Using 'Padlet' (or other electronic bulletin boards) to enhance the visibility of clinical reasoning in small group teaching

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Abstract

Case-based learning (CBL) tutorials are an important setting in medical education. Group dynamics vary according to the variety of personalities, cultural backgrounds and experiences of the students that comprise the group. Early in CBL group formation some students can be hesitant to articulate their clinical reasoning. Padlet, or any other freely available electronic bulletin board can help enhance the visibility of clinical reasoning in a non-threatening manner, enhance collaborative learning and encourage students to commit to formulating a diagnosis as they develop their skills and confidence.

Keywords: Technology, Teaching, Learning

Context

I tutor in small group, case-based learning (CBL) in the pre-clinical years of a graduate-entry medical program. CBL is often the students' first engagement with clinical problem solving and the commencement of their journey as diagnosticians. One challenge that I deal with from time to time is the student or students who for various reasons, whether it be confidence, cultural reasons or personality are hesitant to contribute their clinical reasoning in the small group setting. Early in the CBL group formation, I prefer to use a tutoring style of inviting, rather than selecting students to present their thoughts on a case. The challenge is that not all students feel confident enough to share their ideas. Having seen 'Padlet' used in lecture settings I decided to use it in the CBL context.

First, I created a Padlet wall for my tutorial group. This is a simple process as the Padlet website has clear instructions and there are instructive videos available on YouTube. Go to the Padlet website (https://padlet.com), sign up, create a wall in a style of your choice, set the privacy settings to ‘Moderation’ (this means posts will require
approval by you before made visible to members of your group), then share the link with your students. Students use
desire's to open the link and post comments onto the bulletin wall. Tapping on the screen opens a text box
where students can anonymously type their ideas. Figure 1 provides an example of ‘work-in-progress’ on a Padlet
wall.

Once the history and examination findings of the case have been revealed, I invite students to post their provisional
and differential diagnoses onto the wall. I ask students to consider the evidence that supports, does not support or is
missing as they formulate their diagnoses. Once all members of the group have posted their differentials, of which
only I have visibility of at this stage, I ask for a volunteer to articulate and justify his/her diagnoses to the group. I
then pose questions to the group to help students link the diagnosis back to pathophysiologial mechanisms and
justify it. Once the volunteer student has finished presenting I reveal the Padlet wall to all students by ‘approving’ all
posts. I then invite the group to consider the various diagnoses proposed and as a group justify and prioritise them. I
have found that this encourages students to commit to the diagnostic process and for the group to consider a wider
range of diagnostic possibilities that might not otherwise have been shared.

Using Padlet allows me visibility of each student’s diagnostic thinking earlier. Students also have insight into each
other’s reasoning. Several useful outcomes have resulted: first, a rapid growth in confidence of the group; within a
few weeks even the most reserved students volunteer to lead the clinical reasoning discussion. Second, articulation
of clinical reasoning is enhanced. Students have visibility of all their peers’ thinking, and learn from the process of
justifying and prioritising all diagnoses posted by the group. Third, diagnostic outliers can be identified and
remediated who might not otherwise have shared their thoughts. Fourth, the process creates a discipline in thinking
of all members of the group as all members must commit to formulate a diagnosis prior to learning what other’s in
the group think. Finally, the group developed as a community of inquiry more rapidly.

I am not suggesting that this tool be a regular feature of CBL but it is an approach that has added variety and fun to
tutorials. Padlet has helped my students develop as collaborative learners faster and allowed me to have visibility of
each student’s reasoning earlier, whilst keeping students comfortable until their confidence develops. Any electronic
bulletin board can be used, Padlet is just one example.

**Figure 1:** A Padlet wall work-in-progress with two student’s posts yet to be ‘approved’ or revealed to all students’
devices.
### Take Home Messages

### Notes On Contributors

Dr Michaela Kelly is a general practitioner (GP), senior lecturer and academic coordinator in the Primary Care Clinical Unit, Faculty of Medicine, University of Queensland, Australia. She is also a case-based learning tutor to first and second year students in the medical program.

### Acknowledgements

### Bibliography/References

### Appendices

### Declaration of Interest

*The author has declared that there are no conflicts of interest.*