



***Delivering remote large group teaching –  
what does the scholarship tell us and what  
are our experiences?***

**Transcript:**

**MARK**

So, welcome to this latest ASMEBITESIZE. We'll be looking in this ASMEBITESIZE a little bit at large group teaching and thinking a little bit about how we can deliver effective remote large group teaching particularly in the time of Covid. Many of us are very familiar with delivering large group teaching and we've had to adjust that. Coronavirus has forced us to do a lot more remote teaching yet familiar with remote teaching technology, some of that has been a challenge but it's also been an opportunity. It's been an opportunity to think about well how can we do this differently? It's forced us sometimes to think about well what's the evidence? How can we do this most effectively? How does the scholarship inform what we do? And so, the purpose of this ASMEBITESIZE is not for us to tell you what we think you should be doing but we want to get a conversation going, we want to work as a collaborative group of medical educators to improve how we all deliver remote large group teaching. So, the purpose of this first session is we're just going to introduce some thinking. We're going to discuss a bit about the lessons that we've learnt from our experiences. We're going to look a little bit at some of the underlying scholarship. And then we want to have a follow-up session on the 5th August at 4.30, we could be a bit more interactive and we want you to join the conversation, bring along questions, ideas, thoughts and experiences to that session. And we can pick up a little bit more about how we can develop large group teaching going forwards. So that's the plan. We're going to look a bit at how we currently deliver large group teaching, what the scholarship shows and a bit about lessons that we've learnt from our recent experiences. So, we're going to do about half an hour now and I'm going to introduce who we are. So, I'm Mark Lillcrap I'm a rheumatology consultant. I deliver quite a lot of large group teaching, I'm here at the University of Cambridge I'm the Sub-Dean for the curriculum and I sit on the ASME Board. I'll let Clare introduce herself next.

**CLARE**

Hi everybody. My connection with Mark and Jeremy is I lead the Masters and Diploma stages of the Medical Education programme at the Institute of Continuing Education at Cambridge and I also happen to be the Chair of the ASME Education Research Committee.

**JEREMY**

So, my name's Jeremy Webb I work with Mark as clinical Sub-Dean at the School of Clinical Medicine. My area of responsibility is staff development and I lead on the foundation programme for medical educators and also our post-graduate certificate. My clinical background is I'm a GP and I also teach graduate medical students on a weekly basis.

**MARK**

Excellent so we're going to kick off just by thinking a little bit about how do we currently do staff development for large group teaching and so I'm just going to give a few pointers just to trigger a bit of our own thinking about large group teaching. So, what I'm going to do is I'm going to go through a brief presentation that summarizes some of the stuff that we would talk about in our staff development programmes for our faculty about how to deliver effective large group teaching. So, delivering large group teaching. So, in terms of the things that we would routinely think about with our staff development when we're talking with our lecturers are to think about our lectures well a little bit like a good meal. We want to think about a starter, a main course and a desert. And we think about how do you attract attention? How do you activate learning amongst the students in your large group session? How do you maintain attention as you go through the session and how do you ensure that learning has taken place and promote future learning? So, whenever we're talking about large group teaching largely in a lecture kind of format, we get our lecturers and teachers to think about those key areas. And I suspect most of you who are listening to this will have come across this kind of framework in either in how you prepare your own teaching or in terms of staff development, faculty development sessions that you've done yourself. Let's just unpick those three areas in a little bit more detail. So, attracting attention; so, there are a variety of ways that we would advise lecturers to think about how to get a session started, how to grab the attention of the audience and engage them a bit with activating their prior learning. Often, we'll talk about using anecdotes or clinical cases to get that started. We might advise people to think about a short video that introduces a key area, we might present a clinical problem or an interesting fact, we might give them a short quiz at the start, one or two single best answer questions to again just activate a bit of learning before we kick into the rest of the session. There are a variety of tools that we use in our lectures to survey the audience's prior knowledge, to think about attitudes if we're thinking more around large group professionalism teaching. And we advise people to think about well what's going to be relevant to what you're covering next and what's going to be relevant to the audience and the students that you have in front of you? When it comes to the main course, how do you structure the main session? And there's a few key areas that we would routinely advise our lecturers. We advise our lecturers to be aware less is more. Limit the amount of information that you're giving. Think about chunking the content, chunk the content into sections of 10-15 minutes each so that you have regular breaks as you go through the session and that allows review time if you put pauses, silence, quietness other activities in to break up your session that facilitates student learning and enables you to maintain the concentration of the students. Sometimes you might have short quizzes, you again might use things like single best answer questions to help with that. We talk about the importance of concentration span, being aware that after about 10-15 minutes you're going to lose your large group concentration so you need to change their focus of attention. You can do that by having more than one of you facilitating so you change the focus of attention, you can do that with pauses and gaps, you can do that with activities but you need to think about that in your structuring. And in order to facilitate having those gaps you usually need to reduce how much content that you think that you're going to deliver within the session. And then finally how are you going to promote learning? We encourage our lecturers to think about well what are going to be the two or three key take-home messages that you want your students to take from the large group teaching session? And you want to make sure that links with the initial objectives that you defined at the start of the session. You want to think about well what about those activities that you

are imbedding in the chunking of the session, do they reinforce those points? Have you structured your large group teaching session to facilitate that? And encourage your students to write down what they've learnt. So, encourage students at the end, give them time to reflect on what have I learnt in the course of the past hour? What do I want to read up on further? What are the key things that have challenged me in this session? And ideally you want to evaluate that yourself and you want to find ways that you can access that information. We encourage our lecturers to think about using post-it notes or getting students to write things down that they then leave with you so that you as the lecturer can see what did my students learn from this session? Because the key thing that we discuss it's not what you teach that matters, it's what your learner learns which is important. And I guess that's the key thing that we all need to think about as we migrate from classic lecture based large group teaching to the alternative which is what we're all having to think about which is that remote large group teaching delivery. We're all getting very used to having to use various remote teaching platforms in order to deliver large group teaching and it's clearly very different it's got different challenges but as we mentioned at the start it's also potentially got some great opportunities. How can we deliver the most effective large group remote teaching? We want to promote the scholarship, we want excellence. That's ASME's vision to promote the scholarship and excellence of medical education and we want to work collaboratively. So, what we want to pick up on is well how does the scholarship inform this? Is there evidence from prior scholarship that we can utilise as we're redesigning and re-configuring large group teaching sessions to be remotely delivered that will be useful for us to think about. And so, what I'm going to do at this point is I'm going to hand over to Clare and I'm going to get Clare to just talk us through a little bit about what does the scholarship teach us here? Is there anything from prior scholarship that would help us deliver more effective large group teaching. Clare over to you.

CLARE

Thanks for that Mark. So, those who know me will know that I'll probably start by being a little bit provocative around this. And I think the first question I have been pondering with is actually what's the point of lectures? Why are we doing them anyway? Why are we doing them face to face and why are we doing them remotely? And one of the things that happens is if we accept wholesale that that's going to be our mode of delivery, we can get very hooked into the mechanics of the delivery, the efficiency of the delivery, the effectiveness of the delivery. And whilst I think they're really important things to think about for me it's always going back to well let's think about learning first. And to what extent are lectures a good vehicle for learning, and more importantly in this context what are their inherent limitations in terms of learning and therefore how can we find our work-arounds with that? And there are a number of ways at which you can go into that. There's a very good paper that was in Perspectives in Medical Education which said basically what would happen to medical education if we took the evidence seriously and it's a lovely paper by Cees van der Vleuten and Erik Driessen, so big names in medical education, and they basically synthesised the kind of scholarship of learning and they say if we're going to take the education evidence seriously we need to think about in any form of teaching and learning what are the opportunities for students to engage in thinking behaviours? So not just receptive, processing information, we know they're very good at that we know that they are good at taking large amounts of information and processing it, that's how they got into medical school in the first place and they're very efficient. So, what are the other types of thinking behaviours that we want to promote in teaching and can we do that in

lectures? And so they talk about opportunities for elaboration so the lecture perhaps being a place where it's possible to elaborate upon ideas so we then have to think about well what do they need to do before or how do you set that broad landscape of a topic so that there is an opportunity to elaborate upon ideas and to develop for example a narrative, a story, or an argument. Good learning involves co-operative learning so there's opportunities for dialogue. So, are there ways in which before, during or after the lecture whether face to face or remote, that we can foster dialogue, whether it's an internal dialogue so setting them questions and quizzes and all those things that you've already talked about Mark, or whether there are ways in which we can create spaces for them to talk to each other. And in remote learning that's often about letting go of control. Because there's no way we can then check in on every conversation that's been had, but we can create spaces where they can have conversations. And I suspect Jeremy will talk a little bit about how you do that. Good learning involves feedback so feedback to learners so it might be that we're having to do that through group work or we're having to do that through quizzes, but it also involves processes of engagement and I think one of the things learning theory leads us to think about is not only how do we make sure that students have the knowledge it's how do we help them put that knowledge to work. How do we help those students make connections between that knowledge and the clinical environments that they'll encounter, the patients they'll encounter? So, in a sense how are we going to bring the clinic into the classroom and give them opportunities to see how whatever that is you guys are teaching has got meaning and relevance and that's something that you can add, that a text book can't. It's something that they can't naturally go and scurry around and find. And the other thing is about how we make sure that we position learning in a social context so that they understand that in coming together and thinking about medicine and thinking about medical practice it's not only the content, we're also engaging with processes of professional identity formation and becoming, and belonging to something that you weren't already part of. And actually, a lecture is a good place for socialisation. And I'll perhaps sum up that from another paper that I was looking at which actually was from out with medical education, it was from Teaching in Higher Education it's a paper by Sarah French and Gregor Kennedy and they were looking at the role of lectures in contemporary higher education because they were saying there are so many challenges, they fight against us in terms of everything we know about good learning, the lecture is not a good place for that to happen. So, as lecturers we have to work particularly hard in a lecture and if we're doing it remotely, we have to work even harder, so why bother? So, you know why would we bother to continue with lectures? And I thought what they say is highly relevant to medical education here because they talk about things like cost effective modes of delivery and, you know, being able to provide content and structure, and up-to-date research findings and those kind of things, but they do emphasize a number of things and there's a couple that I think are worth thinking about is they allow you to offer sustained argument and narrative and that links to the idea about argumentation that in fact you can contextualise the knowledge, you can help those students make connections, you can help them see why it matters to know this stuff, more than just simply passing an exam. You can rehearse them in a whole load of skills that are really important for clinical work so you can rehearse them in note-taking, in active listening, in reflective practise if you're confident enough to create the spaces within the lecture to allow them to do that. And the other thing I thought was, you can model behaviour you can model thinking behaviour, you can model professional behaviour; this is how we approach our work with patients who present with these conditions, about the

language you use and how you talk about your work. And then the last one of their continued value of lectures and I think it's what I'm thinking about is they describe them as a social event that produce and reproduce a sense of shared communal understanding. And for me that's perhaps one of the most powerful things of lectures that we don't necessarily explicitly embrace that this is a space where you can lay out the land, the landscape of this is how we think as doctors, this is how we work as doctors, this is how we approach this particular field of enquiry. And for that they're really powerful. So that's all I would add to the mix at this particular point.

MARK

So, although it might take us out of our comfort zone a little bit the remote teaching offers us the opportunity to develop some of those areas more effectively.

CLARE

Absolutely.

MARK

Yeah. So, I'm just going to hand over to Jeremy at this point to give us a little bit of an idea about practical tips. Obviously, you've been delivering large group teaching during the sort of lockdown time, just a bit about how you've learnt some lessons picking up from what Clare's been discussing about the scholarship.

JEREMY

I think we'd like to emphasize the importance of planning process as much as content. And I've co-taught with Clare for a number of years and I used to always put content first and process last. Clare has convinced me of the need and I think remote teaching has made it even more. What do you want them to get out of this session, how are you going to plan the session to deliver that? And then put the content in at the end. But in fact I say content at the end but I think we're putting a lot of content in at the beginning so the thing that I have found works well and the students have loved, is the fact that you pre-warn them what a clinical session is going to be about and you give them some stuff to look at beforehand. So, now if I'm going to be running a teaching session, I will say to them on Thursday we're going to be discussing abdominal pain in children for example and here are some things that you might like to look at. So, you might like to look at this chapter in this paediatric text book or you might like to look at this video of a patient describing their experience of presenting with abdominal pain. And you can get videos quite easily online so if you just search for things for instance like inflammatory bowel disease I came up with a fantastic video of a child presenting for the first time with abdominal pain, who has turned out to have Crohn's Disease and she gives a narrative of how she's first presented and then has been managed since that time. There are some fantastic resources out there. So, Patient Voices is a really good one for giving the patient's perspective of an illness. If you want more specific clinical ones then we use a thing called Speaking Clinically which I think came from the University of Bristol which is an amazing resource where you can virtually search for a particular condition and you'll find a patient with that. And so now we preload all of our teaching sessions with something in advance to get them to look at. The other thing which you can find is if you want to go back to basic science or relate a condition to basic science there's some brilliant web pages, a lot of them from the US where people actually can draw out things and show spider diagrams and plot out their clinical reasoning and their thinking which the students loved. So, we've broken down when we've been running our own teaching sessions what we call before, during and after so like Mark's meal. So, the before is the starter where we give people the ideas about what's coming up to whet their appetite, the during then becomes much more

of an interactive session where we don't teach so much content but we build in ways of interacting with the students and then the after is where we might point them to further resources that they want to go to but as Mark also pointed out encouraging them to reflect on what they've learnt and what they've covered. So, we actually give them time to write things down or say before the next session what are going to go and look up, what are you going to go and read more about? So, that's a sort of general thing about teaching the way we've approached that. And that works well for small groups as well as larger groups. There are some particular things with larger groups that you need to be aware of that I think are very different and Clare and I have run a number of large group sessions together. We feel that actually that running much more than 25 on your own is really difficult and co-facilitating is something that we've found is really useful. So, if you've got the option to have somebody else with you then take it. Even if they don't lead the session if they can monitor things like chat and you can prime your students to use the chat facility on the virtual platforms to put in questions, then you can stop every five minutes or at the end of a particular section and then draw in questions so that involves the students. We've also learnt to use break-out rooms which are a facility which we find really useful and the evaluation that we've had from our learners is that they really enjoy that and we should be doing that more and not less. Clare you've I think had when you were interviewing for the PG Diploma some of the people on the Certificate talked about that. Do you want to just share that with us?

CLARE

Yeah so, the context of our large group teaching is obviously people doing things like certificates and diplomas in Medical Education so it's a particular context with large group teaching or remote teaching more particularly. We did run some pre-record sessions that we had this kind of dialogue and they really enjoyed them, they liked it best when there was discussion between us where it felt like there was an authentic conversation going on between faculty. They really appreciated that. But they said that what it didn't allow them to do is have that space and time and think the thing through, to talk them through with each other and to kind of develop those ideas and actually put them into their own particular context because obviously they're from all specialities, all stages of medical and dental careers and they felt that the real value that they had in the face-to-face teaching was being with peers so that they could say what do you think about this idea? Or do you get this thing about that, or I'm not sure how that would work in my context. So, I think that they felt that in a sense we were maybe a bit too rushed to kind of put them in their break-out rooms and then not pull the back again, or we were pulling them back too rapidly and that's something we're certainly thinking about. And not only in break-out rooms for formal kind of structured activities, they were saying it's nice sometimes just to have a bit of space to catch up with people to talk about what they've been doing since the last time that we had teaching, or talk about assessments that are coming up. So, for our next year we're beginning to think about how do we create some spaces for that kind of peer collaboration, that kind of social dialogue that we don't have to be in charge of. So, I think that's quite an interesting thing as the educator to kind of relinquish control really, to create those environments.

JEREMY

And I think that is something that we've both found the fact that you feel a bit out of control when you're using break-out rooms. The other thing with break-out rooms is a lot of them allocate the students randomly to the break-out room, so if you want to do some pre-course work you need to be able to use the non-random distribution which

takes a bit of a skill because you need a list of who's coming beforehand. And I'm running a clinical session next week and I've been thinking about that and I decided - it's for first years on the use of common drugs - I've just done five different cases and I'm going to break them into five groups and I need to work out who's going to be in which group but you know it does take some planning. And the question is how long do you leave them to discuss things in the group because you then feel a bit redundant. You can go off and make a cup of tea yourself and they're still there when you come back. But you can dip in and out of the rooms which has happened but occasionally it crashes the system so you just have to be aware of that.

CLARE

They can ask for help as well. Can I go back to your example of what you were doing with the lectures Jeremy with the clinical students because I think you made some really lovely points there about that before, during and after piece that so clearly echoes the paper around taking the education evidence seriously. Because in a sense what you're saying to them is look this is what we're going to be doing, here are some things that you can do, you gave them a choice so there's some independence in terms of well I might read the chapter or I might watch the video, or I might do both but in a sense you're giving them an opportunity to kind of get a first sense of the field, the first sense of the topic to be discussed. And then you're very actively saying to them in doing that first we can use the time wisely and in using the time wisely, and you talked about opportunities for interaction or discussing cases, you're doing that piece of elaboration of ideas, you're doing that piece of collaboration, you're putting it in a social context. And that you're doing mentoring in its broadest sense is that you're helping rehearse them in ways of thinking through the patient presents with an abdominal complaint. And it does in a way feel counter-intuitive and often if it's set up to be a large group, or a lecture or remote, we get very hung up on oh what do they need to know? What am I going to say? But if you've decided that beforehand and said look this is your starting point do your homework folks, and then you authentically engage with it because I think the trouble is if you say do this work and then you actually then just deliver a lecture they're like, what's the point? And actually I could go and look at it afterwards because you might as well just record it because then what we know with pre-record is actually they quite like pre-record because they can stop it, they can rewind stuff they don't understand when you're burbling on like I am now. They can go at two times the speed. You know they actually have more control of a recorded lecture so it's about being confident if you say you're going to use the time to think things through and discuss and interact, you have to do that because if you don't you've let them down.

JEREMY

I think it's a matter of priming the students so I think it's really important that you, so what they do is they don't just get look at the video and read the chapter, what we use is what we call advanced organisers so we say look at the video and whilst you're viewing it think about the following. For instance the one with abdominal pain, what other conditions might this child have who presents with abdominal pain? What were the consequences of her having to have steroid treatment? What did she describe? So, they've actually got some pointers and then when we start the talk, we actually do put up a list of intended learning outcomes so that they know roughly what we're meant to be covering in that time. So, you try and match those to what you've done already. Because otherwise they could look at the video and pick up completely different things to what you feel are the important things they want to cover.

MARK

But I'd pick up say there's sort of three areas that I think you're highlighting that map to the scholarship. The first of which I think picks up beautifully on the second paper you were talking about, it's that social event and actually part of our responsibility as largely facilitators and lecturers is to create a social event for learning for our students. And that may involve interaction, it may involve cases but we need to think about that and we need to plan for that. The second thing picks up on the importance of reflection within the process and actually, having times of space and space to discuss with peers, space to just reflect on your own. And as you highlighted Jeremy there something about having to let go. And not necessarily feel that you're always in control because actually again mapping back to what Clare discussed around the scholarship that's what a learner needs in order to effectively learn within that large group context. And then the third thing is about how do we embed within clinical teaching the patient voice? And how do we get a patient-centred approach to large group teaching? Which things like Speaking Clinically, Patient Voice, very much maps to what we were discussing with Selina Robertson the John Ellis prize winner around patient narratives. And actually how do we utilise effective patient narratives to frame our thinking be it clinical reasoning, be it professional practice, be it basic science, be it therapeutic. And so, they would be the sort of three themes that I think have emerged. Thinking about the social element, thinking about providing space, and thinking about the patient element. Clare was there anything else you wanted to add in terms of the scholarship from what we've discussed?

CLARE

I think those three points are really powerful and actually I'm thinking of yesterday's webinar was on social accountability and there was some really interesting discussion about the purposes of a medical education and who are we serving here. And I'm a great proponent of how do we help our students make connections between their knowledge and how they put that knowledge to work and how do we rehearse them in ways of thinking. And it's quite an old paper now, it was from Brown and Manogue and I think it's actually an AMEE best evidence medical education on lectures but it was interesting they did a study of medical lectures and dental lectures and they looked at structure, which seems like a really simple thing about how you structure a lecture. And they said most lectures were structured on the classical literature structure which is like you'd see in the Oxford Textbook of Medical Education so it's kind of signs, symptoms, and you know we all know it and we all know what's coming next. And they go on to suggest other ways in which you might structure, whether it's a problem-centred lecture, or a comparative lecture. And what strikes me about these alternative modes of structuring is that rather than saying you know patient's present in this linear way so they present as a textbook so you go is the abdominal pain this? Doomp doomp doomp doomp doomp, no; so, then you go back to then you go back to the beginning. Actually, what we do as clinicians is something much more sophisticated so rather than doing it that way, you do it that way. This looks like a this but in the back of my mind it could be a that or a that, so what would be the difference between it being this or this or this. Well we'd have to look for this and we'd have to look for this. So that paper is worth a look at just in terms of other ways of structuring a lecture which again then rehearse the students in ways of thinking like doctors. They could find classical literature anywhere, they read the Oxford Textbook chapter, done deal. But actually, it's not knowing that stuff it's how we know when this stuff is relevant but also how do we know when it's not relevant when we need to bring in something else? So, with those three very succinct themes I think that's the other one that I'd point people to.

MARK

And obviously all we're doing, as I say, we just want to get a conversation going. We're learning from our own experience and we want the community of medical educators that is ASME to share ideas. We've also made mistakes, and we've learnt from our mistakes. It's very easy we've discovered with remote teaching to make mistakes. Jeremy you said you had a few other just sort of practical tips about using things like Zoom and Teams when you're delivering large group teaching - over to you.

JEREMY

Well I suppose the first one as we've demonstrated brilliantly is mute and unmute. But in a large group you want everybody to be muted when they're not speaking otherwise you get the dog barking and the Amazon man turning up. The other things I think we probably ought to talk about; co-facilitation is definitely worth thinking about particularly if you're going to be running a particularly large group otherwise it becomes a bit unmanageable because if you are using a PowerPoint projector then you can only see four or five people at once and so it's very difficult to monitor what's going on in the room. If you're recording a session a bit like we are now the thing that I was taught last week which I've now found much easier is that you don't have to have your own face on the recording the whole time. To me there is nothing more off-putting than having to look at myself talking so at the moment I'm looking at Clare which is fine. When I look at myself it's terrible so what somebody taught me last week is actually it's really useful, show your face and introduce yourself but when you're actually doing your talk it's probably ok just to turn your own video off. So, you don't have to view yourself. So, I've found that much easier because that's much more what I would be doing face to face, I don't have to look at myself unless there's a large mirror in the room.

CLARE

Can I add to that one Jeremy because on the diploma we actually had somebody who I was working with who did a demonstration of coaching and she was coaching over Zoom one of the participants on the course, and what she got them to do was - we have cameras on on the diploma, so we have on mute unless you're talking but cameras on so you can see because there are only 20 odd people - but she just got everybody to turn their camera off other than the person that she was coaching and it was so powerful because everybody's gaze was on the interaction between the two and you weren't being distracted. So, I think judicious use of camera on and off depending on need, obviously more than 25 or so you're scrolling between screens and that's hard work.

JEREMY

And I think Mark you also mentioned the thing that Lawrence Sherman talked about with the ASME session where he talked about standing up because one naturally is standing and doesn't sit the whole time. I'm aware I'm doing this the whole time I'm putting my arms up and down and if you turn your camera off you can actually stand up and walk around the room, but it does mean you have to have decent audio so Mark and I both bought a large microphone which I will demonstrate now, which cost me about £40 on Amazon. If you're doing lots of this, I think having a decent microphone is useful to think about.

MARK

Yeah and I'd add certainly if you're used to doing a lot of large group teaching and you're used to doing lectures, you're probably used to standing up to deliver that and actually having the camera off enables you to stand up and certainly I've found when I'm doing pre-recording large group teaching, sort of the asynchronous large group

teaching, I feel much more comfortable standing discussing my presentations than I do when I'm sitting down which is much more of a small group kind of interaction feel. And so, make the most of that opportunity that you have with the various remote teaching tools that are available.

JEREMY

The other thing we talked about was thinking about content; how are you going to break up content. So, that can be using things like break-out rooms that's one way of dealing with it. The other is to put in a little quiz or some MCQs or single best answer questions which mirror what they're going to get in assessments, medical students really appreciate those. But then you can discuss why people have got to those answers and when you're questioning people, we encourage the use of the one-minute preceptor type model. But I think the thing to be aware of is that on Zoom that can be quite intimidating so if I suddenly said over to you Clare take me through that, it's a bit like oh my God. So, you have to be a bit careful that you're not pouncing on people and it can be more so than when you're in a room with them because you can monitor the quiet ones in a room with them. That's the advantage of the co-facilitator is they can be keeping an eye on what's going on.

MARK

But equally that sort of addressing, single best answers, unpicking the reasoning, discussing that actually is a really helpful way in a large group setting of creating that feel that this is a learning event, that it's got that mentoring support element to it and actually you're not just discussing the standard iterative stuff you're going more into how do I think, what's going on in my mind in this situation, how do I approach this? So, I think they're really useful tools that again just map to the evidence and if we're starting with as Clare's highlighted the sort of blank canvas as to why do this large group teaching? I think it's a really good thing to imbed.

CLARE

I was just going to add to that you can use other technologies as an adjunct. So, if you're confident with other technologies and certainly I wouldn't do it without a co-facilitator, so you could run an interactive tool like, whether it's Slido but there's things like PollEv, other interactive things are available. So, in some of the platforms there's things like a polling function but they're not sophisticated, but you could run that in parallel and I think if it's students you're going to work with over a period of time so it's not a one off, for a one off it's an awful lot of your time and space with them is setting it up to use them but if you set a culture that whenever we do this there's a Slido for example running in the background where they can ask questions or you can get them to do a think-aloud, you can do a word association there's a whole load of different things you could do and you could run that. But that's where you do need a co-facilitator because again there's nothing worse than saying to the students interact with us, want you to put things in the chat room, ask us questions and then you totally ignore it because you realise you actually haven't got the capacity as the person facilitating the teaching to do it. There's too much going on, you're over stimulated as a teacher. So, actually having somebody quietly in the background curating the interaction is really powerful.

JEREMY

And if you're really good then interactive white boards are fantastic. There is a whiteboard on Zoom for instance and I'm sure there are in the other platforms. That you can actually plug your iPad in and use a whiteboard so in the same way as you might use a flipchart to draw things out which, you know, it avoids the death by

PowerPoint and I think feeling that you have to put a PowerPoint up all the time is not necessarily the best way of doing things. And we've created a space on our VLE called virtual medical education lessons learned which has got lots of these tips on it. And one of our PGCert applicants has done an amazing presentation where he's done a whole 20 minute talk just using a whiteboard where he draws things and it's much more powerful than using PowerPoint. I think the only thing is the use of silence. It's ok in the same way as silence and waiting time is something you need to think about when you're teaching face to face it can be a bit unnerving on remote platforms. The final thing I'm quite used to doing is I keep a notepad by me on the computer and actually if I'm teaching a group of 20 I will write their names down from the participant list and then when I get a question from them or I have asked them a question I'll put a tick by it. So that then I can then make sure that I've tried to include everyone because the electronics tends to be if we were hear Mark Lillicrap's picture would be at the top the whole time because he would probably be the biggest contributor as a student.

CLARE

You don't say? Even more than me?

JEREMY

And it's exactly the same with the students so the ones that talk the most are the ones that appear and it's the ones that aren't appearing that you need to be aware of so that's something just a practical tip, just a bit of paper, a pad and a pen by you is invaluable.

CLARE

I'm going to try that one next time I do it, thank you Jeremy I like that.

MARK

Ok so we've looked a little bit at different aspects of large group teaching. We've thought a bit about well how would we approach conventional lectures; how would we advise somebody to do that? We've looked at some of the scholarship and what the scholarship can teach us that would be useful to apply in remote teaching and we've thought a bit about the practical elements of delivery, what practical tips have we picked up. As we said at the start we don't anticipate that this session is here to tell you exactly what to do, we want to get a conversation going and we want to get examples of good practise from other areas if people have been doing research work looking at remote teaching delivery it'd be great to hear from you. And so what we want to do is follow up this conversation you're going to get some communication from the ASME office about the details, if you want to submit questions or ideas in advance we'll be meeting up for a live Q&A interaction on Wednesday 5th August at 4.30 for about 45 minutes of discussion. So, do try and join us for that. That will also be recorded and you will be able to access that afterwards if you're not available at 4.30 on Wednesday 5th August. We hope if nothing else we've triggered some thinking. We hope there's some ideas there that you might want to take away. How are you going to create that social experience of the large group teaching session? How are you going to allow interaction, how are you going to articulate thinking, how are you going to introduce gaps and silence and quiet into your next large group teaching session? We look forward to joining a number of you on the 5th August otherwise thank you for taking the time to listen to this presentation. Bye.

CLARE

Thank you very much see you soon.

**ENDS**