Final M3 What do physical classrooms need to facilitate HyFlex instruction

In order to facilitate effective Hyflex instruction in our classrooms, I think there’s a couple of critical components. Clearly the classroom needs to have adequate audio and visual technology to capture what’s going on in the classroom well for the online synchronous students who are streaming in live but also to capture it as recording for later for asynchronous students and other students quite honestly to review so that means you have to be able to capture primarily audio is the most critical aspect of this from our experience. So when students are asking questions we should hear those students asking their questions and you know if it’s just the faculty who’s repeating every question that a student gets because there’s not real mic that can work but it's certainly a less than I think less than ideal solution. So how do we capture those students? Do we have room mics? Do we have ceiling mics? Do we have other kinds of microphoning system so there are lots of different solution out there for tha that’s really important what about seeing students in the classroom? Or putting them on the recording? In most cases we want to have a whole class view of the the class when we’re recording for for um for um later reuse but we also want to be able to focus on the presenter whoever that might be. Whether it’s the faculty member, or a guest presenter, or a student so I think you have to have a couple of different room views I think you need to you know ideally you’d want a whole a whole room view but as well as a presenter room view like or a presenter iviewer like you might expect so that’s important as well. Now students they’re speaking this is where I don’t think we necessarily have to have a camera focusing specifically on them if they’re just asking a questions from the class but if we have a whole a whole camera or a whole room view we’ll see that motion we should see see where that student’s asking the question from and so I think that might be good enough now it’s also important I think to show students who are synchronously online to the people in the classroom in ways that make them more than just tiny little box on the screen at the very front of the class and so if we have another perhaps a side view screen or a a creen off to the side that shows these the the synchronous learners right maybe it may be the back channel you know or something like that over there as well I think e do a much better job of keeping in mind that there are others in this class beyond those of us sitting in the classroom. There may be five or six or ten of us here well there’s another eight to ten people on line and there they are I can see them and so that’s an important aspect I think also of kind of the technology in the classroom. You know clearly if you have classrooms that are set up for active learning where students can move around you can group around tables etc those are always good things to support learning uh in any kind of class including a hyflex class So that’s important I think that the more we teach with active learning activities in the classroom we also have to be able teach well with active learning activities in the synchronous classroom which means we need to have good breakout rooms. I sometimes try to connect in-class students with online synchronous students in breakouts if the noise levels and the basically the technology and uthe uh the personal audio visual or the personal audio really in the classroom supports that uh if I if it doesn’t support it fine we’ll just do we’ll do online breakups we’ll do classroom breakouts but we’ll report out consistently so those are important aspects one other think I’ll say uh is that the classroom technology that students have access to will help them interact with on the same in the same platforms at the same time with online synchronous student and so to the extent you can have students in the classroom sharing or having technology you can use you know shared google spaces, whiteboards whatever it happens to be that’s also a good idea for a set up in your class which means you have to have a good wi-fi or network set set up in your classroom that you can rely on as well. So based on our experiences um and research within cairo leuven we know that making the remote students visible is very important we know that it’s its it’s um it requires a lot of technology and it creates it requires a special room but we know we I did personally the research to investigate um what the set design um improves so how the set design improves the quality of teaching also the quality of engagement and we know that if you make sure that your remove students are also visible on screens and then ask again also ask this teacher should ask remote students to turn on their camera and they need to and also the remote students need to um have the experiment experience that um their camera needs to be so they are it’s an interactive session but then we know that it’s it’s it’s really needed and it’s really effective and the the the way a room is is designed really uh really has an affects yeah the quality of teaching and learning in a hyflex way. A lot of technology a lot of good at least for one direct I would say high impact cameras because one biggest problem which I see is students not being able to see what is written on the whiteboard or if I am showing up a book or a text or something that’s absolutely not seen so that adds on like at multiple levels doing things adding things on zoom or scanning the page of the book and then sending it across on so so that would actually save so many other things which we are paraphernalia and possibly spending more time in doing those things because technology is our technicalities ais not really effective so high power or high impact cameras very important uh also things which allow group work to happen more effectively and group work not just breakout rooms but if somebody wants to partner with uh like on some days as I said just yesterday last week I did an assignment where assignment was designed in such a way that some people who were in class were doing it as a group some people who were on zoom were doing it on zoom it was a continued a scaffolding exercise it went off to the next week next week the scenario changed some of them who had come to class were not there were on zoom now in those kind of mechanisms is there a way that effortlessly you can you can just do the group work with your peer or with our partner who is online out there without disrupting the whole modality of the exercise per se. Uh, third I would say elements of very creative exercises or applied exercises. I think it’s still very challenging to know one if the student has at all understood it so say for example today we are explaining or doing we are doing a role play role play to uh exemplify empathy or to explain collective trauma uh now role plays and stuff like that very different if it is if it is uh happening it’s not a theater which you are saying out there uh so so I think it’s very challenging for creative exercises applied exercises group exercises and cameras. Audio audio is key; you can’t really have a synchronous session if the online participants can’t hear what the classroom is saying. They need to be able to hear what their peers are saying in any discussions um you also need a strong internet it’s really challenging if the streaming isn’t smooth we for the pandemic or during the pandemic we upgraded our classrooms so they all have the same equipment a pan tilt zoom camera a document ampera that I’m on right now. Quality auto and audio and a touch screen monitor and then all the classrooms re the sme so faculty have the same experience no matter what classroom they’re in it is really really hard to teach hyflex if the equipment doesn’t adequately support it it is great to have multiple screens if possible to view the online students that isn’t always possible and then make sure that you know how to uh get tech support if needed quickly. So I’ve taught in a lot of different types of hyflex classrooms and I think it really depends. It's important to have two screens I think. One screen where your material is on your powerpoint for example the other screen showing the zoom or other conferencing applications you're able to see who’s in the class if they raise their hand to participate and so on. Sometimes this is difficult to do. I walk around a lot and I move my hands a lot. I'm not always focused on the screen and I don’t want to ignore anyone so maybe having like an audible chime when somebody raises their hand is a good idea. I've used that a few times and I find that's effective or ask somebody from the class to just basically run the zoom part if they see anybody has a question just signal to me and I’ll and I’ll uh I’ll answer. So I think it’s important to balance that to be able to see the screen to be able to monitor what’s going on and to have like awareness of what’s happening in the class both from the asynchronous I”’m recording the video for students later perspective as well as for the synchronous students online and the ones that are face to face in the classroom. Classrooms that are set up to be able to be taught in the hyflex modality need to have adequate audio equipment so both speakers and microphones and cameras that pick up the majority of the room so that we can you kind of feel part of the room. I don’t believe you need television screens all the way around the classroom things like that where you see these really like hundreds of thousands of dollars in classrooms an things like that but they do need the people that are virtual need to feel connected somehow that could be done simply through like an owl I was talking about but you know so it’s adequate microphone adequate camera to be able to pick up adequate lighting um and because a lot of that learning that’s happening in the classroom is active learning also the classroom needs to be set up to be they can easily move it’s not straightforward like lecture type of calls it needs to be able to break up into groups easily. Um, this is usually will be outside of any health concerns or anything like that because health concerns okay make it so we don’t want to come up in these groups but outside of that we want to create an environment that is an active learning environment but also one that will pick up sound that’ll pick up video that will give people an excellent experience even if they're not sitting inside the classroom and then the people of course inside the classroom need to have an excellent excellent experience as well. Certainly the classrooms need to be very high tech. When we think about combining students that are learning in a synchronous online and synchronous in person experience we need to have the opportunity to connect with these types of students at the same time. There also needs to be that high tech component of recording the material so that the asynchronous students can watch the videos or engage in that content as well. But I think another really critical piece alongside that the tech is to ensure that as an instructor you have the proper amount of support. So again, being adaptable is important in the classroom but having support is equally as important so ensuring that there is tech support that’s available or It support that's available in case you know something doesn’t work or something goes wrong so I think that you know as an instructor you definitely have to be confident in the tech tech that you have available that you can produce that ontentent aht is both synchronous and asynchronous but also to make sure that you feel confident in that you have the necessary support system that’s available to you as well as you deliver the material in that hyflex learning environment. Classrooms need to have the proper technology there should be soundproofing within the rooms uh things like echoing and noise from external factors should be taken into consideration there should also ideally be multiple screens so that if there are synchronous students it can feel as though the synchronous students are actually there in the classroom with everybody sometimes when the setup is a traditional type of a classroom set up it can create some disconnect with the synchronous students especially so really keeping in consideration how do we help everyone feel inclusive. I’ve heard of cameras that have 360 rotation and they’ll move towards a person who’s talking. I think looking at those types of innovative technologies also helps to really immerse all students into the experience.