The Use of Social Networking Platforms as New, Efficient Technology Tools for E-learning

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Abstract: - Technology has evolved drastically over the past few years and one part of computers and technology is social networking platforms which give people the opportunity to connect and interact easily. The usage of social networking platforms is increasing daily as an educational system on various levels. The aim of this paper is to examine the role of social media in as e-learning educational tool. The article also determine and explores the similarities, features and differences that learning management systems and social media provide to serve as e-learning tool in online education. Moreover it examines students and lecturers' attitudes towards sharing their ideas and knowledge on social networks as online learning platforms.

Keywords: - *Social Networks, e-learning, LMS, Blended Learning, Facebook.*

I.   INTRODUCTION

Few years ago, connections between people were limited due to geographical distances and financial concerns. However social networking platforms made it easier by efficiently connecting people around the globe at low costs. Humans by nature are social since they naturally feel the need and the instinct to connect, communicate and expand their relations [1][3]. Today there are a many websites that offer the services of social networking. The most popular one could be Facebook and according to some researches it's currently hosts and serves over 1 billion user. For this reason people started to have the tendency to associate social networking with Facebook. There are other social networking websites like Twitter which is in fact, the most efficient social media network on the Internet. This is because Twitter allows one individual to share a fact with millions of people in seconds, and people or followers in return can respond in direct replies to this fact within seconds as well [1][2][9].

Web based learning provides numerous advantages for both teachers and learners. It allows the students to show their technological skill set. The web based learning (e-learning) has increasingly becoming a viable, and effective tools for delivering instruction and training [4][13]. This can increase the motivation and engagement as students become more excited about the new projects they are creating and the tools they are using. For students to learn in a fully online environment, it can be advantageous in that the course is flexible, cost-effective and convenient where it can easily be adapted catering to students' schedule. According to study done by researchers almost 3.2 million students were registered in online learning studies in fall 2005 while this number had increased to 61% in fall 2006 [5]. Over the past ten years e-learning have gone from early adopter novelty to mainstream essentials. Statistics shows that the number of corporations that use online training methods is significantly growing mostly for the reason that technological barriers are diminishing. In the year of 2011, 77% of American Corporations were using online learning Management systems while this number was only 4% in 1995 [6].

On other hand, the popularity of using social networking sites as an educational tool is increasing every day. Many educators are now trying to integrate these online teaching platforms that were provided by commercial services such as Google, LinkedIn and Facebook into learning environment. Recent studies have shown that the applicability of use social network sites doesn't stop for social purpose, but now has been used in formal way for educational purposes A national survey conducted in U.S in the year of 2010, to almost 1,200 principals, teachers and librarians found that most agreed that social networking sites can help educators share information and resources, create professional learning communities and improve school wide communications with students and staff [7][9].

This paper focuses on investigating the learning significance of working on social networking platforms as tools for e-learning. First part of the paper discusses LMS as a function of learning tool. Then, it provides deep documentation of the influence of social networking platforms as an educational tool with comparison and recommendations of the use of social networks and LMS for online learning. Then it present the methods and the findings of this study. Finally, the last section of this paper describes our conclusion and future scope.

II. E-LEARNING

E-learning basically means that the participants take parts in virtual learning courses; this however goes well beyond using simply a computer to study. It means e-collaboration which makes group work possible via web conferences and within discussion forms. It combines all educational actions run by learners and instructors over the web using computers or any other electronic devices [8][12][13].

The required course materials are made available to participants in digital format which means that the content has been adapted to the special requirements of an e-learning course [17]. This will allow the participants to exchange ideas within the course and while online. Thought the course period the participants are accompanied by experts who are available to provide support on various levels. The Learning Management System which is a function of e-learning and popularly called LMS software is an application which allows instructors to create online course and training courses. LMS is the infrastructure that delivers and manages instructional content. Instructors using LMS can track the progress of the participants by accessing detailed reports and statistics along with creating, managing and delivering valuable learning courses to their learners [10][11]. It helps to keep the students and the teachers well organized. Students can review materials, complete work and turn in, whenever, and wherever since it's all entirely online. The diagram below shows the three fundamentals of e-learning. This form the three key elements that shape the foundation of e-learning, which are Learning Management System (LMS), resources, and environment without which e-learning would be ineffective and void.
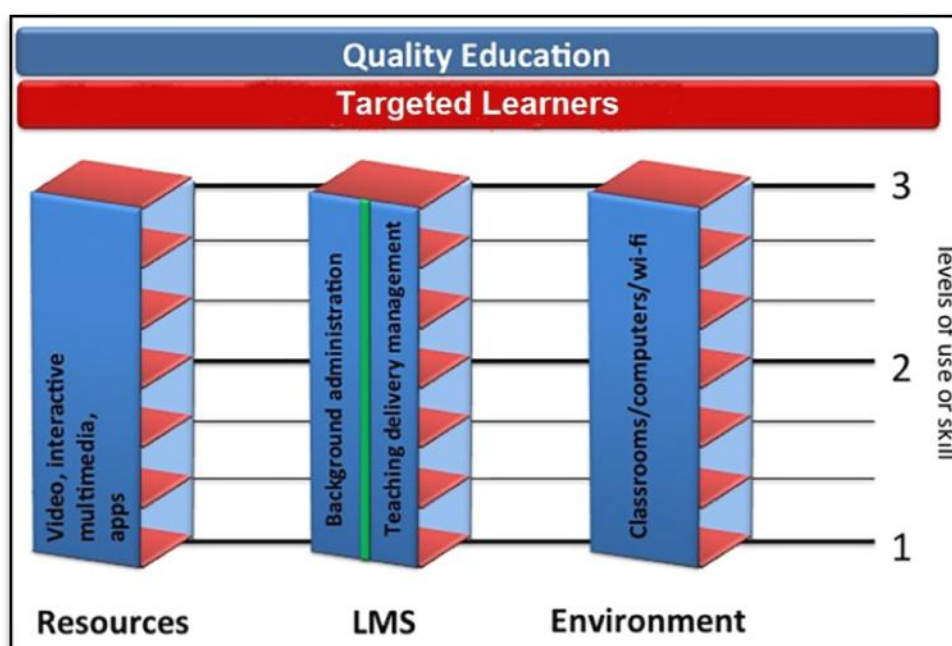

Fig. 1: The three fundamental elements of e-learning

2.1 Benefits of E-Learning

E-learning has several advantages over conventional classroom learning while having similar learning outcomes. The main one is being convenient with participants not having to leave their place anytime anywhere or having to go away long distances. The points below highlights some of these advantages.

- Encourages Independent Learning: It helps students to choose learning resources, or to select content in accordance to the level of knowledge or interests they have. Students take responsibility to put together self-confidence and self-knowledge for their learning.
- Increased Participation: e-Leaning encourage learners to communication with each other or between students and teachers in online discussion.
- Self-Paced: Student can select the technique of teaching to learn at their own pace depending on their ability and how can be convenience with it. It helps students to skip things they already understand and concentrate on materials that they have no knowledge of.
- Consistency: it helps to make the entire learning style consistent regardless of different instructors teaching the same subject which is very important for some for some disciplines.
- Availability: Curriculum, tutorials, e-libraries are available all the time 24/7.

III. THE RISING POWER OF SOCIAL NETWORKS

Social networks have changed the way we live today. Generally the social network is made up of online communities that are connected to one another using the means of technology. According to many researchers, social networking websites have become the most popular means for communication nowadays [9].

There are numerous advantages of using social networks. One advantage is that social networks became an ideal place to share and discuss ideas views and opinions. Another benefit of social networks is that it helps in building stronger relations where a user can create a profile and build a personal network that connects the user to other people using the same social network. Users of different social networks have become able to use their networks for other purposes like job search, applying for educational courses and online learning [14]. The power of social networks is increasing among the online learners and it is ever more attracting the attention of academics, students and researchers of various backgrounds of knowledge and skills. The figure below presents the impact of social web technologies on e-learning according to a major study for several years by Horizon Reports from 2004 to 2010 [15].
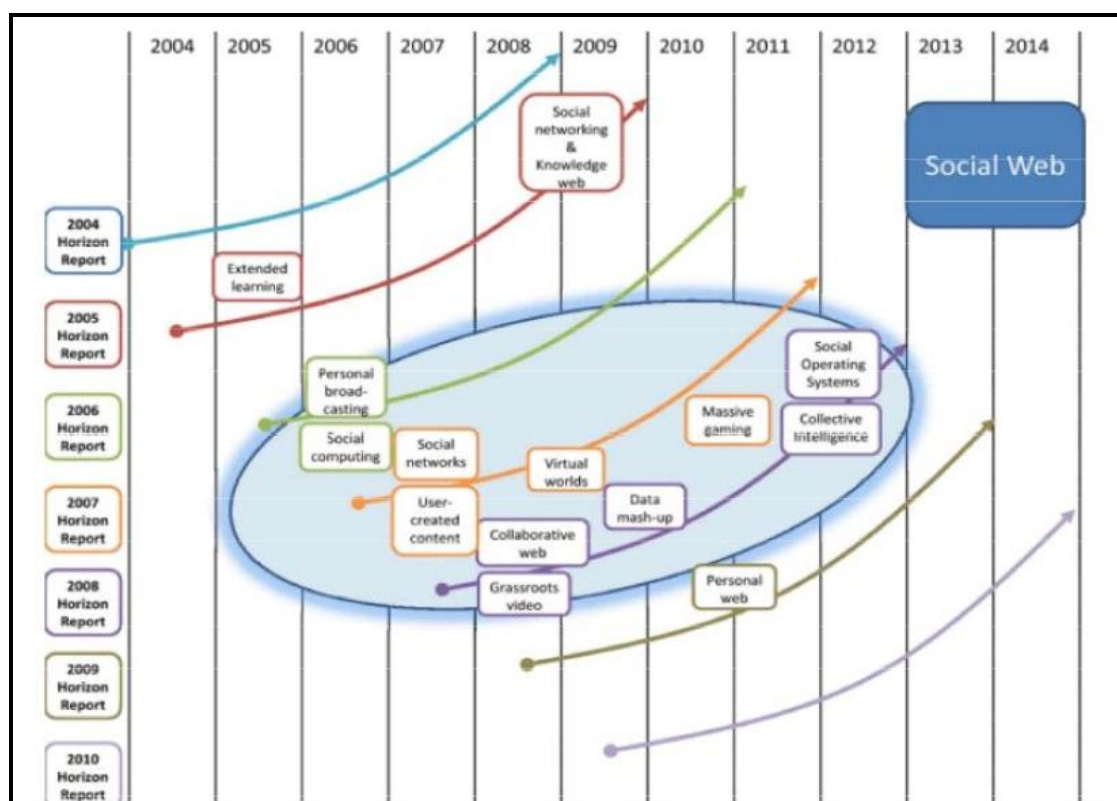

Fig. 2: Social web technologies in education

3.1 Social Networks as Platform for E-Learning

The role of using social networks as an educational tool is growing every day. Social networking websites are being used more than before by instructors and teachers to communicate with learners or for out of classroom activities and discussions. Today many instructors and educational institutes are trying to incorporate these social platforms into education environment [15]. Social networks develop the skills of learners by the interaction between students in discussing new ideas with classmates or with other students study in similar fields. Educators and instructors often take advantage of student's abilities in using social networks to create discussion forums, class groups, videos, and more. For instance, teachers can set up class groups which give the students the rights in collaborating out of the classroom, develop group projects, assign meeting dates, practice for tests, and upload notes online. Moreover, instructors record student's presentations and place them as study guides for students to refer back when needed [16]. Social networking is a good form of entertainment, effective for meeting students with common interests and it's believed that's these networks can benefit learners' educational process by developing more efficient connections across boundaries and over time. A study was conducted by the author of this paper to review and compare e-learning LMS systems and social network application features applicable to learning process which is shown in Table 1.

Table 1: Comparison of Social Networks and LMS tools and features

Features	Social Networking Platform	LMS
Media Sharing	✓	
Messaging	✓	✓
Forum	✓	✓
Blog	✓	✓
Wiki		✓
RSS	✓	
Calendar	✓	✓
Chat	✓	✓
Realtime Activity Stream	✓	
Tagging	✓	
Groups	✓	
Friends	✓	
Profile Pages	✓	
Task upload		✓
Free of charge	✓	
Adding User roles	✓	✓
Course categories		✓

IV.   METHODS

A research was conducted to study the feasibility of integrating social networks applications in online learning for students while comparing these tools with the ones commonly used as learning management systems.

4.1 Research Hypotheses

While a Learning Management System (LMS) serves as good platform for eLearning, Social Network applications like Facebook groups are more popular among students.

4.2 Research Questions

1. How frequently LMS platform and Social Networking group's courses are used in online learning?
2. What is more popular among students; is it e-learning platform on LMS or social networks?
3. What are the common and different characteristics and features, social networks and LMS provide for students in e-learning?

4.3 Early Finding and Discussion

An electronic survey was conducted online using Gmail forms for 60 students of an IT background from different Malaysian universities (UKM, UNITEN and UPM). The questionnaire included multiple choice questions, closed as well as open ended questions. Students completed the survey and the results for each student were calculated. The study has shown that there wasn't a statistically significant difference in answers between the genders. Some of the data collected are shown in the Table 2, Table 3 and Table 4 of this paper.

Table 2: How often do you use LMS and Social Networks for learning purpose?

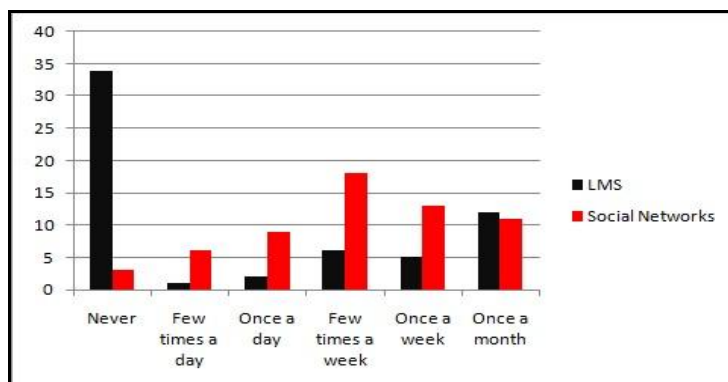| Regularity of use	Number of Respondents	
	LMS	Social Networks
Never	34	3
Few times a day	1	6
Once a day	2	9
Few times a week	6	18
Once a week	5	13
Once a month	12	11

Fig. 3: How regularly do students use LMS and Social Networks as learning tool

According to the results show above, it indicate the number of times the social networking platforms used for educational and learning purposes is higher than that of using the learning management system for the same purpose. Social networks as informal, supplementary learning tools became popular and accepted among students. This could be supported by the fact that social networks provide an attractive and more active learning platform for students.

Table 3: In your opinion, how useful the use of LMS or Social Networks in learning process?

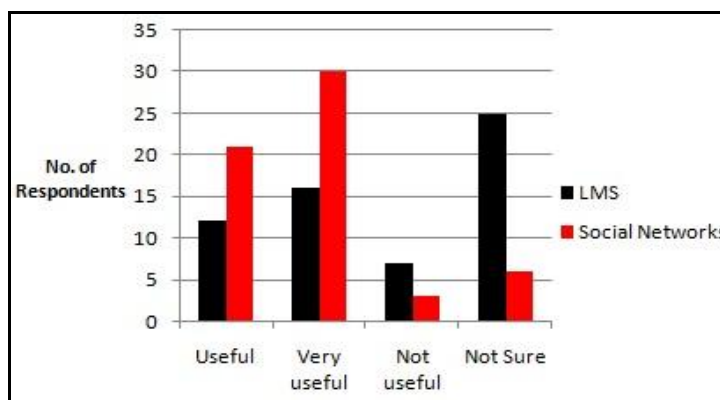| Usefulness of use	Number of Respondents	
	LMS	Social Networks
Useful	12	21
Very useful	16	30
Not useful	7	3
Not Sure	25	6

Fig. 4: How useful the use of social networks and LMS in learning process

The finding which is presented in fig. 4 reveals that the usage of social networks in learning and education process is useful and more important than the use of learning management system. This estimation could be explained in a way that social networks equip students with more tools to share and spreading their ideas in the light of interacting, communicating and entertaining manner.

Table 4: Rate the effectiveness of spreading better and faster learning information between students using LMS and social networks?

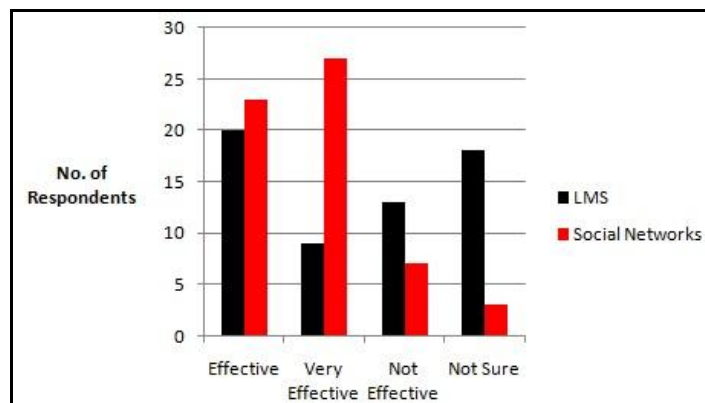| Effectiveness	Number of Respondents	
	LMS	Social Networks
Effective	20	23
Very Effective	9	27
Not Effective	13	7
Not Sure	18	3

Fig. 5: Rating the effectiveness of social networks and LMS in learning process

The results in the fig. 5 above presents the effectiveness of the use of social networks and LMS in spreading faster and better learning information. The results indicates that most of the students still prefer and think that social networks is more powerful and effective in spreading information in a fast and better way. The results imply the use of social networks permit users to access data quickly on the go and also provide them with the decision of sharing information with their peers.

V. CONCLUSION

This study is one of the first attempts of investigating the use of social networks in educational purposes and how it impacts in virtual learning. The main contribution this study is analyzing the current learning systems and discover the connection of social networks in e-learning. According to the results of this research, social networking platforms, are more popular among students than LMS platforms. But there are still some students who prefer to use LMS as a tool for e-learning since the information they get is safe and approved by the instructor. As the popularity of Social networks increasing every day, it its believed it can provide better and rich in content environment for sharing data, obtaining fresh information from the educators and peer to peer feedbacks. However there still more research is required to be conducted in this area to study the links between e-learning and social networks. The future scope of this research will be on studying the impact of using social media platforms on student psychology in e-learning environment.

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