1. Introduction

One of the main difficulties in communicating science to undergraduate students is ensuring that the thought process behind key concepts is communicated effectively.

In order to address this a series of short focused multi-media resources were developed based on areas of the chemistry degree course that students often have difficulty with.

The resources took the form of approximately 5 minute long ‘clips’ which were based on PowerPoint presentations with added audio soundtracks.

2. The Clips

- The clips took the form of ‘screencaptures’ that were recorded by preparing presentations in Microsoft PowerPoint and adding animations and audio by using the Adobe Presenter plug-in
- The clips were short (around 5 minutes long) and highly focused
- Clips were used in two second year modules: molecular symmetry (CH2010) and bifunctional molecules (CH2005)
- The clips were recorded by students as part of final year BSc projects
- The use of the clips was evaluated by surveys, focus groups and usage statistics

3. Feedback

Distance Learners
What did you like most about the clips?
“When I went back to read the lecture notes I understood better compared to other modules”
“The fact that you get the extras that the lecturers say in lectures, but don’t always put in the slides!”

Campus-based students
General student comments
“The clips helped to reinforce my understanding”
“The clips are very useful indeed. I wish all modules had some sort of chemistry clip/animation”

Suggestions for Improvements
“More in-depth discussion/careful explanation of mechanistic steps”
Several students requested more in-depth clips

4. Usage data

- Clips were watched by the majority of students (73 out of 104 students in CH2010)

CH2005: 31 responses, CH2010: 21 responses

5. Conclusions

- Students like this type of resource
- Students mainly access the clips for revision
- Some students access the clips in the early hours of the day
- The clips are particularly useful for distance learners and dyslexic students
- This can be used to develop student generated content

- The clips need to have good sound quality
- The clips should not just repeat lecture content
- Some in-depth content should be included
- Including animations can be difficult and time consuming using the current approach

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