

Facebook or Learning Management System

Irena Valova

Abstract: *This paper reviews the current research on the use of Facebook in e-learning and analyzes the differences between a Facebook group and a regular learning management systems. The main properties of both platforms are described and discussed.*

Key words: *Facebook Group, Learning Management System, e-learning, social networking site.*

INTRODUCTION

E-learning is an interactive process of sharing of information, skills and knowledge by using information and communication technologies. Whether it is focused on distance education or campus based education, universities all over the world are using learning management systems (LMS) to support and improve e-learning within their institution. All LMS are not alike, and they can be used in different ways. However, a common idea behind LMS is that e-learning is organized and managed within an integrated system. Different tools are integrated in a single system which offers all necessary tools to run and manage an e-learning course. All learning activities and materials in a course are organized and managed by and within the system

In 2010, Facebook made it possible to be created closed groups that allow asynchronous and synchronous interactions between members. This also allows sharing of information. The Facebook group contains very similar components of LMS, and thus raises the possibility that Facebook could turn into a learning environment and serve as an alternative LMS.

This article is trying to analyze the potential of Facebook to replace the traditional LMS and to find out whether a Facebook group is an appropriate platform for delivering learning processes and how this environment differs from other LMSs.

LEARNING MANAGEMENT SYSTEMS

The development of ICT and computers, and the advent of the Internet in our everyday life made possible the increasing use of different Learning Management Systems (LMS) to assist or entirely replace traditional training. Learning Management System is a global term for a computer system specifically developed for managing online courses, distributing course materials and allowing collaboration between students and teachers. A LMS will allow you to manage every aspect of a course, from the registration of students to the storing of test results, as well as allowing you to accept assignments digitally and keep in touch with your students. These systems are usually developed or purchased and maintained by the universities to provide a space for online learning for the students. An LMS is usually closed system for registered users only and supports multiple courses with relative ease. The separate courses are typically managed by their authors (educators). He is the user who has the authorization to grant privileges to the students on his course, to upload content to the site, organize the materials according to the course description, to open discussion groups, and to manage the information uploaded to the newsgroups, including the option to delete inappropriate content from it. The educator can view reports of the users' activities and receive students' work in order to assess it. In some LMSs the system is integrated with other administrative systems in the university or organisation, such as the registration system or payments system. The students' privileges are usually more limited than those of the educator. Students registered for the course can view the content and download it. They can take part in interactive activities that take place in forums and in some cases may also contribute content to specific parts of the site, such as special collaborative repositories defined for this purpose by the educator. Different

learning management systems have different user interfaces and different features. However, they all share three key functions [8]:

- **Content management system** - allows uploading different type of content items: texts, presentations, scanned articles, audio-visual materials. It also enables the materials to be organized in an appropriate structure, planned by the educator.
- **Interaction management system** - this system manages the interactions between educator and learners and between learners themselves. It allows to open asynchronous spaces for collaboration or synchronous communication using chat and other online tools
- **System or tools for managing and assessing learners** - provide administrative tools for recording students' activity, tasks, grades, and feedback. They also provide user reports that support the instructor in measuring the level of the learners' participation and in assessing the students' achievements.

To perform their functions any LMS should provide enough disk space to store information and content of all courses, as well as social space to maintain the communication between participants in the learning process. Interaction between users is extremely important because it helps student motivation, provide mutual support among them, and encouraging constructive learning.

A large number of LMS are known today, commercial or free ones, offered as SaaS in the cloud or installed, as well as plenty of private developed LMS to meet the needs of specific organizations [12]. LMSs are used by academic institutions and companies to manage, track, and deliver courses and training programs. One of the fastest growing software sectors over the last decade, it is now a billion dollar plus industry with hundreds of competing offerings [15]. On figure 1 is a look the most popular options as measured by a combination of their total number of customers, active users, and online presence. Whatever type LMS is chosen, experience shows that they all have a lot of restrictions. In general, educators use them to publish content once in its course and eventually publish the results of student learning. Other functionalities of LMS are rarely used thus turning such systems into undesired expense. Moreover, LMSs are very expensive systems because even the so-called "free" open source systems require adaptation and ongoing maintenance by skilled technical staff. Another disadvantage of LMSs is the fact that in many institutions the course is deleted from the LMS server after the end of a course in order to save storage space. In some cases the learner loses the permission to enter the learning environment as the course ends; thus, access to the course materials is no longer possible. The control of the student over the LMS is limited.

The main structure of the LMS, as described above, has aroused much criticism among researchers. They argue that the organizing principle behind the LMS is actually the traditional centralized and hierarchical structure, discouraging the wide adoption of LMS's, and thus preventing innovative and cutting edge pedagogy in these environments [3].

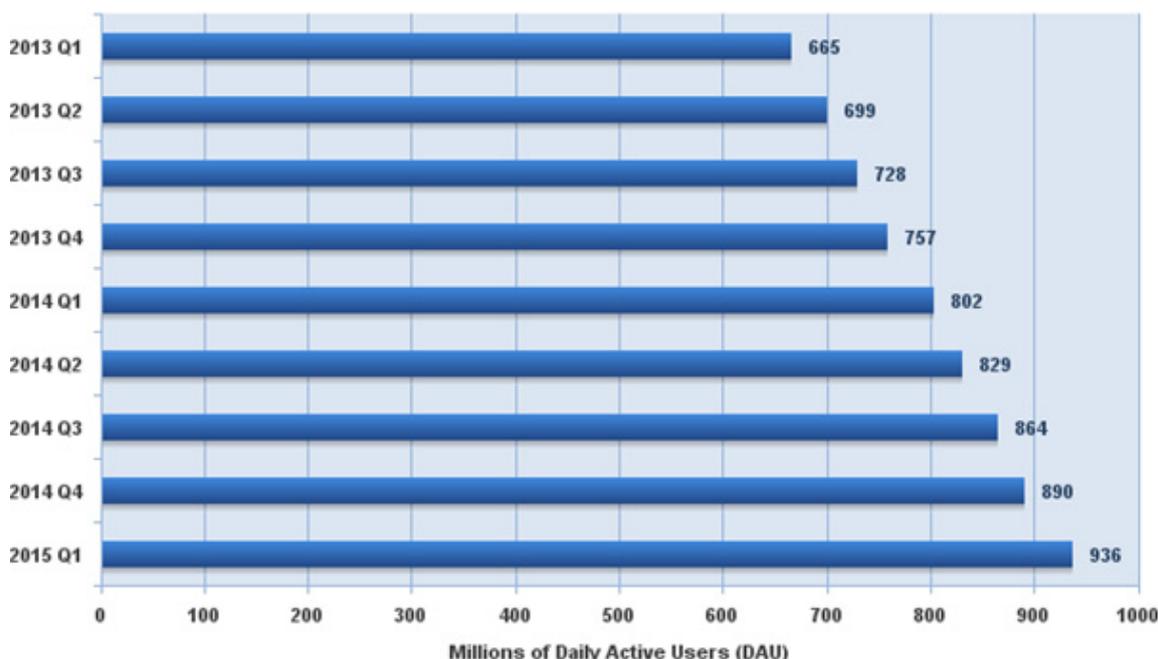
SOCIAL NETWORKING SITES, FACEBOOK

Social networking sites (SNS) on the web are becoming increasingly popular during the last decade and their use has become a habit for a large amount of the population between the age of 15 and 35 years. Social networks represent large groups of people that have a common interest, hobby, share a cause or generally something to connect them. Today on the web there is a huge number of famous online social networks that offer many and different means of communication and interaction of its users. They can share with each other different types of content and to integrate third party applications. Social networking sites provide user-created content platform applications allowing the users to contribute their knowledge in different formats. Facebook, Twitter, MySpace.



Figure 1. The top 6 most popular LMS software in 2015

Delicious, Blogs, Wikis - these are only a few of the social networking websites that are used by various groups to stay in touch with friends and colleagues [13]. The most popular social network, based on the amount of users, is undeniably Facebook. It has been released in 2004 but only for students in Harvard. Until 2006, Facebook has been introduced to other universities and on September 26 2006 it was open for anyone aged 13 and older. Ever since it has become the largest and fastest growing social networking website in the world. Top 20 valuable Facebook statistics from May, 2015 can be seen in [14]. The facts are indicative and very interesting. Figure 2 shows statistics for the users of Facebook increasing during the last two years in millions.



Source: Internet World Stats - www.internetworldstats.com/facebook.htm
 Facebook daily active users worldwide, retrieved on April 26, 2015
 Copyright © 2001-2015, Miniwatts Marketing Group

Figure 2 Facebook Growth in the world between 2013 and 2015

Facebook is used in different areas for growing popularity in the world – business, health care, library, marketing, criminal investigation, education and so on. As any new

web tool, Facebook groups are not developed for learning and training, but they started to be used in the field of academic education and the improvement of the whole environment of Facebook as a social network supports even such applications. In some studies the possibility of professor-student interaction online is researched. One of the problems identified in this context is related to the willingness of professors to be “friends” of their students, thus exposing their everyday life to the students, and vice versa. The merging of the social with the educational environment is perceived as a violation of privacy in many cases [1, 4, 7]. Research conducted in [6] shows that in most cases the increased exposure of the professor through Facebook helped the students to perceive him/her as being more human and trustworthy. At the same time, the researchers emphasize that overexposure to be seen as a sensitive matter. Many professors are not interested in this exposure and prefer not to share their personal lives with the students. Many students are neither interested in this exposure; they would rather prefer a separation between learning space and social space. In light of these findings, it seems that Facebook is not a suitable environment for formal learning activities that require professor-student interaction [5].

With the appearance of groups on Facebook, which does not require members of the group to be friends, it became possible to create a study group in which students and professors participate without being “friends.” Under these conditions, the possibility of using the Facebook group as an alternative to an LMS becomes relevant. A Facebook group can be created by any Facebook user. The creator of the group can invite other Facebook users to register for the group by forwarding a request to join it. The group's administrator (creator) can choose to close the group so members can either apply for permission to join or be invited. Alternatively, the group can have an open membership rule where anyone can join and participate in it. In the case of a closed learning group, the information published in the group does not appear on the user's wall as do all other activities on Facebook, but is published only among group members on the group wall.

The center of the Facebook group is the wall, where the members of the group can share content, statuses (plain text messages), links to Web sites, pictures, and videos.

Each item uploaded to the wall can get responses, either by indicating “like” or by writing a more detailed comment. The organization of the information on Facebook is dynamic as new items appear at the top of the list, and old items with new responses are also pushed to the top of the list. The wall is thus always reorganized in such a way that the items that have been discussed lately are always at the top.

The Facebook group wall also allows the creation of documents (docs). The docs are part of the items posted on the wall, but can also be accessible from a special box on the group page. The documents generator of Facebook is a very simple editor, providing only minimal design of text. Another tool of the Facebook group is the “events” generator. Events are items that are time-dependent and allow the members of the group to attend or not attend.

The profile pictures of all members of the Facebook group appear on the group page. There is a special sign to indicate those currently on Facebook. Group members can use the one-to-one instant messaging system to talk to each other, as well as group conferencing to chat with the entire group. The group also provides an internal search engine that supports information retrieval from the environment.

An attempt to use a Facebook group as a substitute for an LMS is described in [11]. The authors argue that the Facebook group has the potential to be used as an alternative to an LMS, because it contains the pedagogical, social, and technological elements required from an LMS. It allows the sharing of materials and resources and it allows discussions to take place. However, the authors argue that the Facebook environment is still perceived to some extent as an unsafe environment that violates the privacy of the participants. Another study measured the extent of involvement of students in discussions on Facebook compared to a traditional course site. The findings indicated that the number of messages in the discussion that took place on the Facebook group was 400% higher

compared to a parallel discussion on the WebCT forum. The authors explain the increase in the volume of activity in Facebook by the fact that “students were already accessing Facebook for personal use and checked in on the group when they accessed Facebook for other reasons” [9].

COMPARISON BETWEEN LMS AND FACEBOOK GROUP

A very short comparison of the characteristics of a Facebook group and the properties of an LMS shows some fundamental differences between them.

User authentication:

- **LMS** usually requires a username and password for user identification. This means that the users (students and educators) have to make a registration in the platform or if it is possible to use his username and password for the network of the educational institution that provides the platform. The username and password, in most cases, are exclusive to the institution or to the platform (LMS) and force the student to manage another account besides his day-to-day private accounts.

- As a **Facebook** user, joining a Facebook group does not require another account. The users use the same identification attributes for using Facebook and learning. On the other hand, some kind of inconvenience is that a Facebook profile is required in order to participate in a Facebook group and may be not all students and educators are interested in having a Facebook account.

Ownership

- An **LMS** is managed and controlled by the educational institution because it is developed or bought for institutional purposes.

- **Facebook** groups are relatively neutral, but they belong to Facebook. They belong neither to the organization nor to the students nor to the creator of the group. This has its pros and cons. On the one hand, the environment is free of charge and does not require any maintenance but on the other hand it is risky in terms of content and privacy issues and depends on Facebook policies. Moreover, the fact that the course's site is not under the ownership of the institution embodies a deep change in attitude towards ownership of knowledge. The knowledge and information uploaded to the course's site is no longer exclusively related to the educational institution, but is jointly owned by the learners and educators and also by Facebook.

Content

- An **LMS** provides powerful tools developed to create and store a variety of content, including different type. The educator has the permissions to create, publish, and delete content. The students, in most cases, are allowed to consume the content. In an LMS the organization of content is up to the educator.

- A **Facebook** group compare to LMS is limited in terms of its ability to upload content. To overcome this problem it was necessary to develop strategies for integrating content from other Internet platforms, such as Google Docs or another clouds for example, with Facebook. Since 2012 Facebook groups interface offers the option of uploading files directly to the group space. All participants in the group have very close permissions and can create content, delete content, invite participants to join the group, and so on. The main weakness of the Facebook groups is that organization of content is controlled neither by the users nor by the educator/administrator, but by the Facebook policies such that newer news feeds are always at the top of the list, as are comments to old feeds that push old feeds to the top. The dynamic organization of the environment makes orientation and retrieval of content difficult. On the other hand, this is also its main strength: the dynamic organization produces the engine that generates interaction and encourages active participation.

Interaction

- Most **LMS** allow limited synchronous interaction between learners.
- In **Facebook** groups, synchronous interaction is the main mode of communication between users. All the time for every group member is possible to see who is active and who is not. Group members can communicate synchronously in private chats and also in the group chat. The possibility of synchronous dialogue enhances the interactivity between the users of Facebook groups, makes the group more social space oriented rather than just a learning space and indirectly supports learning in an informal way.

Assessment tools

- The LMS provides the educator with many different tools to assess learning, ranging from questionnaires and different type of tests and reach to activity reports from the system about students' submissions, tasks, and mark books.
- A Facebook group does not have most of these options. The only tool built into the Facebook group, which could be used for assessment is the internal search tool. By typing a name in the search bar, the instructor can create a user activity report. The report separates between the activity of initiating a new status and comments on existing statuses. The report does not include "like" responses. The combined use of a Facebook group with Google Docs or another questionnaire tools may extend, to some degree, the possibilities of submitting written tasks and of using multiple choice questionnaires (forms).

Relationship between Content and interaction

- In the LMS there is a separation between the content management elements and the interaction elements. The educator can create a content item (presentation) or an interactive item (forum or discussion), but each item stands on its own.
- In Facebook groups all types of elements are created through the status bar, so each item, whether it is content or interaction, is automatically added to the wall with the options of commenting or adding "like" to the item. There are no differences between different types of elements. This special design makes interaction a part of the content. Using Facebook only as a repository of content is also almost impossible with this structure.

If the Facebook group could meet the purposes of learning management systems, and if it could overcome some of the disadvantages indicated in the management and operation of learning using these systems, there is a reasonable possibility that a Facebook group could be a real alternative to an LMS.

CONCLUSIONS AND FUTURE WORK

Despite the significant differences between the Facebook group and the traditional LMS, there seems to be grounds for using the Facebook group as an alternative to an LMS. A Facebook group has several distinct advantages over a conventional LMS, as well as some major disadvantages for learners and educators. Using a Facebook group as an LMS challenges the learners and the educators to provide original and creative solutions for learning in this environment. It is easier for the students to use Facebook group instead of new environment such as LMS. They feel free and comfortably in Facebook.

Some research and comparison of the students' results, when they were used Facebook group and LMS in parallel will be useful for the decision what to use in the education, but it depends not only from the used system, but also from the educator and from the students group.

REFERENCES

- [1] Abel, M. (2005). Find me on Facebook ... as long as you are not a faculty member or administrator. *Resource for College Transitions*, 3(3), 1-12.
- [2] Coats, H.J.R., & Baldwin, G. (2005) A critical examination of the effects of learning management systems on university teaching and learning. *Tertiary Education and Management*, 11(1), 19-36.
- [3] Dron, J. (2006). *Any color you like, as long as it's Blackboard*. Paper presented at the World Conference on E-Learning in Corporate, Government, Healthcare and Higher Education, Honolulu, Hawaii, USA.
- [4] Hewitt, A. & Forte, A. (2006). Crossing boundaries: Identity management and student/faculty relationships on the Facebook. Presented at the Computer Supported Cooperative Work Conference, Banff, Alberta, Canada.
- [5] Madge, M., Meek, J., Wellens, J., & Hooley, T. (2009). Facebook, social integration and informal learning at university: 'It is more for socialising and talking to friends about work than for actually doing work'. *Learning, Media and Technology*, 34(2), 141-155.
- [6] Mazer, J.P., Murphy, R.E., & Simonds, C.J. (2009). The effects of instructor self-disclosure via Facebook on instructor credibility. *Learning, Media and Technology*, 34(2), 175-183.
- [7] Mendez, J. P., Curry, J., Mwavita, M., Kennedy, K., Weinland, K., & Bainbridge, K. (2009). To friend or not to friend: Academic interaction on Facebook. *International Journal of Instructional Technology & Distance Learning*, September.
- [8] Morgan, G. (2003). *Faculty use of course management systems*. Retrieved from <http://www.educause.edu/ir/library/pdf/ers0302/rs/ers0302w.pdf>.
- [9] Schroeder, J., Greenbowe, T.J. (2009). The chemistry of Facebook: Using social networking to create an online community for the organic chemistry laboratory. *Innovate: Journal of Online Education*, 5(4). Retrieved from <http://www.innovateonline.info/print.php?view=pdf&id=625>
- [10] Sclater, N. (2008). Web 2.0, personal learning environments, and the future of learning management systems. *EDUCAUSE Research Bulletin*, 13. Boulder, CO: EDUCAUSE Center for Applied research.
- [11] Wang, Q., Woo, H. L., Quek, C. L., Yang, Y., & Liu, M. (2011). Using the Facebook group as learning management system: An exploratory study. *British Journal of Educational Technology*. doi: 10.1111/j.1467-8535.2011.01195.x
- [12] https://en.wikipedia.org/wiki/List_of_learning_management_systems
- [13] https://en.wikipedia.org/wiki/List_of_social_networking_websites
- [14] <https://zephoria.com/top-15-valuable-facebook-statistics/>
- [15] <http://www.capterra.com/learning-management-system-software/#infographic>

ABOUT THE AUTHOR

Assoc.Prof. Irena Valova, PhD, Department of Computer Systems and Technologies, University of Rouse, Phone: +359 82 888 685, E-mail: Irena@ecs.uni-ruse.bg.

The paper has been reviewed.