Using a WebLearn Forum for Online Learning and Collaboration Among Medical Students

Diagnosing the problem: complexities of time and place

The first year of the four-year graduate-entry medical course (GEC) is challenging for both students and teaching faculty. The 30 students, some of whom are post-docs, have a wide range of prior knowledge and learning styles. Furthermore, many are encountering a multitude of new concepts and material in a short space of time. As a result, some of the teaching and learning can feel quite 'siloed' with students moving rapidly between modules with little time to assimilate integrate their knowledge into a wider framework.

The students are generally a highly-motivated, self-directed and enquiring group who are very keen to learn. They also relish clinical contact to inform and enhance their learning, but have limited time to see patients in their first year. Dr Richard Harrington, Associate Director of the GEC, runs a series of case-based seminars often using videos of his own patients. However, his work as a GP in Thame, coupled with the students' multiple commitments, can make it difficult to timetable these seminars.

The WebLearn Forum tool seemed a promising way to address some of these competing challenges. By posting clinical details and photographs of a real patient (with their specific consent for use in this way), Dr Harrington would be able to create an online learning environment similar to a classroom seminar. In addition, the Forum style would enable students to integrate their learning across a number of domains as details of the case unfolded.

Access to real case studies enhances and expands students' knowledge

Having alerted students to his plans in a classroom seminar, Dr Harrington posted a simple description of his patient's presenting complaint (a cough) and his subsidiary concern (bruising of his abdomen), together with two photographs. He initially asked the students to make basic observations about the photographs and constructive comments on the posts made by their peers. An interactive discussion followed.

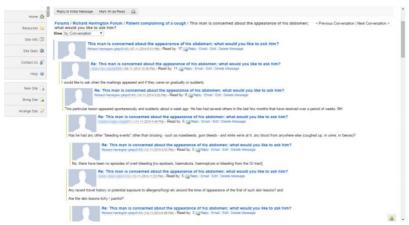


Figure 1 Online discussion forum about a patient presenting unusual bruising

In all, 17 students viewed the forum and 12 participated in the ongoing discussion, which ran for three weeks. After the first week discussion on the presenting complaint was closed and new information was provided about the patient's past medical history, which was very relevant. This triggered further questions about the medication he was taking, both prescribed and over the counter: essential information in the evaluation of any patient. Dr Harrington reports that, collectively, the group demonstrated a good approach to information gathering ('taking a history') with a range of observations and comment. They were generally appreciative of each other's contributions. When the patient's complex past medical history and medication was disclosed, the discussion moved to another level. What seemed like a relatively minor problem (bruising) uncovered multiple complexities. Thus the case discussion moved beyond the students' current syllabus, extending into cardiovascular disease, oncology and pharmacology.

Medical students are often taught to seek a 'unifying diagnosis': i.e. a single underlying cause for a set of symptoms. This approach is typified by the metaphor of 'Occam's Razor', but on this occasion it did not apply. This, Dr Harrington says, highlights a growing need to adapt medical practice in order to reflect the increasing aging of the population and patients presenting with multiple complex conditions.

A learning opportunity for teacher as well as students

Through the WebLearn Forum tool, Dr Harrington reports that students were able to develop their skills of history-taking, clinical observation and analytical reasoning in a safe environment. He also felt that the forum environment perhaps enabled those with less prior knowledge to contribute more confidently than they would done in a face-to-face classroom. Moreover, Dr Harrington overcame some of the practical difficulties in running his seminars as he could moderate the discussion without being in Oxford.

Some students had clearly researched their contributions to the discussion. However, the Forum tool didn't only the students space to research their answers, it also stimulated Dr Harrington to do the same. As a generalist, he quite often finds himself taken to the limits of his knowledge by the GEC students and in the past has responded to their own questions by suggesting they research the answers themselves. Instead, he can now do some background reading before answering, so the process is educational for him too.

Dr Harrington also hopes that the forums will help to raise the profile of primary care as a

A prescription for others...

Dr Harrington encourages others to 'take the plunge' with this advice:

positive career option for Oxford's medical students.

- Identify an interesting problem or question that will engage a group of students and get started. For medical teachers there is a wealth of opportunity.
- Start with a relatively simple problem; the students will be quick to uncover some of the complexities.
- It is best to set some ground rules for discussion (see above) and moderate the interactions.
- Use photographs or lab data to stimulate the students to engage.
- As moderator, maketime to check and contribute to the discussion on most days.
- If the discussion is slow to take off, email the group a reminder or approach a couple of students individually and ask them to 'prime' the discussion.

Dr Harrington also thanks Damion Young of the <u>Medical Sciences Learning</u>
<u>Technologies</u> team, for his generous assistance in making creative use of WebLearn as a teaching tool.

Runner up, OxTALENT 2015 award for the use of WebLearn. This award recognises examples of using WebLearn in innovative ways to support online study and interaction as part of a course or programme of study at undergraduate or graduate level. Our attention was brought to Dr Harrington's innovation through our research into the student digital experience at Oxford. The text and images in this case study have been adapted from his entry for the OxTALENT competition.