
Title	Creation of interactive learning aid for teaching of animal histology practicals to facilitate blended learning
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CREATION OF INTERACTIVE LEARNING AID FOR TEACHING OF ANIMAL HISTOLOGY PRACTICALS TO FACILITATE BLENDED LEARNING

by **A/P CHEW SHIT FUN**

Natural Sciences and Science Education

The study of animal histology involves the learning of the structures of many different types of cells and tissues.

During a typical laboratory session, student teachers will need to locate and identify different cell types in the microscope slides using the compound microscope. As many student teachers do not have prior knowledge in animal histology, they face difficulties in identifying and locating various cell types and linking them to their functions. Many student teachers ended up spending a lot of time and effort trying to take photographs of these slides through the eye piece of the compound microscope - which is not an easy task. A lot of time was also spent during the laboratory session trying to help them locate various cell types.

To resolve this problem, Associate Professor Chew from Natural Sciences and Science Education collaborated with Centre for Innovation in Learning to digitise the microscope slides and use *Zoomify* software to annotate the cells and structures in these slides. Following that, they came up with the idea of creating an electronic-book which serves as an interactive resource material for the student teachers to use during the laboratory session.

Each student teacher is issued an iPad containing the electronic book where they can make reference as they view the microscope slides during the laboratory session. With the aid of the *Zoomify* software, they can also perform their own annotations and make their own notes on the digitised slides. In addition, they can now have access to all these digitised slides after the laboratory session which was not possible in the past without the electronic book.

Through this blended learning approach, the student teachers can now learn anywhere and at any time as long as they have access to the internet. They can now take greater ownership of their learning and can learn independently. This will definitely help to motivate the student teachers to learn animal histology and also reduce the challenges they face in the laboratory.



Students using the interactive learning resource (e-book) during their practical session in the teaching lab.