

# NOVEL WAYS TO UTILISE QUIZ TOOLS

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## ABSTRACT

All learning management systems have a quiz tool. We know that when students are actively engaged with learning activities, their learning gains improve. In this workshop, we will look at how the quiz tool can be utilised to increase the cognitive engagement of students in different components of online courses: lectures, labs and tutorials, and assessment.

Lectures can be set up with short videos interspersed with questions in which students practice solving problems related to the theory presented in these videos. Students can then receive targeted feedback and solutions to scaffold them through this learning. Online labs can make use of simulations embedded in a quiz or present data (which can be randomised) for students to analyse. Tutorials can encourage students to try a question before presenting the answer.

Other advantages of the quiz tool include the ease with which participation can be tracked; automatic marking, which can reduce marking loads while giving effective feedback; and randomising variables for students, which make it easier to track cases of academic misconduct.

In this workshop, the examples given will use the [STACK question type in Moodle](#). This question type allows for multi-part questions with randomised variables, carry-on marking, and algebraic answers. On other learning management systems, other question types can be utilised in a similar way, such as [Mobius](#) and [Numbas](#).

Participants will be encouraged to share how they have used the quiz tool or seen it used.

Intended Audience: University Educators

## PRESENTER



Elizabeth Angstmann is Professor and First Year Director in the School of Physics at the University of New South Wales. Liz obtained her PhD in theoretical atomic physics before deciding to focus on teaching. Liz created an online Graduate Certificate in Physics for Science Teachers. In her large first year courses, she utilises the quiz tool extensively for online lectures, labs, and assessment. Liz is the current Chair of the Physics Education Group of the Australian Institute of Physics. Her work has been recognised through the award of an Australian Award for University Teaching citation in 2018 and the prestigious Australian Institute of Physics Education Medal in 2020.

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