

Research Data Management Plan

'Flipping' the classroom: are students engaged?

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Data Management Plan Edited by	PI
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Faculty	Health Sciences

1 Research Project Details

1.1 Research project title

'Flipping' the classroom: are students engaged?

1.2 Research project summary

The flipped classroom (or inverted classroom) is receiving increased attention although it is not a new approach (Watters, 2012). Flipped learning, otherwise known as the inverted classroom, is a pedagogical approach that requires students to do background reading/preparation (often involving elearning resources) prior to attending the face-to-face component of a course where the tutor facilitates learning through applied activities and discussion to foster deep learning (Davis, 2013). This approach, acknowledges that the role of the academic or teacher is changing from "sage on the stage" to "meddler in the middle" as information is readily available to learners through the internet (McWilliam, 2009); in other words, how do academics add value when they are no longer the holder of knowledge and the information typically delivered through lectures is easily accessible elsewhere? Although an increasing number of publications are exploring the flipped learning model there is a lack of evidence to determine whether the approach works with all cohorts and, indeed, what the key elements are that support student engagement to ensure they come to the class prepared. The aim of this research project is to determine whether the flipped classroom model is engaging first year students in their learning. The research aims to explore the following research questions: 1. Does the flipped/new unit structure engage students in their learning? 2. What elements of the unit design support engagement in the flipped model? 3. What improvements to the unit would enhance engagement?

1.3 Keywords

flipped classroom, student engagement

2 Research Project Data Details

2.1 Research project data summary

1. Blackboard© data on student access to online pre-preparation material.
2. Incidents of plagiarism (including a comparison with 2015 data, where the unit was not utilizing a flipped approach). (quantitative)
3. Student attendance for the workshop. (quantitative)
4. In week 5 of the semester a 5 minute online anonymous "stop, start and continue" exercise to determine what is working/not working in support of student learning. (qualitative)
5. At the end of semester (week 14) an anonymous online questionnaire to explore students' experience of the flipped approach. (quantitative and qualitative)
6. A focus group with tutors to explore their perceptions of whether students were engaged, prepared, and if the flipped approach supported student learning. (qualitative)

2.2 Ethical, confidentiality or privacy considerations

Low risk ethics application currently underway. The research project aims to improve student learning in the unit, most of the

data is readily available to the PI as unit coordinator and the primary source of data direct from participants will be anonymous. Unequal power relationships between the unit coordinator and student will be mitigated by recruiting student participants through the unit tutors. Tutors will undertake training in a regular tutor meeting to ensure that ethical standards for recruitment will be adhered to and none of the tutors are on the research team. Students will have the option of ticking a box to determine whether their data will become part of the aggregated data set (in the online in class questionnaires) and will receive an information sheet. Both questionnaires should take no more than 10 minutes to complete. The proposed focus group for the tutors will be conducted by AI 1, who has no line management relationship to the tutors. Any identifying data in the focus group transcription will be removed prior to being shared with the PI.

2.3 Data organisation and structure

Data relating to student activity in Blackboard is available from Blackboard (live). However, at the end of the semester this information will be archived and stored on a folder in R drive. The online questionnaire will be administered through Qualtrics and once the data collection is complete the data will be downloaded and stored on the R drive (as above). The remaining data (focus group transcription) will also be stored on the R drive.

3 Research Project Data Storage, Retention and Dissemination Details

3.1 Storage arrangements

Electronic data (questionnaire responses downloaded into SPSS files, Blackboard data and transcribed focus group data) will be stored on the R drive as described above.

3.2 Estimated data storage volume

50 megabytes

3.3 Safeguarding measures

Data will be maintained on a folder in R drive, which is automatically backed up by the University.

3.4 Retention requirements

7 years (All other research with outcomes that are classed as Minor)

3.5 Collaboration

AI 1 and AI 2. Where collaborators require access to data this will be made available through the R Drive folder.

3.6 Data dissemination

No plans to disseminate beyond a publication.

3.7 Embargo period

Not applicable.