

Flipping Feedback: Creating Audio-visual Exemplars to support Feedforward for first year Dental Nursing Students.

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Class Size

23 students

Discipline

Higher Certificate in
Dental Nursing, Year
1: Biology module.

Feedback Approaches

Audio visual exemplars used to embed assessment literacies around Laboratory report write-ups providing timely feedforward for students.

Technologies

Screencasting software (Screencast-O-Matic) in conjunction with a document camera (Epson ELP-DC06 Document Camera Visualiser). Hosted on Virtual Learning Environment (Moodle).

Challenge & Aim

First year students are required to fill out a lab workbook for their practicals and to submit a laboratory report as part of their Continuous Assessment for Biology. The lab report is based on one of their first semester biology practicals, an experiment on osmosis.

First year students in particular have difficulty in filling out the workbook and preparing the lab report in the correct format. Many don't appear to understand

what is expected in terms of workbook and lab report content, despite the fact that details are included in their lab manuals and this is discussed at length in the practical sessions. It appears to be quite a difficult exercise for first year students, particularly those who haven't previously studied science subjects or have been out of education for a few years.

The aim of the research was to test the student response to the provision of online

video exemplars as feedforward. It was hoped that having access to narrated video examples of what is a good standard of work and what is a poor standard of work would help students in preparation of their CA and would ultimately improve the overall quality of their work.

Three workbooks from previous years were used as exemplars in the study; an example of a good workbook, a poor workbook and a middle of the road workbook. A document camera was used with Screencast-O-Matic to record pen-strokes synchronised with narration to create four 5-7 minute videos. In the videos I went through each of the exemplars, detailing the points which placed each example into the good, poor or middle of the road category.

I particularly focused on the individual sections of the workbooks and lab report; the type and amount of information that was required in each case. The videos were uploaded on the Dental Nursing Moodle page for Biology, which students were free to watch as they prepared their own lab reports.

The effectiveness of this feedforward was assessed in a number of ways

- 1) Checking how often students accessed the videos on Moodle
- 2) Asking students one to one if they found the videos helpful.
- 3) Giving students a questionnaire to fill in.
- 4) Getting comments in a focus group setting.

Evidence from the Literature

Working with exemplars is often cited as promoting a greater level of understanding with students (Bloxxham and Boyd, 2008, p.74). However having access to exemplars alone is not considered sufficient to improve students understanding of standards and what is expected of them (Price and O'Donovan, 2006). Talking around the exemplars is seen as extremely beneficial for students. Video and audio recordings are recommended (Wiggins 2012)

as a means to improve teaching performance by enabling teachers to “perceive things that we may not perceive as we perform”. Video and audio recordings are also a way to get information across to students that may be ignored when mentioned in class or written in a lab manual. With this in mind the study took the approach of using video feedforward and exemplars to assist students in preparation of their Biology practical workbooks and lab reports.

Feedback Approach

The videos were prepared using the document camera and Screencast-O-Matic. The videos were uploaded on Moodle 3 weeks prior to the deadline for the osmosis lab report submission and 7 weeks prior to the workbook submission. Students were free to watch the videos whenever they chose and as often as they liked while preparing their CA. At the end of

the semester students were asked to fill out a questionnaire and participate in a focus group on the video exemplars. The students were also informally asked in the practical sessions whether they found the videos helpful or not. The details of students who accessed the videos were obtained from Moodle.

Outcomes

The outcomes/findings were determined with a short survey of 10 questions and a small focus group with 3 students from the class, which was recorded. Data on the timing and frequency of viewing the videos was obtained from Moodle.

Informally all of the students reported that they found the videos helpful.

Moodle activity analytics; the good workbook exemplar had 86 views, the poor workbook exemplar had 28 views and the middle of the road workbook exemplar had 29 views. The good osmosis lab report exemplar had 139 views.

All students viewed the good work book video at least once (some up to seven times) and the good osmosis exemplar at least once (some up to 12 times). This would seem to indicate that at the very least students were trying to get the measure of the expected standard for a good write up.

Out of 23 students, 14 students viewed the poor workbook video exemplar and the middle of the road workbook exemplar and 5 students viewed the good and poor workbook exemplars and the good osmosis report exemplar.

Another interesting finding was that students from other programs accessed the videos. All first year students in the Faculty of Science and Health study Biology and can access each other's Moodle pages. It emerged that 6 Pharmaceutical Science Y1 students had also viewed the videos.

One of the key findings that came from the focus group comments was the boost in confidence that the videos provided for the students with regard to their own work. Being able to refer to a good exemplar and compare it to a poor example (*"what not to do"*) while carrying out their own work seemed to be very important to the students. Having access to this resource as a video, where different points were highlighted, seemed more important to the students than just having exemplars (in document form) available on Moodle.

Student Response

All students agreed that the exemplars clarify the required standard for the workbooks and lab report and all agreed that watching a video was better than reading written instructions. These points also emerged from the focus group conversation. 18 students stated that they felt their work had improved because they watched the exemplars, again this echoed the sentiments of the focus group conversation.

All three focus group students stated that the good lab write up and bad lab right up gave clear indication of

"what you should and shouldn't do".

They didn't really focus on the middle of the road exemplar.

"Definitely in terms of knowing what to write and where you put it, it was really helpful". "You know what the standard is, to be expected when you're writing up reports"

They did appear to find the poor exemplar to be useful though,

"so you know what not to do"

When asked how important knowing the standard is to first year students, one student stated that it was very important

"it will help you in the next year as well. You'll know how to write up things because you're not really told how to write anything in college"

This was quite surprising for me to hear, that this perception exists with students, This illustrates the gulf that frequently exists between lecturers and students in terms of understanding and experience (Moore et al., 2008).

The focus group clearly expressed that the video examples provided a certain confidence boost in relation to their own work,

"mine didn't seem too bad compared to the good one"

Even reiterating the individual headings for them provided confidence

“when you see it written down you think, well what do you mean by this? But when you hear and you see it you think oh yeah”.

The focus group felt that the exemplar documents and videos *“supported one another”*. One student reported that in addition to watching/listening to the video that she paused and took pictures at certain points in the videos to compare to her own work, to give better support and boost confidence as to how her report was shaping up.

Recommendations

This kind of feedforward is useful for any class size as students access the videos in their own time and it's clearly really useful for students to be able to go back to the videos as often as they want. The students appeared to primarily focus on good and bad exemplars; given time pressures that students are under this is not surprising. It does call into question the value of preparing a middle of the road exemplar. It may be of much more value to focus on the good and bad exemplars. Additionally having one less video may be less off putting to some students. It was impossible to tell from Moodle whether students had watched the full videos or just opened them for a couple of seconds. To get a complete picture of which students watch videos it might be useful to get students to answer questions on Moodle regarding the content after watching the videos.

References

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