

Case Study: Implementing Active Self-Feedback in Teaching

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Course information

Across the 2024/25 academic year, several courses implementing active self-feedback were delivered by Nick Weise, a Senior Lecturer in Chemistry. These courses were taught to undergraduate students from a range of academic backgrounds, ranging from first to third year, and on courses including Chemistry in the Faculty of Science and Engineering (FSE), and Biology, Biomedical Sciences, and Biochemistry in the Faculty of Biology, Medicine and Health (FBMH).

These courses were Fundamentals of Chemistry (1st year, FBMH, 100 students), Contemporary Themes in Chemistry (2nd year, FSE, 150 students), and Chemistry of Biological Processes (3rd year, FBMH, 80 students). Active self-feedback was implemented with a similar approach on all courses and focussed on note taking.

The task

Ahead of time and asynchronously, students prepared for the session by watching a video about relevant course content and were asked to take notes as a formative activity. During a tutorial (focussed on the same content as the videos), students spent the first 10-15 minutes comparing their notes to those of their peers around the and used this time to generate their own feedback for how to improve their note taking in the future.

The active self feedback approach was structured with the following questions: *What did you understand? What did you not understand? What questions do you have?* Students generated their feedback informally, answering these questions verbally in small groups.

Comparators

Students compared the notes they had prepared for the session to those of their peers'.

Reflections by teaching staff

Due to the formative (and therefore optional) nature of the activity, attendance and engagement was a challenge. Furthermore, the more informal nature of the feedback generated – verbal rather than written – made it hard to measure the efficacy of students' generated feedback.

Reflections by students

One student, in their end of unit questionnaire, compared the section of the unit in which active self-feedback was implemented to the other two sections without this approach, saying:

“Only the last section (industrial biotechnology) provided adequate feedback and was taught the best by far”.