Tapping LMS data: Student participation in “Preparing-for-the-Test” discussion forums

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Learning Management Systems (LMS) are widely used in contemporary higher education as platforms for pedagogical and administrative instruction management. When carefully designed, the LMS can model knowledge organization, appropriate style of communication and improved time management. The LMS can also be useful as a research tool, since it records activities within the course site and data can be extracted via system generated reports (Macfadyen, & Dawson, 2010).

The academic calendar contains stressful exam periods. Students are often confused and unsure of what exactly will be required. As students start preparing for the exam many questions arise, which they would like answered, preferably "instantly". This situation calls for devising an effective solution for publishing, documenting, sharing and answering questions, in an academically sustainable manner.

Over the past decade I have constructed "Preparing-for-the-Test" discussion forums in several course sites to help students prepare for assessment events. Seeking answers to the research question: What was the characteristic student participation in the Q&A discussion forums? I have used three data sources: The recorded discussion strings, data provided by the LMS records and students' response to a post-exam questionnaire. Sample data will be provided from the 2017-2018, 2nd year course with over 70 students, which had a mid-term and a final exam. The mid-term discussion forum showed 3 discussion strings, in which 3-4 students plus the lecturer participated. The final exam discussion forum showed 19 discussion strings, in which 12 students plus the lecturer participated. These data seem to indicate a rather low response level, which might act as evidence against the forum's usefulness. However, the issue of passive vs. active student participation in discussion forums is well documented (e.g. Rovai & Barnum, 2007). LMS collected data create a fuller participation profile, showing over 400 records of student activity in the mid-term forum, mostly involving "accessing" or "viewing" a discussion. Over 2000 records of student activity, involving over 40 students were found in the final exam discussion forum. An interesting finding is that several students re-accessed the mid-term discussion forum in preparation for the final exam. The student activity chart (fig. 1) provides compelling visual evidence concerning the exam-related activity, showing peaks around exam weeks. The results of a questionnaire administered after the final exam shed more light on student views and participation in the relevant forums: 67% accessed and viewed questions and answers; 11% contributed questions; Usefulness was rated "high" or "medium" by about 60%.

In conclusion, lecturers can create instructional impact by providing designated discussion forums in the LMS environment, serving students' needs at critical exam periods in the academic year. The advantages of the suggested forum extend beyond its obvious utility, and reside in the potential for promoting important students' abilities: formulating well-defined questions in appropriate academic style; creating Q&A repositories; becoming aware of peers' questions and trying to respond to them; self-checking comprehension of provided answers; when necessary, posing additional questions.