

Students' Feedback and Communication Habits using Moodle

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Introduction

eLearning can be informally defined as a software solution for educational purposes, which is based on theoretical postulates, trends in cognitive science, artificial intelligence, and pedagogy. Recently the Learning Management System approach formed a basis for a reliable eLearning platform that should comply with standards and best practices recommended by respectable educational and corporate stakeholders in the growing eLearning market [1]. Such a solution is used in our department for the design and implementation phase of courses that support classroom training [2].

During introduction stages of eLearning components into university courses we made a decision to use and possibly extend an existing eLearning platform, more precisely LMS system for our eCourses instead of developing a new one from the ground up. After testing several systems, consulting a number of comparative studies and papers [3-6], we could draw initial conclusions on the available products. In our decision process we considered the following factors: the LMS solution should be well established, available for general purpose use and preferably Open Source [7]. The former not only assures flexibility and considerable cost savings, but also offers the possibilities for extensions and customizations according to specific course requirements.

The evaluation of Open Source LMSs was done using the following criteria: active community, stable development status, good documentation, didactical objective and focus on the presentation of content or communication functionalities. Afterwards LMSs that met the criteria were analysed in detail regarding communication tools, learning objects, management of user data, usability, adaptation, technical aspects, administration, and course management. The final choice fitting necessary requirements was Moodle [1], [8], for its good basic features, great extensibility potential and even some potentially adaptive features [9]. In addition, this solution has been accepted by our university as the official LMS in order to make reuse of teaching material among local faculties more feasible and the option of a centralized system. It has been in use at our department for several

years now and both students and teaching staff are satisfied with its performance and usability [10]. It has to be added that Moodle has a rapidly increasing popularity at universities and new features are developed continuously.

Moodle is a modular and extensible platform that offers a variety of features to support the educational process. However, through its usage certain issues have been uncovered including usage and usefulness of communication capabilities.

In this paper we present the results of experiences and results gained by a questionnaire for students in order to reflect the students' communication and feedback habits when using Moodle, their general opinion of eLearning as well as their experiences with Moodle regarding technical issues. The focus is on the analysis of students' habits and usage of communication features and possible reasons behind. Furthermore, we studied willingness of students to participate in feedbacks, more particularly when they (evaluate) teachers. Nevertheless, to protect their anonymity we tried to ascertain if students are afraid and therefore not prepared to participate in the grading process. Additionally, we investigated their overall opinion and comments on eLearning and experienced technical problems of Moodle. The study was conducted partly using a questionnaire on a sample set of student at our faculty and partly using experiences with Moodle in the study process.

The rest of the paper is organized as follows. Section 2 presents the results of the questionnaire dealing with students' habits regarding communication capabilities of Moodle and the key findings. The feedback habits of students are analysed in Section 3. In Section 4 students' general opinion on eLearning and technical problems encountered when using Moodle are presented. Finally, a conclusion is drawn in Section 5.

Analysis of Use of Communication Capabilities

The main goal of the questionnaire was to provide insights into students' habits regarding different communication and collaboration functionalities provided by Moodle. The questionnaire was conducted among students at our institution, on a sample of 136 students

from two different study programs – Informatics and Communication Technologies, and Media Communications.

The first group of students had a share of 65%, whereas the second group of students had a share of 35%. The distribution among age resp. study year was as follows: 37% were first year students and 64% were second year students. The gender distributions included 77% male students and 23% female students which can be explained by the fact that both study programs are technical study programmes and as such male dominant in Slovenia. However, the study programme Media communications deviates from the typical pattern and therefore roughly half of the students are female.). Since undergraduate studies have been transformed into a three-year programme three years ago, only students from the first two years were available at the time the questionnaire was conducted.

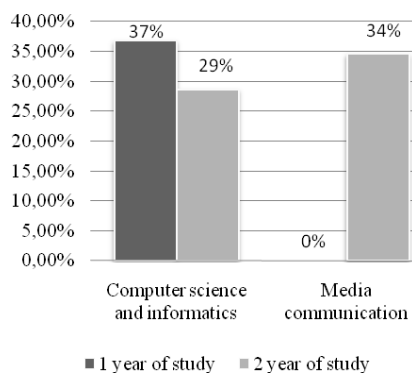


Fig. 1. Distributions of questionnaire participants according to their year of studies and study programme

Firstly we have analysed student usage of Moodle’s communication capabilities. Unfortunately, it is noticeable that students are not as prepared and eager as their lecturers to use communication capabilities in Moodle, particularly advanced web 2.0 communication elements like forums, chats, blogs, and wikis.

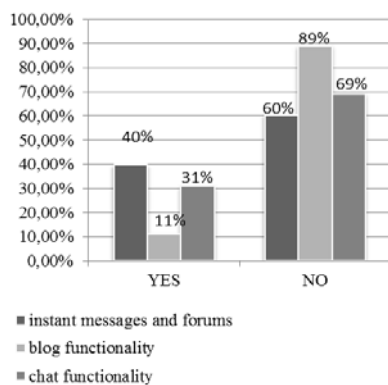


Fig. 2. Usage of Moodle's communication capabilities

Most of these elements are in high percentage unused by our students. The reasons for such behaviour of students are different. A fairly high percentage of students claim that they are now familiar with the specific communication capabilities. This is rather unexpected since the same capabilities are used by students daily at

other web pages (e.g. at the faculty’s web page). Other reasons why students do not use communication capabilities include lack of time or simply that they do not want to use them.

A more detailed analysis indicated that only 39.71% of students use forums and instant messages regularly, mainly to track current course activities or to ask questions about assignments and subjects in general. Blogs are used by 11.03% and chat by 30.88% of students. The majority of students do not use blog functionality because they do not need blog functionality, they do not use blogs at all and they do not know that this functionality even exists. Similar results were acquired for the chat capabilities in Moodle as 70% of students do not use it and because they use e-mails or they do not need this function. Additionally, most students (60%) do not use instant messaging and forums, and 40% of those who use it, apply it mainly for educational purposes, e.g., to ask questions related to subject or exercises, to get help from other students or teachers and to submit exercises. Most of the students say they still prefer personal communication with professors and assistants or use e-mail communication instead. Nevertheless, most of the students concluded that employing these types of communication paths, being obligatory or not could in fact be very useful.

Regarding Wiki features in Moodle, the questionnaire showed that 28% of the students have already used it. A problem that students are facing when using Wikis is that other participants can change their part of work any time. However, 66% of the students have no problems with this fact.

Experiences with Teacher and Course Grading

The second part of the research focused on an analysis of students’ feedback using Moodle regarding the grading of teachers, teaching assistants and the course in general.

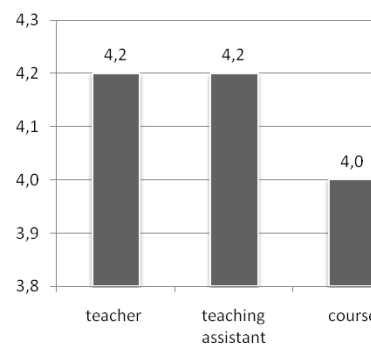


Fig. 3. Average grades assigned by students

The grading process was implemented using Moodle’s feedback capabilities which guarantee that the answers cannot be linked to Moodle usernames of students. More detail students were asked to assess different aspect of the teachers, teaching assistants as well as the specific course in general.

Teachers as well as teaching assistants were assessed on a scale of 1 to 5 regarding the quality of their lecturing, clarity, collaboration with students and

helpfulness in regard to students. We were positively surprised by the participation, honest grading and comments students made. Additionally, students were asked to give comments on teachers and teaching assistants, as well as the course in general.

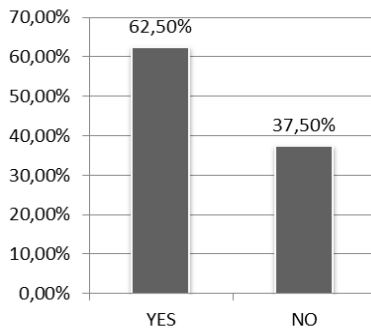


Fig. 4. Are you afraid of the consequences if assessing a teacher

They were mostly satisfied with the course performers and structure. The average grade for teachers was 4.2, for teaching assistants 4.2 and for the courses 4.0. Some students also gave interesting and useful comments. However, the percentage varied from course to course. Specific comments were not useful as some student just answered with “great” or a similar general phrase.

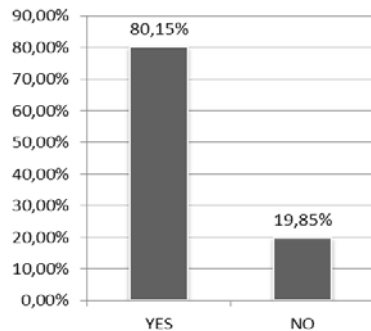


Fig. 5. Would you participate in a questionnaire of this kind and answer the same if they would be assured anonymity?

In the features questionnaire, we also wanted to determine if students have any difficulties when grading resp. criticizing teachers. The results indicate that 63% of the students are afraid of the consequences if they criticize a teacher. However, the response to our feedback for grading teachers, teaching assistants and courses did show a slightly different picture as 55% of students participated in the grading. In general, students are prepared to assess a teacher if they would be assured anonymity as indicated by the accompanying questionnaire.

Regarding students’ relation to answering questionnaires, we could observe that 80% of students would participate in the same questionnaire (as was conducted for the purpose of the paper) on Moodle and would answer the same if they would be assured anonymity. The rest of the surveyed students expressed their lack of belief in the possibility to be completely anonymous while filling out online questionnaires in environments like Moodle which systematically keep records of all user actions. In general they value every

opportunity to state their opinion on matters that directly influence the quality of the courses they attend.

Other analysed aspects of Moodle and eLearning

Finally, students were also asked about their opinion on eLearning and Moodle in general as well as technical problems. The most favourable thing students highlighted is the accessibility of available teaching material and exercises from virtually anywhere without geographical restrictions. Other benefits they highlighted are collection of all the teaching material in one place and the possibility of being informed about important issues regarding the courses they attend, such as grading changes and availability of the teaching material. This functionality is provided through Moodle’s integrated mailing services tightly connected to discussion forums. The general opinion of eLearning is very positive. Students believe that it offers a good and interesting approach to contemporary teaching and learning. Students also expressed their beliefs that eLearning is very useful, but it cannot replace face-to-face learning completely.

A minority of students (16.18%) reported some technical issues when using the platform. It was also noticed from our viewpoint (administration) that technical issues are mostly caused by hardware and software limitations of the employed servers. The issues include: connection problems, slow response in case of many users connected to Moodle, difficulties when opening or downloading specific types of files in certain browsers, etc.

Conclusions

In the paper we presented the analysis of a questionnaire and experiences gained through use of Moodle which investigate habits and usage of communication features, students’ willingness to participate in feedbacks, more particularly when they assess teachers, their general opinions on eLearning and their experiences with technical issues of Moodle.

It is interesting to point out, that students were more than willing to answer the questionnaire and we needed just 10 days to collect the results. Most students feel very comfortable with Moodle, after just one semester of use.

While we are still drawing exact conclusions, and deciding on the impact these results will have on the future usage of Moodle, it is already visible that the opinions are not unique, and that requirements, attitudes, and beliefs of students are rather diverse. It has to be highlighted that students are not always able to formulate precisely their problems and dilemmas. However, most of the students are willing to present ideas for potential changes in the application of certain features of the system in our practice, and initiatives for upgrading of teaching material and techniques.

Unfortunately, the research indicated that students are not as eager as their lecturers to use the elements of social networks in their courses and studies. Forums, chats, blogs, wikis, and other similar elements are in high percentage unused by our students. The major reasons students indicate is that they are not aware of the features,

lack of time to use the features or simply because they believe they have no use for them.

Overall, students are satisfied with Moodle and eLearning in general. Furthermore, students are aware of the benefits e-learning carries and are therefore welcoming further implementations of eLearning into our teaching practice. However, there are still some technical problems when using Moodle mostly caused by hardware and software limitations of the employed servers. We could conclude that Moodle present a very good eLearning platform. Still Moodle is only a platform and the quality of the teaching process cannot be based only on the facts that Moodle is employed but teachers still need invest effort in course preparation and implementation.

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Received 2010 05 03

M. Hölbl, T. Welzer. Students' Feedback and Communication Habits using Moodle // *Electronics and Electrical Engineering*. – Kaunas: Technologija, 2010. – No. 6(102). – P. 63–66.

eLearning has managed to penetrate into most classrooms nowadays and Moodle is one of wider accepted LMS. After years of its application in everyday teaching practice we were inspired to analyse the student communication and feedback habits using Moodle. In this paper, we will present the experiences and results of a questionnaire regarding Moodle and eLearning. Firstly we analyse which communications capabilities of Moodle. Additionally, we present an analysis of students' feedback habits using Moodle regarding the grading of teachers, teaching assistants and the course in general. Finally, we also investigate student's general opinion on eLearning and experiences with technical problem when using Moodle. III. 5, bibl. 10 (in English; abstracts in English, Russian and Lithuanian).

М. Холбл, Т. Велзер. Анализ особенностей э-учения на основе системы Модле // *Электроника и электротехника*. – Каунас: Технология, 2010. – № 6(102). – С. 63–66.

Описываются особенности работы студентов при работе в окружающей среде Модле. Представлен опыт работы по системе Модле и указаны основные проблемы по освоению разных модулей дисциплин. III. 5, библи. 10 (на английском языке; рефераты на английском, русском и литовском яз.).

M. Hölbl, T. Welzer. Darbo Moodle aplinkoje ypatumai ir grįžtamasis ryšys // *Elektronika ir elektrotechnika*. – Kaunas: Technologija, 2010. – Nr. 6(102). – P. 63–66.

Viena iš labiausiai paplitusių e.mokymo valdymo sistemų yra Moodle. Nagrinėjami studentų bendravimo Moodle aplinkoje ypatumai ir grįžtamasis ryšys. Tyrimas truko keletą metų. Pristatytas tyrimo klausimynas. Tiriama studentų nuomonė apie e.mokymąsi, įvertinama jų patirtis dirbant Moodle aplinkoje, analizuojamos išskylančios techninės problemos. III. 5, bibl. 10 (anglų kalba; santraukos anglų, rusų ir lietuvių k.).