A COMMUNITY OF PRACTICE ENABLING A RAPID RESPONSE IN TRANSFORMING BIOCHEMISTRY LABORATORY TEACHING

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The emergence of the COVID-19 pandemic has meant the adoption of emergency remote teaching by many who teach at university. This has been a particular challenge for courses that include essential hands-on practical skill development. The prior establishment of our Community of Practice, aimed at transforming laboratory education, has meant we have been able to respond rapidly to the challenge of moving face-to-face laboratory teaching to online sessions.

Biochemistry students at University of Western Australia already complete their pre-laboratory reading and quiz asynchronously online, following the “Prepare, Do, Review” model. Students then attend face-to-face laboratory and post-laboratory sessions. We have now developed online laboratory and post-lab sessions using Zoom and incorporating videos of laboratory procedures. Students deliver oral presentations in the post-lab and the summative quiz is now asynchronous and online.

The changes have provided the impetus for reviewing other laboratory sessions, and the introduction of electronic laboratory notebooks. We have also expanded our Community of Practice with a team of postdoctoral researchers to ensure the techniques students are learning are contemporary and relevant to research.

We will discuss the challenges in implementing the changes we have made, and the gains in the development of new resources and teaching strategies.