

# ASCILITE 2024

## Navigating the Terrain:

*Emerging Frontiers in Learning Spaces, Pedagogies, and Technologies*

### A new solution to an age-old problem: Introducing FastFeedback Questions

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Feedback is an essential component of good teaching that can help students to understand how they can improve their performance (Sadler, 2009). However, feedback often reaches students too late in their learning process to make such guidance actionable, failing to promote dialogue between students and teachers. Historically, and according to a long study in Australian universities spanning over two decades, feedback has been an area of low student satisfaction (Baik et al., 2015). According to a major national poll in the UK, student discontent with feedback is a major concern for most UK higher education institutions (Deeley et al. 2019). Similarly, in the UK, Murphy and Cornell (2019) and Evans (2013) found a misalliance between what students expect and what is provided in feedback.

In this study, I explore the effect of an innovative synchronous approach to delivering students' timely, actionable feedback called 'FastFeedback Questions' (FFQs) (Elnashar, 2018). FFQs are a formative feedback tool that places focus questions within each PowerPoint slide, which are projected but not in slide show mode, so students can see the questions beside the content. Students receive a version of the slides without answers before the lecture. During the lecture, the instructor engages students interactively with the questions, verifying answers in real-time on the slides. Through a structured, guided process, students engage in critical reflection on the knowledge and skills they have acquired. They are encouraged to assess the quality of their current understanding of the material introduced in lectures and are shown how their progress aligns with expectations. By identifying gaps between their present state and where they need to be, students are supported in developing their evaluative judgment, equipping them for future learning opportunities. (Tai et al. 2018).

Integrated Systems Anatomy and Physiology (ISAP) is a complex subject delivered across a large, multi-campus, number of students (n) = 650, where students must comprehend and remember concepts and techniques within a mass of detailed content (Hattie, 2012). FFQs were used in ISAP after modification to suit this cognitive recall unit where a slide of information was followed by a slide of focus questions. This study used a cross-sectional survey design (Creswell, 2019) to understand whether the FFQ method is effective in an online lecture. Measures include pre and post student satisfaction data (from the university-wide standard survey; questions relating to feedback), pre and post exam scores, a student questionnaire (n = 79) with supplementary three focus groups. Ethical approval for the study was granted by the participating University's HREC.

Findings indicate that the students were more engaged and motivated to answer the FFQs. Furthermore, FFQs increased the student final exam mark by 10% on average. From the questionnaires, students reported that the FFQs assisted their understanding, and motivation to reflect on learning. From the focus group, students reported that FFQs increased their self-confidence when their responses to the FFQs were correct, and they recommended FFQs be used in other units.

Future studies on FFQs in additional units are planned over several years to understand if they are relevant to other STEM content, and to explore if FFQs produce similar outcomes.

**Keywords:** Formative assessment, Feedback, Online environment, Complex subjects, Focused questions.

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<p>Elshnar, M. (2024). A new solution to an age-old problem: Introducing FastFeedback Questions. In Cochrane, T., Narayan, V., Bone, E., Deneen, C., Saligari, M., Tregloan, K., Vanderburg, R. (Eds.), <i>Navigating the Terrain: Emerging frontiers in learning spaces, pedagogies, and technologies</i>. Proceedings ASCILITE 2024. Melbourne (pp. 6-7). <a href="https://doi.org/10.14742/apubs.2024.1096">https://doi.org/10.14742/apubs.2024.1096</a></p>
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