

3C Moodle as Big Brother: quantifying students' engagement through their use of a virtual learning environment

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Recently, Casuso-Holgado et al (2013) reported a high correlation between student engagement and achievement in the biomedical sciences, replicating findings from other disciplines as well as research on general student retention and achievement. Measuring student engagement is conventionally achieved through self-report questionnaires. However, such methods limit the number of participants and the usability of engagement measures for identifying non-engaged students for targeted interventions.

We report on a pilot study to quantify student engagement through their use of a virtual learning environment and the resultant engagement score's use as a tool to predict student performance at level 1. For Level 1 Psychology students there are a variety of Moodle sites to communicate information and encourage their study skills development. Some of this represents important and vital services, such as submitting coursework through Turnitin or accessing their laboratory handbook. However some of the information is specifically designed for self-study and additional support, for instance extensive guidance about plagiarism; writing resources; and optional homework assignments. Students have a choice about whether and how often they access the additional information. Moodle offers a tool for tracking student use of each page and hence we intend counting the number of visits students make to optional information on Moodle at discrete time periods in semesters 1 and 2: before their first coursework submission; before semester 1 exams; and again before their final coursework submission. At each stage we will correlate student results with the engagement score and also identify less-engaged students.

We will discuss the results along a number of dimensions including the method's effectiveness as a measurement of student engagement; its ability to predict student performance; and the feasibility of using it to identify struggling or non-engaged students for targeted intervention such as reminders and advertising about additional resources and optional homework.

References

Casuso-Holgado, M. J.; Cuesta-Vargas, A. I; Moreno-Morales, N.; Labajos-Manzanares, M. T.; Barón-López, F. J.; Vega-Cuesta, M.,(2013) The association between academic engagement and achievement in health sciences students. BMC Medical Education, 13(1), p33. doi:10.1186/1472-6920-13-33