



Evaluation of interactive teaching in bioscience degree courses

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Summary

The Personal Response System (PRS) is a tool that can be used to introduce problem solving and question/answer sessions in the traditional lecture. The purpose of the project was to assess the effectiveness of using the Personal Response System (PRS) in a primarily descriptive subject, which is not traditionally taught with an emphasis on problem solving. Evaluation of the examination outcomes showed a positive effect. Student perceptions, as measured by questionnaires and focus groups, were very positive to the use of interactive methods.

Project aims

To assess the effectiveness of using the Personal Response System (PRS) in a primarily descriptive subject, which is not traditionally taught with an emphasis on problem solving.

Methodology

The Personal Response System was introduced gradually in the department and was in the third year of use in two courses. Several lecturers teach both the courses, only one of whom introduced PRS as part of the lecture system. This allowed a comparison of PRS teaching versus non-PRS teaching within the same course. The evaluation of PRS was done by two means:

- 1) The preparation and analysis of a student questionnaire to assess student views.
- 2) Collection and statistical analysis of exam marks covering the periods both prior to and after the introduction of PRS.

Project outcomes

See <http://bio.ltsn.ac.uk/tdf/matthey.htm>

Project review

The original plan was followed although the timing of the collection of archived data took longer than anticipated. The results support the positive value of interactive teaching showing a small but statistically significant improvement in the examination outcomes for sections of the course using PRS. Partly because of the project, a radical change in the teaching methods and accompanying assessment is being undertaken.

Evaluation

- 1) Evaluation of the examination outcomes showed a positive effect.
- 2) Student perceptions, as measured by questionnaires and focus groups, were very positive to the use of interactive methods.

The future

Interactive teaching will be extended within the Department; both teaching methods (use of VLE and PRS) and assessment style will be changed.

Feedback to LTSN Bioscience

The TDF has had a significant impact in the Department, enabling analysis of data, which could not have been undertaken without the funding. This has contributed, in part, to a major review of teaching and assessment.

