

# Solent University

## Immersive Web Video for Learning Engagement - Post Covid



### Dr Mike Howarth



Email: [m.howarth@mdx.ac.uk](mailto:m.howarth@mdx.ac.uk)

Mobile: +44(0)7778 537 505

See intro Video  
[here](#)

Research at  
[MHMVR](#)

### Dr Anthony Basiel

Email:  
[anthony.basiel@solent.ac.uk](mailto:anthony.basiel@solent.ac.uk)

Mobile: +44(0)7771 99 87 99  
M-F 9am – 5pm only

See the Intro Video at  
<https://youtu.be/spn7UWe99-s>



UNIVERSITY OF  
WESTMINSTER

# **Immersive Web Video for Learning Engagement - Post Covid**

## **360° Immersive Webinar design Socratic discussion Model Multi-cam Active Learning Model Interim Report**

**Dr Anthony Basiel, Louise Morell, Edd Bolton. Solent University**

**Dr Mike Howarth. University of Hertfordshire. Middlesex University,**

**Dr Li Jin. University of Westminster**

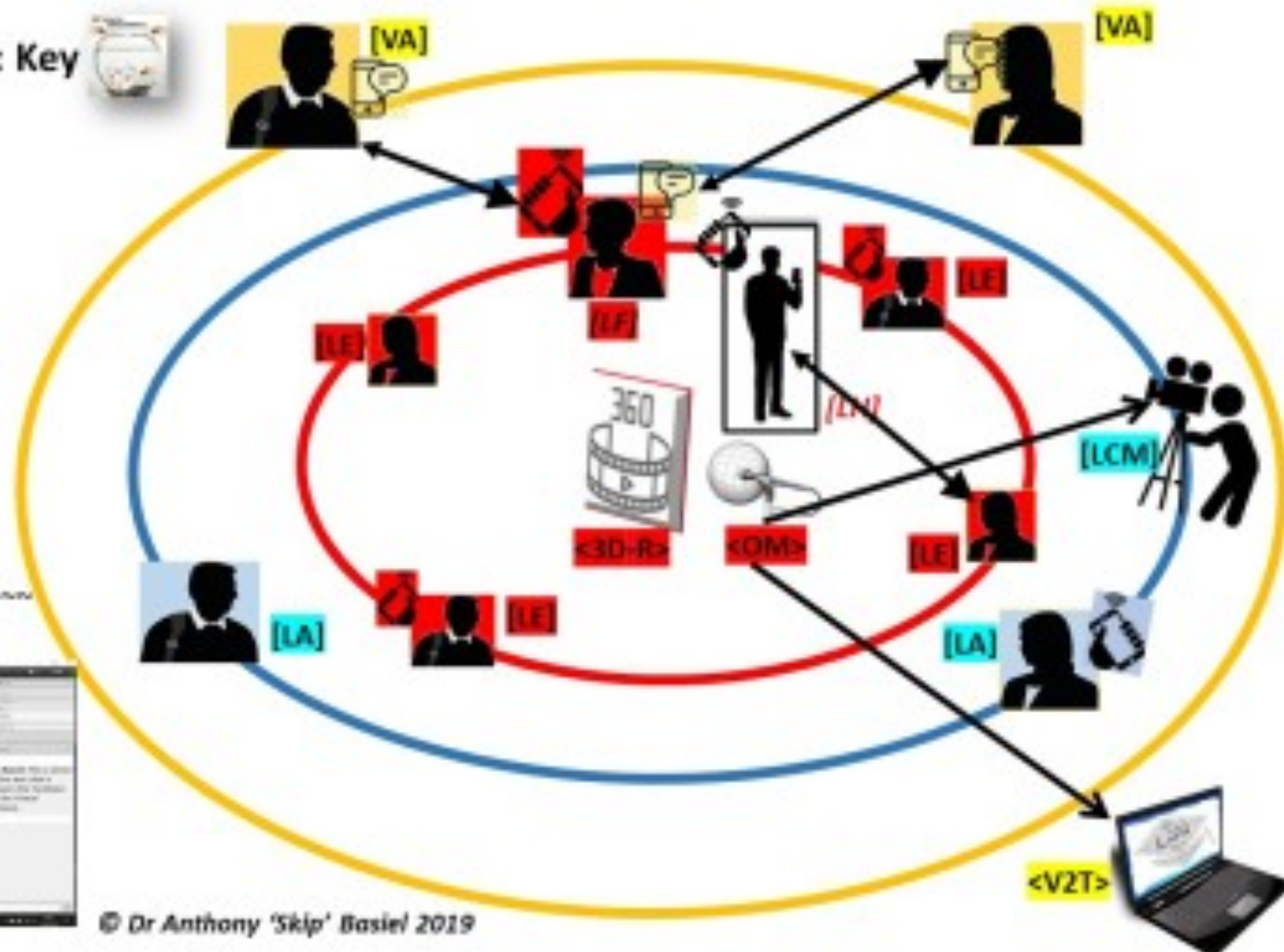
## 360 Fishbowl Webinar: Key

- [VA] Virtual Audience
- [LA] Live Audience
- [LE] Live Expert
- [LF] Live Facilitator
- [LH] Live Host
- [SP] smartphone
- [LTC] Live Text Chat
- <3D-R> 360° video recording
- [LCM] Live Cameraman
- <OM> Omni-mic
- <V2T> Voice-to-Text  
Auto transcription &  
Tag cloud

### Projector Screen Layout



© Dr Anthony 'Skip' Basiel 2019



# Summary

## USP

Academic practice  
leads design

Active Learning in  
face to face classroom  
teaching - post Covid

360° Immersive Webinar design  
Socratic discussion Model

Multi-cam Active Learning Model



# 360° Socratic discussion Model

## Insta 360 AR camera

- The AR camera captures all speakers at once
- The video becomes a clickable recording so you can drag your view to get different perspectives of the participants



# 360° Socratic discussion Model

## Insta 360 AR camera

- Seating is done in a circle, not rows – camera at centre
- The problem discussed is open-ended, no single right solution



# 360° Socratic discussion Model

<https://www.youtube.com/watch?v=2pdvsH1YOy0>

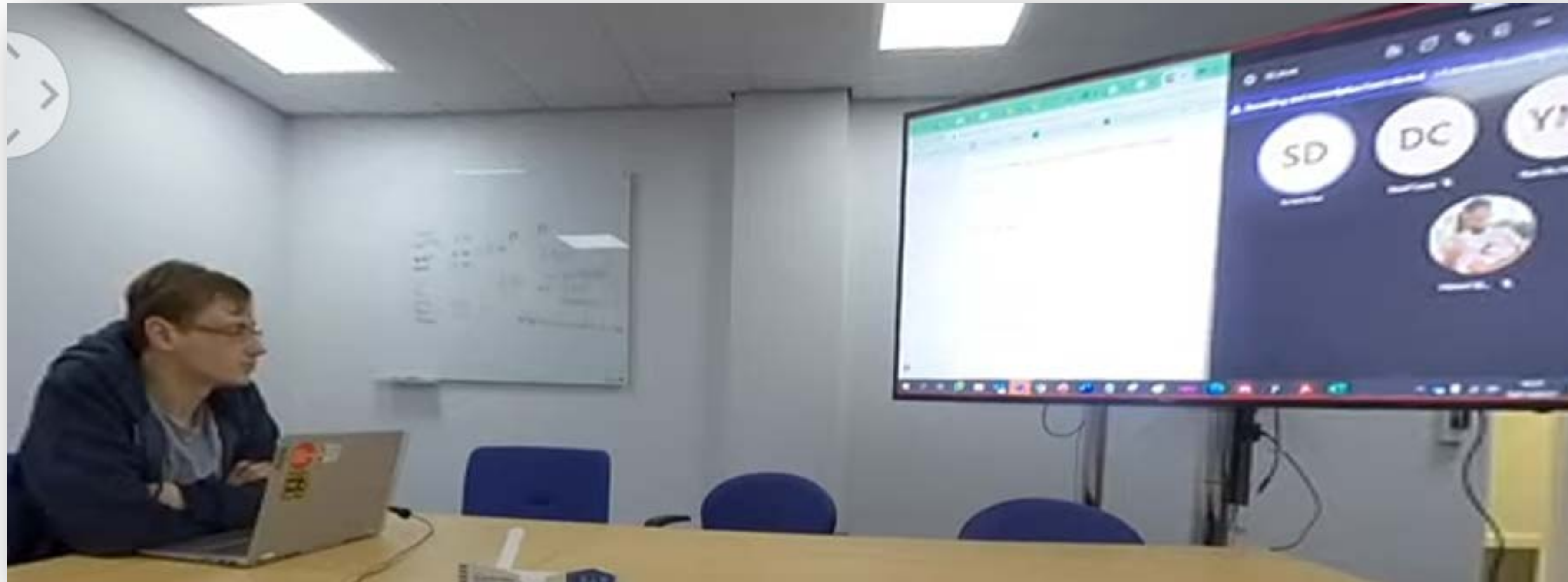
- The large screen TV brings the online audience to the table
- The AR 360\* gets all the action in the circle discussion



# 360° Socratic Discussion Model

<https://www.youtube.com/watch?v=2pdvsH1YOy0>

- While you listen to the discussion of the video recording, you can see the reactions of the stakeholders



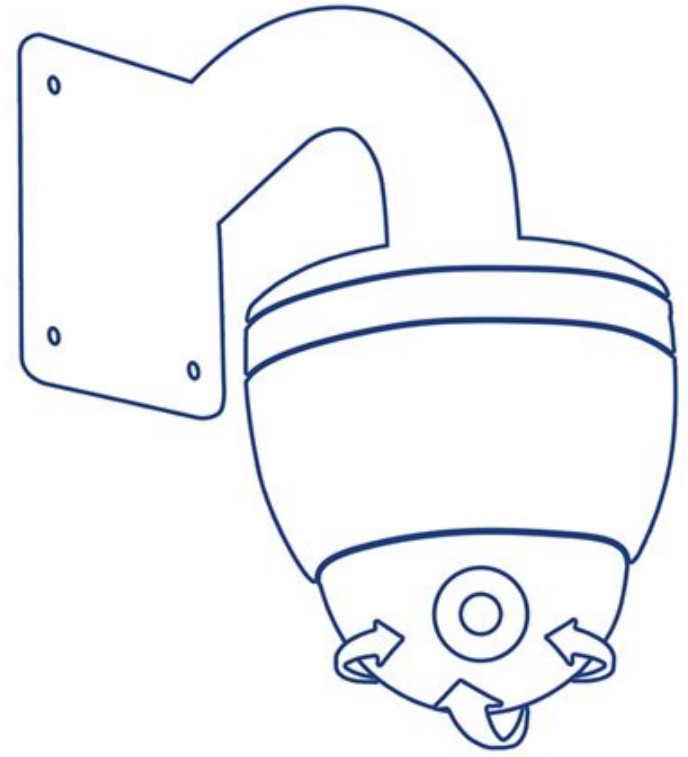
# 360° Socratic Discussion Model can become a 'fish bowl' exchange

- Next stage, an outer circle can be added for the face-to-face audience.
- When there is a question, the two people swap

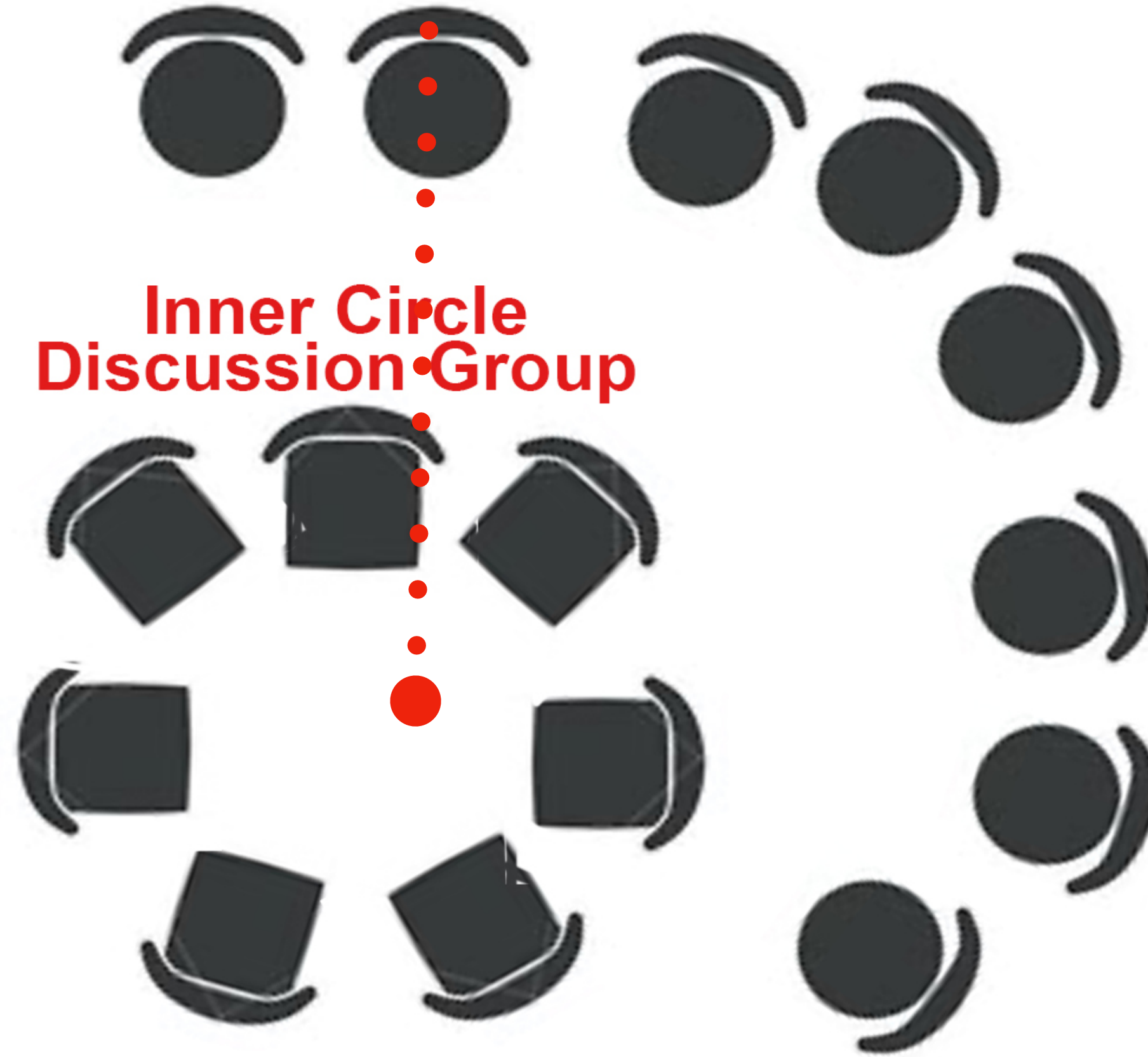




**Multi-cam  
enhanced  
45° teaching desk  
with switcher**



**Outer Circle - students**



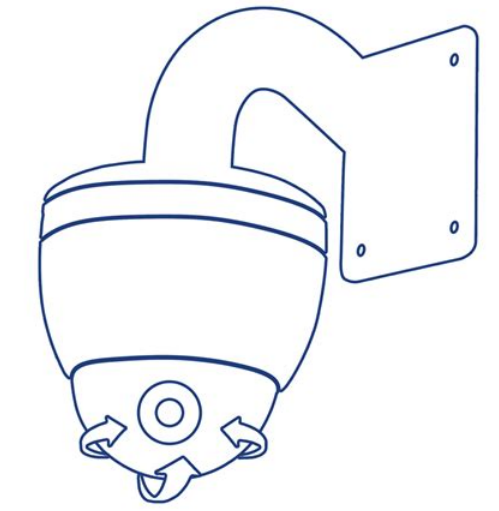
**Inner Circle  
Discussion Group**

**Digital Projector Screen**

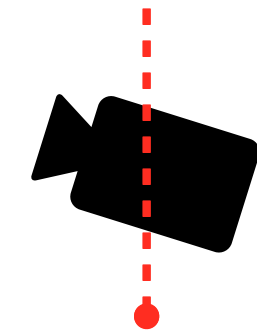
360° camera  
suspended from  
ceiling



**PTZ  
Video Cameras**



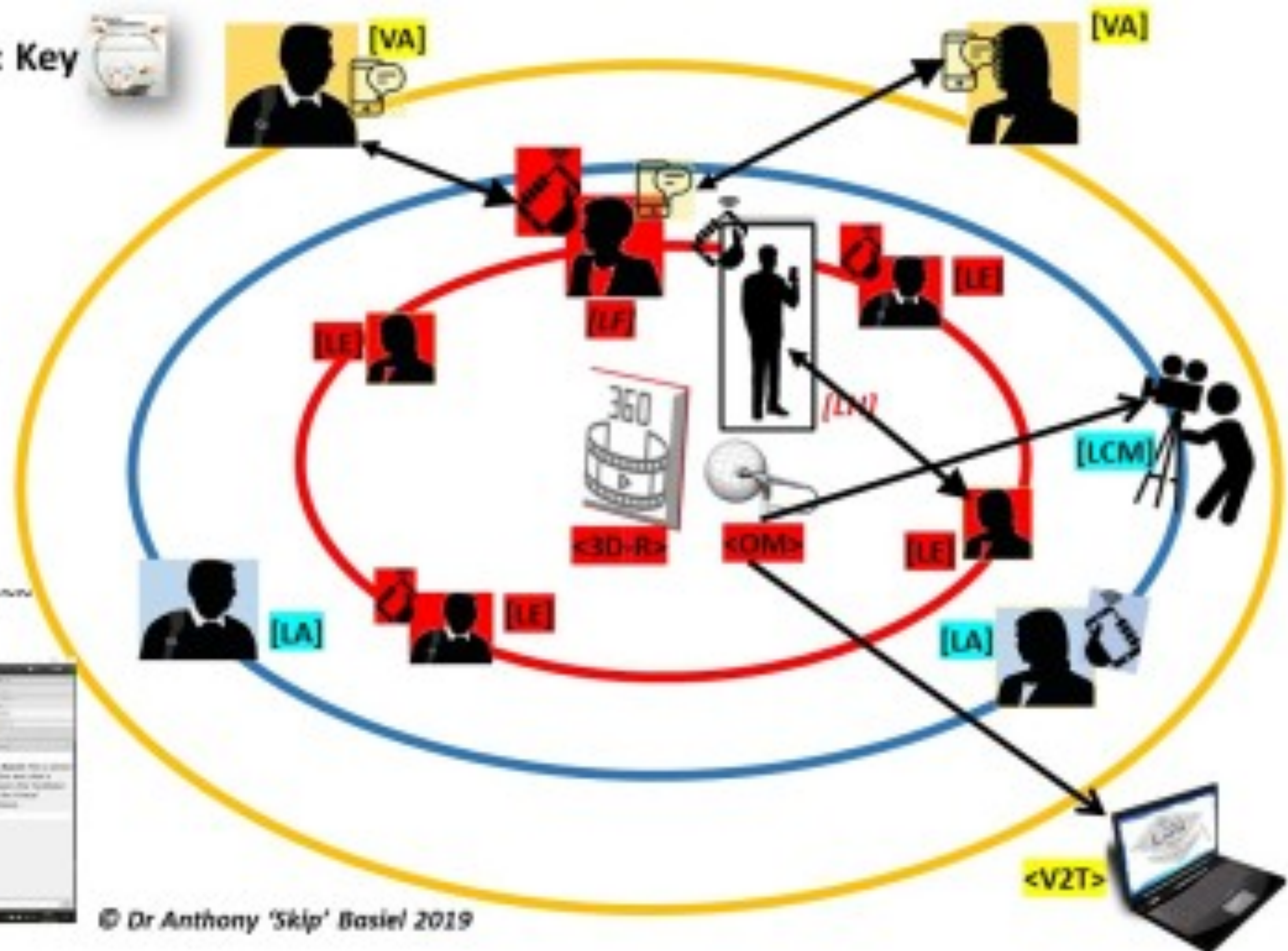
**Facilitator  
Camera**



# 360 Fishbowl Webinar: Key

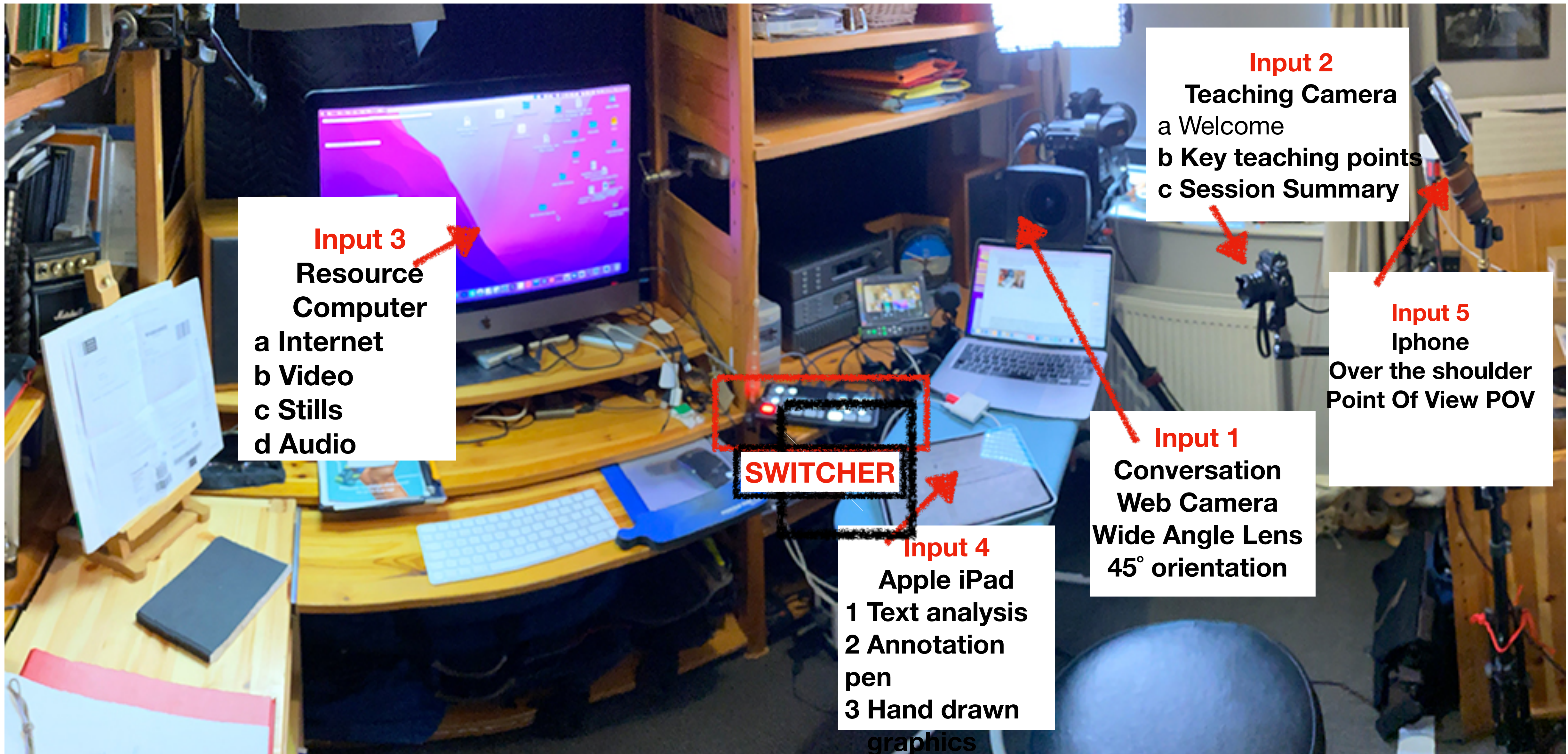
- [VA] Virtual Audience
- [LA] Live Audience
- [LE] Live Expert
- [LF] Live Facilitator
- [LH] Live Host
- [SP] smartphone
- [LTC] Live Text Chat
- <3D-R> 360° video recording
- [LCM] Live Cameraman
- <OM> Omni-mic
- <V2T> Voice-to-Text
- Auto transcription & Tag cloud

## Projector Screen Layout





## Multi-cam Active Learning Model



**Input 3**  
Resource  
Computer  
a Internet  
b Video  
c Stills  
d Audio

**Input 2**  
Teaching Camera  
a Welcome  
b Key teaching points  
c Session Summary

**Input 5**  
Iphone  
Over the shoulder  
Point Of View POV

**Input 1**  
Conversation  
Web Camera  
Wide Angle Lens  
45° orientation

**Input 4**  
Apple iPad  
1 Text analysis  
2 Annotation  
pen  
3 Hand drawn  
graphics

**SWITCHER**

**Multi-cam Active Learning Model testbed**

**Mic**

**Monitor**



**Outputs**  
Zoom Laptop  
Projector  
Live streaming  
Hard Drive

# Heart of the action Blackmagic ATEM Mini Pro 'Switcher'

£230

HDMI cables  
£30-40

**Input 1**  
Conversation  
Web Camera  
Wide Angle Lens  
45° orientation

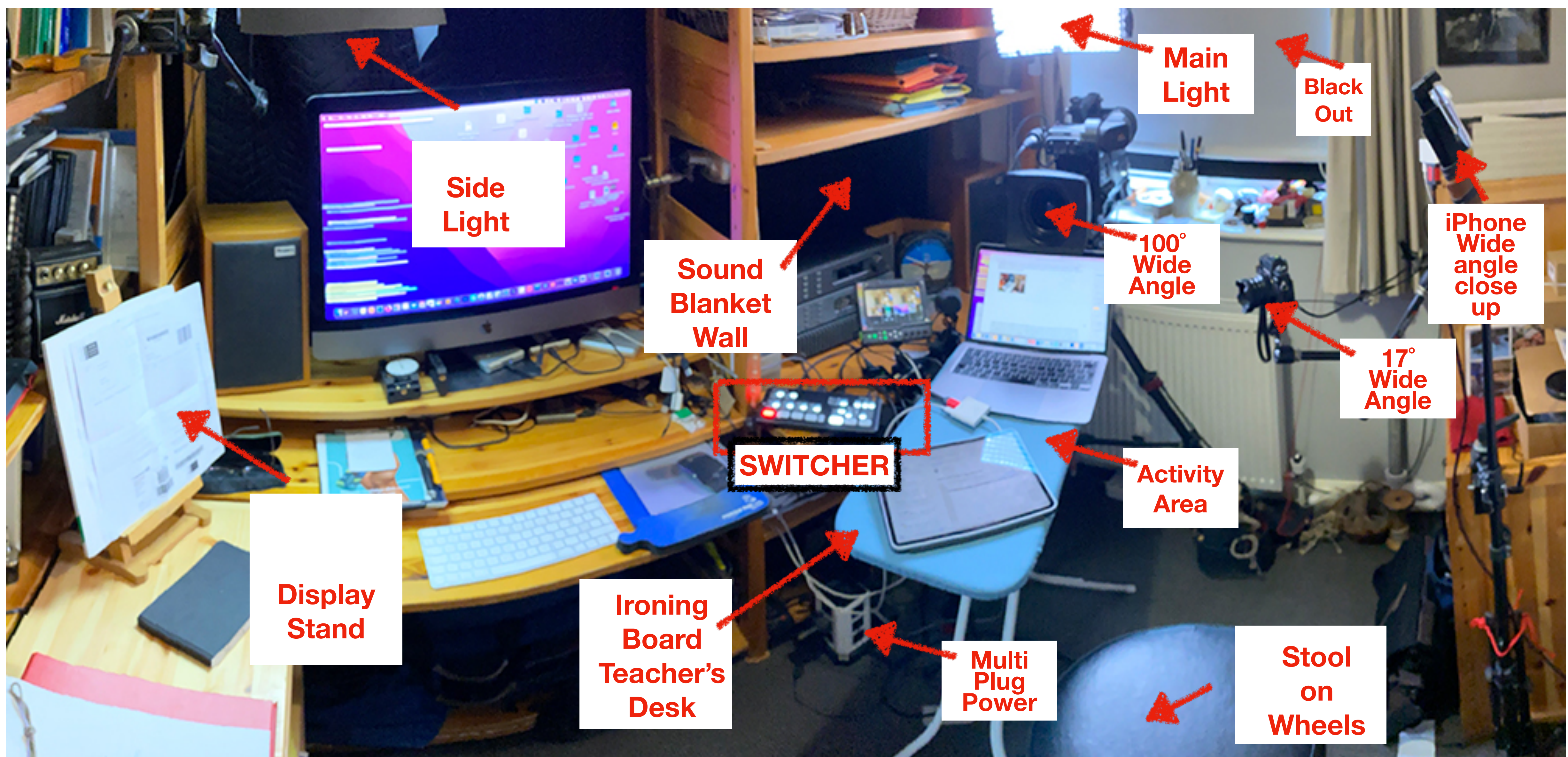
**Input 4**  
Apple iPad  
1 Text analysis  
2 Annotation pen  
3 Hand drawn  
graphics

**Input 3**  
Resource  
Computer  
a Internet  
b Video  
c Stills  
d Audio

**Input 2**  
Teaching Camera  
a Intro  
b Key points  
c Summary

**Input 5**  
Iphone  
Over the shoulder  
Point Of View POV





# Active Learning Teacher's Desk Model elements

# Summary

**Academic  
practice  
leads design**

**USP**

**Active Learning in  
face to face classroom  
teaching - post Covid**

## Interim Report

**Data still to be collected**

Case study online survey

Web video interviews of stakeholders

Online instructional designer experts

[presentation paper](#)

We are interested in finding research partners

e.g. U of Herts on the Ufi project. Contact [abasiel@gmail.com](mailto:abasiel@gmail.com)