



Rhodes University

Department of Computer Science
BSc (Hons) Project Proposal

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Project Title: The Educational Value of
Integrating a Learning Management System,
and a Social Networking Platform

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1 Problem Statement

Teaching and learning has evolved from a teacher-centred, knowledge-transfer approach to learner-centred approach where the learner is at the centre of the learning [2]. Learning Management Systems (LMSs) (developed to support the management and delivery of learning content and other services to students [6]) are limited in their design to effectively support the different teaching and learning styles. For example, it is difficult or impossible for learners to interact online using a LMS. As suggested by [1], LMSs should be modified to reflect all the training activities of the learners and should facilitate mobility and constructivist learning with no limit on the time of the day or the location of the learner for them to support the emerging understanding of teaching and learning styles including learning through interactions. This can be achieved through extending the LMS by including social networking features or through integrating a LMS with an existing social network site (SNS).

2 Objective of the Research

The objective of the research is to investigate the educational value social networking can bring if used for educational purposes. Specifically, the project will investigate the following:

1. The integration of a LMS and a SNS using Moodle as a LMS and Mahara as a SNS; and
2. The opinions of the students using social networking in a course after

conducting a test run with them.

3 History and Background

LMSs are designed mainly to support formal learning while SNSs mainly support informal interactions. There are however some SNSs (e.g. Elgg and Mahara) which were developed specifically for academic use. By design, LMSs support well the distribution of course materials to students, while SNSs support well users' online interactions and promote content creation by all users. In a LMS, content creation is mainly limited to a few users who include teachers, system administrators and tutors. LMSs and SNSs support different functions which are complementary and this led to projects integrating the two systems to be able to support both formal and informal learning. Some of the example projects where a SNS and LMS were integrated are: the integration of Moodle and Elgg using the Elgg integration block [4], the integration of Coome LMS and Facebook [5] and the development of Mahara to integrate with Moodle [3]

4 Approach/Methodology

Moodle and Mahara will be integrated using a single-sign-on (SSO) to enable users authenticated by Moodle to access Mahara without being re-authenticated. The integrated system will be tested with students in one of the courses at Rhodes University. A survey approach will be used to collect the views of the students who will use the integrated system.

5 Requirements

To implement the project, the following resources will be required:

1. Moodle software version 1.9
2. Mahara software version 1.5
3. Ubuntu Linux version 11.10
4. Apache web Server version 2
5. MySQL Database version 5
6. PHP version 5
7. Server space (approximately 20 GB) to host the integrated system

All the required software is open source and will be downloaded freely.

6 Progression Timeline

Start Date	End Date	Duration	Activity
6th March, 2012	6th March, 2012	1 Day	Presentation of the Project Proposal
7th March, 2012	9th March, 2012	3 Days	Review the Project Proposal based on the comments made during the presentation
12th March, 2012	30th March, 2012	3 Weeks	Learn and modify the functionalities of Moodle if required
2nd April, 2012	5th April, 2012	1 Week	Development of the Project Website
9th April, 2012	27th April, 2012	3 Weeks	Learn and modify the functionalities of Mahara if required
28th May, 2012	28th May, 2012		Submission of Literature Review
13th August, 2012	17th August, 2012	5 Days	Set up the environment for the system and implement the system
21st August, 2012	21st September, 2012	5 Weeks	Test the system with students
24th September, 2012	4th October, 2012	11 Days	Data collection using the questionnaire
5th October, 2012	1st November, 2012	1 Month	Report Writing
29th October, 2012	29th November, 2012	1 Day	Final Presentations
2nd November	2nd November		Thesis and Short Paper submission

Table 1: Progression Timeline

References

- [1] CONDE, M., A., GARCA, F., J., CASANY, M., J., AND ALIER, M. Merging learning management systems and personal learning environments. In *PLE Conference 2011* (2011).
- [2] KOLB, A., Y., AND KOLB, D., A. Learning styles and learning spaces: A review of the multidisciplinary application of experiential learning theory in higher education. Working Paper 5/05, Department of Organizational Behavior, Weatherhead School of Management, Case Western Reserve University., May 2005.
- [3] MAHARA. About Mahara. Online. Available from: <https://mahara.org/about>.
- [4] MOODLE. Elgg integration block. Online. Available from: <http://moodle.org/mod/forum/discuss.php?d=83788>.
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- [6] TRAININGFORCE. What IS a Learning Management System? Online. Available from: http://www.trainingforce.com/content/what_is_a_lms.aspx.