

## HYBRID CLASSES

- **First decision is:** keep classes separate, or go 'hybrid'?
  - Separate: use different teachers, some may not want to attend in person yet; can employ best practice of looking at camera; no compromise, do each class in best possible way...
  - Hybrid: more 'sense of occasion'/Sangha even for those online? Not duplicating teaching effort/time; easier transition from online to in-person attendance...?
- **What are the issues?** (you may think of others)
  - 1 - engaging both audiences: best engagement for online folks = you looking at the camera; which would disengage the 'live audience' and vice versa. Extra mindfulness required? Has to be as good an experience for those online as those in the room (ideally)
  - 2 - equipment intruding: the teacher needs to be in front of the camera (and mic if not using a tie-clip mic) which could be a barrier, and another point of disengagement for folks in the room. If using a digital camera, you can mitigate by zooming in from further away. Also possibility of technical hitches that hold up the class for those in the room. Beware of cables and mess!
  - 3 - if the teacher does their best to give eye contact to all parties, and equipment isn't too prominent, what do you think will work best in classes? Talks, inputs, seem workable, as does meditation - discussion groups can be done simultaneously in the physical room and in Zoom breakout rooms. Plenary sessions and Q&A's - care must be taken that attention is fairly distributed, that questions on chat get read out (possibly combined), and that comments/questions from the floor can be picked up by your mic, or repeated. Probably need to be a bit snappier than usual?
  - 4 - your team needs at least one, preferably a few, who are confident setting up the gear, negotiating Zoom, breakout rooms, relaying questions/comments, managing participants, checking it's all working OK etc. Do you have that potentially? You can't be teaching and also trying to check comments and everything, unless you are somewhat super-human!

### **Then there is the question of 'what gear', what kit, what technology?**

As it's unclear how long any of us will keep hybrid classes going, I'm assuming most Centres will

prefer a fairly budget approach, using existing, borrowed or cheap kit. If you're going for a more professional look, you will no doubt put in the research yourself.

#### **Most basic:**

- **Smart-phone:** most have decent cameras, but not all will have good enough sound/microphones - **this is crucial** - if people can't hear clearly online they won't stay around. You can get various plug-in mic's but obviously check compatibility - also work out whose phones you'll be using (unless you can get a dedicated one for the Centre) and test in advance. But if you can work out the sound, you simply need a tripod with a clamp to hold the phone securely, and you can either live-stream direct to Facebook, or to YouTube (but you need 1000 subscribers to do that on a phone).
- You can use your smartphone for Zoom, either by using the Zoom app on the phone, or using another app to effectively make your phone act as a webcam for a laptop.
- Either way, it could be an affordable option - just don't skimp on getting the sound as good as possible.
- Bear in mind things like keeping it plugged in for power (live-streaming will eat up battery fast), turning off notifications etc
- Unless you are using it as a webcam, bear in mind you are dependent on the quality of the wifi in the room. This is **another basic** to have sorted: Zoom needs between 1.5Mbps and 3Mbps (up/down) depending what quality the video is (720px or 1080). Wifi can often be fine but inevitably there will be lags/stuttering which can be mitigated against by using an **ethernet cable** into your laptop if you possibly can. They are cheap enough.

#### **Slightly less basic but perhaps the best budget solution:**

- Use a laptop, wired into the router with ethernet cable, with Zoom, and utilising a webcam and separate microphone. So let's look at this setup
- Normally the webcam is inbuilt or sits on top of your monitor - neither will obviously work in a hybrid situation, so the laptop will need to be to one side with the webcam (or a sufficiently long cable) plugged in, and held steady on a tripod - not too flimsy if you've got wooden flooring.
- Webcam video is usually OK though try and get one that does at least 1080px (suggestion will be in notes we're collating) but their sound isn't all that great, so please consider a separate microphone. The least obtrusive is a lapel mic, either with a long enough lead to

plug into the computer, or using a bluetooth mic - beware battery life on those, keep rechargeable batteries at the ready.

- Lighting may be an issue, especially as the evenings get darker. Our eyes adjust well to low light but video doesn't - affordable LED lights make a big difference, again placing them not too obtrusively if possible.
- So we've got decent video, with decent lighting, and decent sound quality, and decent internet - what else?
- The **laptop**: I presume most of you will not want a desktop computer set up in the shrine-room! It doesn't have to be super-duper but will benefit from a reasonable amount of RAM (8 or 16GB), ideally a solid state drive, 4-core processor, decent graphics card - the sort of machine one would get for gaming. This applies more to situations where you're feeding in more than one camera. That said, I believe Brixton are using a nowt-spesh laptop from Ebay, so as long as it's not a dinosaur it's worth trying.

#### **The next level up....**

- To get more professional looking, and loads of great options, with split screens, transitions etc, use software like [OBS](#). Not getting into it here - but Brixton use it

#### **You might like to discuss:**

- Do you have the people to make this a success?
- Do you see this as a long-term project or a stop-gap before we're back to 'normal'?
- Would it be better for you to keep these audiences separate, or go hybrid?
- What sort of online content do you think would engage young people or new audiences?  
This is an opportunity for creativity, not just doing the same old...!
- What aspect of the technology do you feel you need more help with?

#### **A few suggestions for kit and more info from Viryanaga and Aparajita:**

**Webcams:** <https://www.logitech.com/en-gb/product/c922-pro-stream-webcam?crd=34>  
<https://www.logitech.com/en-gb/product/streamcam#section-product-hero>

Or something like: Zoom Q2n-4k: cam/mic £230-ish, supply might not be quick  
<https://www.youtube.com/watch?v=JUmmWJurzwU> intro video

**Microphones:** Rode microphones are good eg:

<http://en.rote.com/microphones/smartlav-plus>

Or USB lapel mic:

<https://www.amazon.co.uk/Microphone-FIFINE-Computer-Lavalier-Mac-K053/dp/B078TFH589>

Note - you need a 'TRRS' microphone to use it with a laptop/phone, not a 'TRS' type which is more common for audio mixers and so on. It's well worth investing more money in a good microphone over a good webcam, most webcams now will do a decent job whereas for sound the difference between cheap and expensive microphones is huge.

**Laptops:** Most laptops will do, and streaming isn't all that intensive (Brixton use an old HP elitebook I got for £200), however most laptops don't handle sound all that well as they only have basic sound cards and the tightly packed electronics in them causes interference. You therefore might want to consider pairing a cheap hand-me-down laptop with an external USB soundcard/audio interface for cleaner sound with less background noise.

**Lights:** and stands are cheap and easy - pretty much any kit off ebay or amazon will do - but it is really worth having them. I'd recommend going for LED though. It doesn't even matter if they have dimmers or not, we just hang pillow cases or stick paper over them to get the right intensity of light we need depending on the situation.

**WiFi:** is a weakness as it can drop out, so Brixton hardwire their laptop into the router with a long ethernet cable when streaming just to be on the safe side. A 50 metre one of these will only cost you about £20, and you never have to worry about signal strength.

#### **Higher tech:**

- Basic intro to livestreaming: <https://www.youtube.com/watch?v=1pFyjFhinIs>
- Streaming to FB live; OBS; Twitch: <https://www.youtube.com/watch?v=q6AHphJXl4>
- YouTube livestreaming - need 1000 subscribers if using mobile (no restriction on webcam/computer)

OBS: some of the possibilities if you have good tech team:

<https://www.youtube.com/watch?v=j2HzbY8E4yQ>

Sikkha advice for tech teams for livestreaming:

[https://docs.google.com/document/d/1LIAdhv5k\\_4qO8FlqPyNBQlpKPvT\\_tC2HrHb25Sf54ml/](https://docs.google.com/document/d/1LIAdhv5k_4qO8FlqPyNBQlpKPvT_tC2HrHb25Sf54ml/)

Very full doc exploring communication and publicity (35 pages!) - everything from objectives, who you're trying to reach, making your message relevant, choosing best content to which channel to post your content to reach your audience.

<https://docs.google.com/document/d/1OfYARaGIKW-AxGOUerUDznhlfjZEnjT1PgFXpsjuSo/>