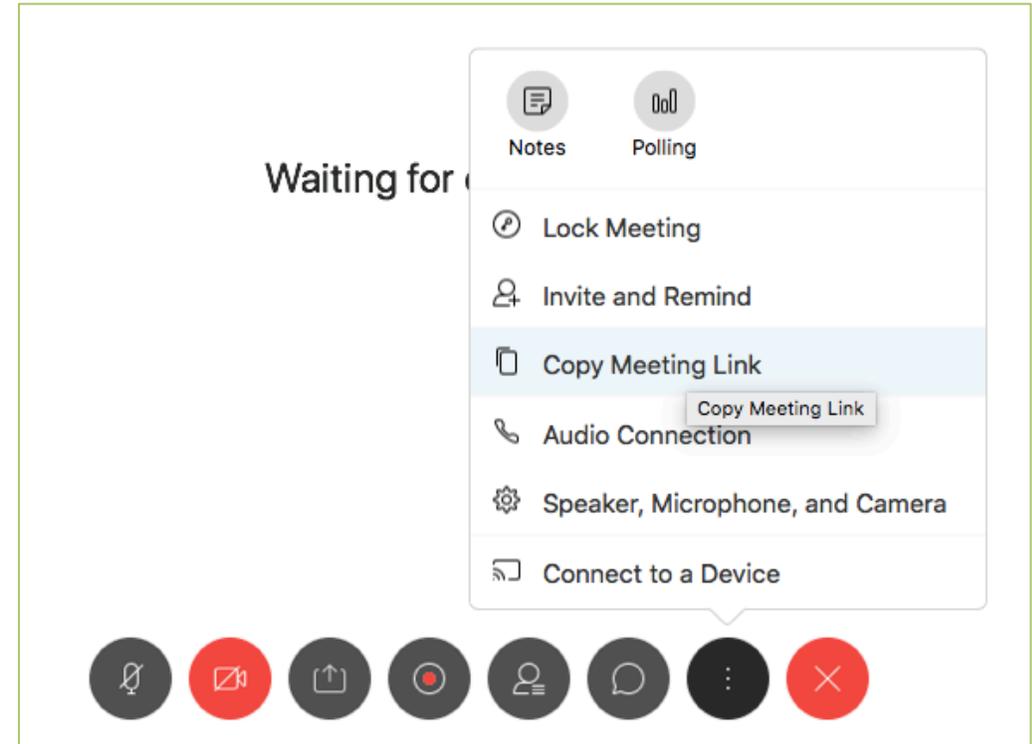
## 1 Schedule Instant Meeting

- Sign in to your Cisco WebEx Meeting Center.
- Select the Meeting Center tab and on the navigation bar select Host a Meeting > Schedule a Meeting.
- Enter a meeting topic and add your meeting invitees.
- Then select START NOW.

## 2 Schedule Future Meeting

- Sign in to your Cisco WebEx Meeting Center.
- Select the Meeting Center tab and on the navigation bar select Host a Meeting> Schedule a Meeting.
- Enter a meeting topic, the date and time for your meeting, and add your meeting invitees.
- Then select SCHEDULE MEETING.

## 3 Copy your Meeting info and share it to your students via email / whatsapp and etc.





# GUIDELINE WEBEX JOIN ONLINE MEETING

**1 Join Meeting**  
through email invitation via your official email or a shared Meeting Room link.

[Join meeting](#)

**2 Register using your real name**  
to allow other member to identify you



**3 Turn off microphone**  
when entering the 'Meeting Room'



**4 Turn on microphone**  
(unmute) and **speak when your turn is called @ when necessary.**



**5 Only one person speaks at a time**



**BY ONE**

**6 Enable Chat** features. If you have a technical problem, please **type your inquiry in the Chat area.** Secretariat/technical member will assist you.



**7 Do not panic** if you are facing line/ technical disruption. You just need to **end the meeting and rejoin the online meeting** using the link as in number 1.



**8 Audio and video quality may vary** and **depends on a device specification and network level at your location.** Refer to the minimum online Webex meeting requirements.





# MINIMUM SYSTEM REQUIREMENT FOR WEBEX ONLINE MEETING

## 1. Windows

1. Intel Dual-Core CPU 2.XX GHz or AMD processor (2 GB of RAM recommended)
2. JavaScript and cookies enabled on browsers
3. Java isn't required for Mozilla Firefox and Google Chrome users.

## 2. Mac OS X

1. Intel CPU-based (2 GB of RAM minimum)
2. JavaScript and cookies enabled on browsers
3. Oracle Java 6 to Oracle Java 8



# BANDWIDTH CONSUMPTION FOR WEBEX ONLINE MEETING

## 1. Maximum bandwidth consumption of Sending and Receiving Video:

No	Video Quality	Receive/ Download	Send/Upload
1	High Definition Video	2.5 Mbps	3.0 Mbps
2	High Quality Video	1.0 Mbps	1.5 Mbps
3	Standard Quality Video	0.5 Mbps	0.5 Mbps



# BANDWIDTH CONSUMPTION FOR WEBEX ONLINE MEETING

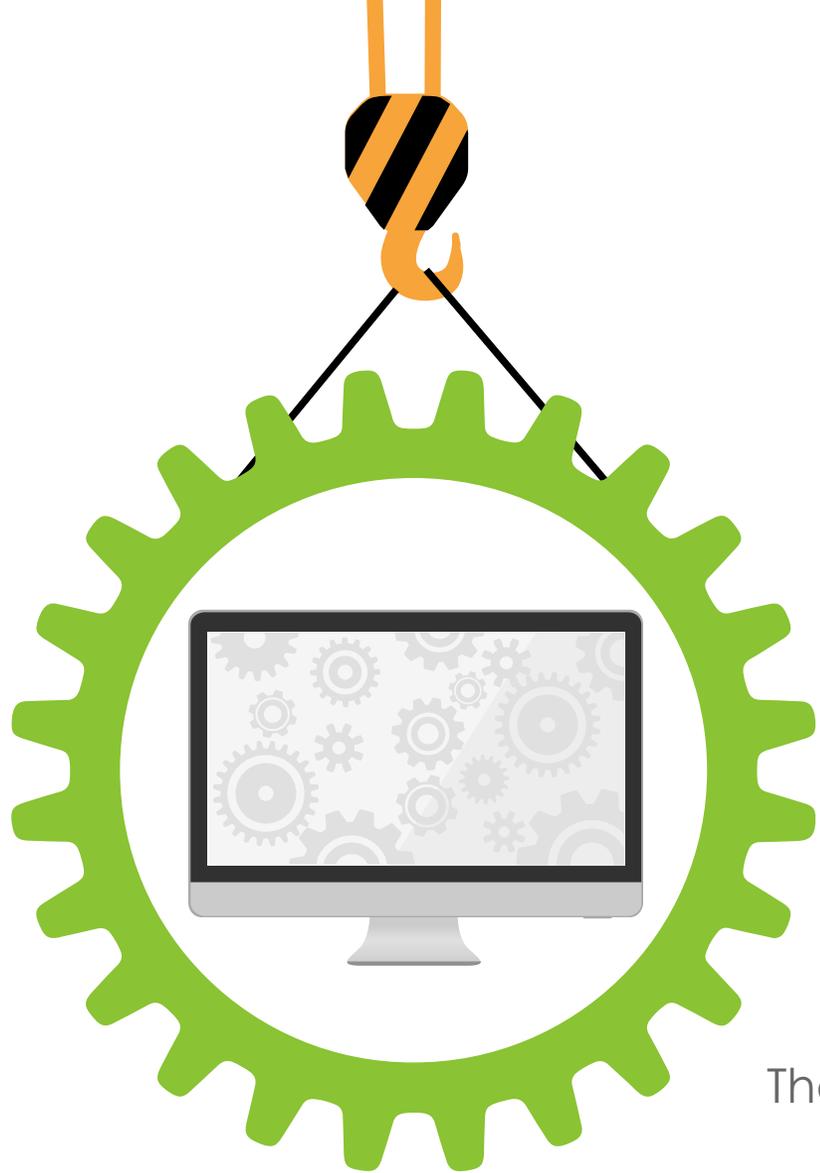
## **2. The actual bandwidth requirements and utilization will vary based on multiple factors, including:**

1. The make and model of the web camera used.
2. The resolution setting of the camera.
3. The frames per second (FPS) setting.
4. How many cameras are activated in the meeting.
5. How many active cameras are on the same network.
6. How many users are actively utilizing the network.
7. The bandwidth utilization of other meeting activities, such as screen or desktop sharing, Voice over IP (VOIP), etc.
8. Whether or not the PC in question is transmitting video, or only receiving.



Request for Webex Meeting  
account UTM

[https://help.webex.com/en-us/8bzter/  
Cisco-Webex-Meetings-Video-Tutorials](https://help.webex.com/en-us/8bzter/Cisco-Webex-Meetings-Video-Tutorials)



# Z O O M M E E T I N G

The software has to be installed  
in your local computer



Can support up to 100 students  
during one live session



# ZOO M M E E T I N G

Allow screen sharing **01**



Allow multiple user to share simultaneously **03**



**02** Allow live session to be recorded



# BANDWIDTH CONSUMPTION FOR ZOOM

## 1.For 1:1 video calling

No	Video Quality	Receive	Send
1	High Definition Video	1.8 Mbps	1.8 Mbps
2	High Quality Video	1.2 Mbps	1.2 Mbps
3	Standard Quality Video	0.6 Mbps	0.6 Mbps

## 2.For Group video calling

No	Video Quality	Receive	Send
1	High Definition Video	3.0 Mbps	3.0 Mbps
2	High Quality Video	2.5 Mbps	2.5 Mbps
3	Standard Quality Video	0.8 Mbps	0.8 Mbps

ONLINE ASSESMENT →  
NEXT SESSION



**SHARING  
SESSION**

