Describe one or two things that you did in 2014-2015 to create significant learning experiences for your students, and explain your rationale for doing so.

Much of the teaching in our Dept involves demonstrating the macroscopic (gross) appearance of disease, using preserved organ specimens encased in Perspex containers, called “pots” (Fig. 1). This can be challenging. Firstly, the finite size of the physical pot makes it difficult for students to appreciate the finer macroscopic features. Also, the specimen is usually passed around while the tutor moves on to the next pot, which divides student attention. They are also prone to degradation and leakage, and require manpower to store and transport. The specimen’s quality also varies between classes, which are taught simultaneously.

To address these challenges, we ‘digitised’ the pots in 2013, enabling large screen projection and standardisation of specimens. Using a digitised turntable and high resolution digital photography, we created a single dynamic file for each pot, naming it the Virtual Pathology Pot (ViP). Some examples are shown here: “Thyroid gland – Multinodular goitre”, and “Stomach - cancer”.

By 2014, we had over 250 ViPs spanning the entire undergraduate syllabus. We also created standardised lessons incorporating ViPs for all tutorials. Student and staff feedback was positive, and ViPs have been incorporated into routine lessons since 2015.

This work was presented at the 11th Asia-Pacific Medical Education Conference in January 2014, as well as at the Innovation and Technology in Medical Education Symposium, Duke-NUS Scientific Congress 2014. It is also featured on the website of the Royal College of Pathologists of Australasia. We are also working on a secure web-based platform with which to share this resource regionally. A link to a video describing this is available here.

In 2015, we developed the Virtual Pathology Resource (ViPaR) for undergraduate, which aims to enhance self-directed online learning (Fig. 2). It comprises text, videos, mind maps and interactive quizzes. We rolled out an introductory chapter in 2015, to positive student feedback. This will ultimately be a collaborative project with the Department of Radiology, incorporating complementary pathology and unique radiology images of scanned pathology specimens.

I believe that self-directed online learning is a key component of the modern classroom, with major advantages of heightened student accessibility and enhanced variety of teaching material.