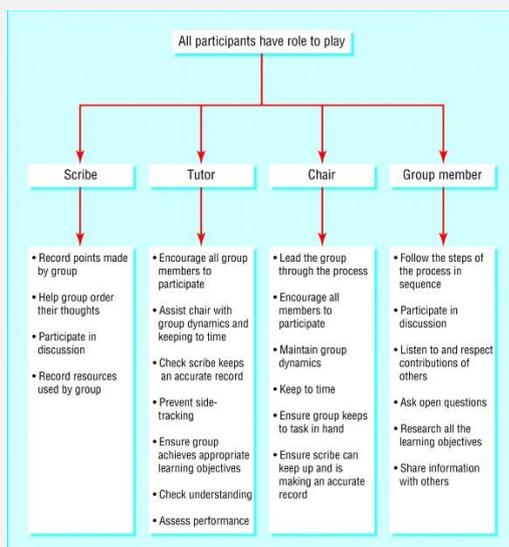


Embracing technology in the transition to online teaching in the Foundation Year in Medicine

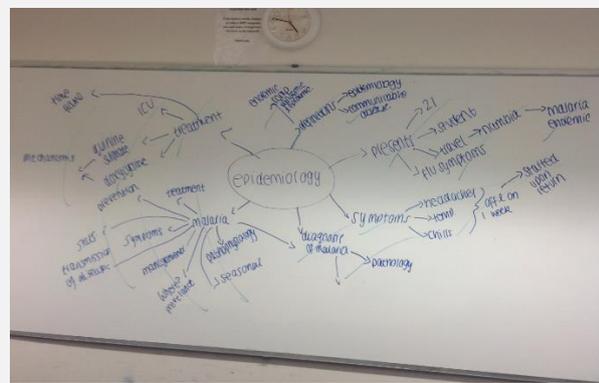
Problem Based Learning (PBL) is a learning and teaching method used in many medical schools. It is often a key factor in the choice of medical school that a student applies to study at, as some students prefer this self-directed, small group style of learning, which often runs alongside earlier patient contact ⁽¹⁾

The concept of PBL is that students discuss a problem case/scenario and define learning outcomes through discussions which are then allocated to each group member to research. They then independently research their identified learning outcome over the following week, write a 1-2 page fully referenced summary and share with the group and tutor via Blackboard by an agreed deadline prior to the next session. At the following PBL session, students present the learning outcome to the group in whatever format they wish, with the group asking questions, etc for clarification.

Each PBL session is 3 hours long; the first half focuses on the feeding back of the learning outcomes to each other from the previous week and the second half of the session, exploring the new problem/case, capturing the discussions on a whiteboard as shown below. There is a rotating chair and scribe each week and each student takes turns in both roles over the course of the year, with the PBL tutor facilitating. The roles are shown in the BMJ diagram below.



thebmj PBL roles flow diagram ⁽²⁾



For our current Foundation Year (FY), the lockdown occurred just as they were due to commence the Easter break, so there was a natural pause in studying. There were 3 weeks of PBL remaining, taking them up to the assessment period. The Easter break fortunately allowed for Microsoft Teams to be set up, staff to become familiar with its functions and consider how PBL would run on line. I was only familiar with the functions of file storage and chat in Teams. Meetings were rapidly helped via Teams in early lockdown, so I became very familiar with how the functionality of it runs, from how to use the video, chat and screen sharing functions. All of this helped me to plan how I would transition PBL to Teams.

The 3 remaining sessions were timetabled to run in their original teaching slot in the week. Once the PBL group was set up, I sent the group an email, asking them to send me a “thumbs up” in our Teams

group to show me that they could access the group chat or an email reply if there were problems. On receiving this, I confirmed to them that they just needed to log in to Teams at the session time and look for me calling them and join the group, with videos on. At this stage I had no idea if any had used Teams before.

At the start of the session, I felt that the students were a little apprehensive, but also glad to be back into a routine and re-connect as a group. I established that none had used Teams before, so we spent a little time exploring the functions together. One downside of Teams was only being able to see 3 students on the screen – this has recently increased to 9. The Chair felt comfortable to run the session, however our scribing role was changed to capturing the discussions by note-taking on their computer as the whiteboard function wasn't live for using. We had some teething problems with screen sharing, so I shared the relevant Blackboard posts. The students really quickly picked up the functionality and technology and by the second and third session, no longer needed me to screen share.

Between sessions one and two, I also timetabled individual meetings with them via Teams, allocating half an hour personal adviser meeting slots. These sessions really helped me ascertain how they were finding PBL and other lecture access, and checking in with their wellbeing.

On reflection, the students recognised that they were learning new technology skills and further recognised that a key skill of a doctor is being able to respond and adapt to a fast paced environment in the professional world they aspire to work in. In terms of transitioning into Year 1 of their medical degree, having had this short period in the online environment has helped them navigate the technology and experience how this will look in the foreseeable future. I also highlighted to them all that they will be the much needed confident students helping the new Year 1 students in the next academic year.

Going forward into the next academic year, I will need to continue to learn the functions within Teams, particularly using the Whiteboard to test how effective this is. I also need to consider how to stimulate even more discussions from the outset with a new group, who will be completely unfamiliar with the PBL concept, especially as I will not be able to see all members of the group together on screen. I do however feel that Teams is a great platform for small group teaching and especially effective for individual tutorials with students.

It has certainly been an interesting experience, learning a new way of teaching, alongside the students and I am glad to have had the opportunity to do this allowing some time now for reflection and planning for the new cohort.

1. Medical Schools Council (2019) Medical Schools Differences. [Online] Available at: <https://www.medschools.ac.uk/media/2371/msc-infosheet-med-school-differences.pdf> (Accessed on 2 February 2019)
2. Wood, DF (2003) 'Problem Based Learning' *BMJ* (2003);326:328 [Online] Available at: www.bmj.com/content/326/7384/328 (Accessed: 15 October 2018)

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