Moodle e-learning–
A global tool for a Develop the Approach of a learning culture with First Year Engineering Student

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Abstract

Globalization has become a widespread idea in national and international dialogue in recent the 21st century. The use of Information and Communication Technologies (ICTs) in education is provide to expand access, eliminate exclusion and increases the quality in education in terms of learning. In general, ICTs are a set of different technological tools and resources, used to communicate, develop, spread, save and manage information. Within the educational context, ICTs promote digital literacy by generating essential skills and abilities. For being this Prospectus Moodle Built for e-learning globally.

In this paper our focus is that blended learning with computer based learning in the Moodle e-learning environment based on constructivist learning theory is an effective tool for I years engineering students for all discipline. Based upon the questionnaires given to students at the end of each course. Which provide useful input for the teaching and learning in the Moodle learning environment and also development of a learning culture. The effectiveness and motivation for e- learning are higher than providing traditional methods of learning. New prospects and possibilities for teaching and learning are opened which will develop the learning culture.

Introduction

21st century students are digital inhabitant. This is a generation that has never known a world without Google, the internet or even smart electronic devices. Technology is at the essence of their lives, affecting every aspect of their day-to-day experiences and influencing their decisions like google assistance goggle map, etc . In fact in present scenario students are basic need and essential requirement to learn, systems that fully embrace the potential of digital learning. It stands to reason, that technology should be a crucial part of their educational experience [1].

Technological evolution and the internet have changed human being lives on divergent, scales including for instance teaching and learning. The web has become path of learning that opens the entrance for people around the world to access education for free, or for fewer costs [2].

Today, the use of web to teach and learn is unavoidable for both teachers and students. Online courses are becoming more and more mandatory for education to and for knowledge spread. Thus, teachers should think about this trend in education and get prepared technically and pedagogically to take online teaching in consideration. In turn, students need to get adequate skills that will help them effectively benefit from the advantages e-learning is providing [4].
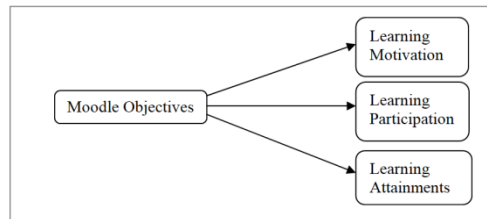
The growing interest of blended learning (combination of traditional teaching methods of face to face and online media) in higher education is indicated by the increasing number of studies in this area. Government and most of the education institute academic staff are encouraged to incorporate both traditional and web-based ICT (information and communication technology) modes of teaching and learning in the courses they deliver.

Moodle Software

MOODLE is a free software package designed to help lecturers and students as a tool to provide in creation of quality teaching. The MOODLE is abbreviated to Modular Object Oriented Dynamic Learning Environment built by Martin Douglas at Curtin University, Australia [3]

Preliminary quantitate evaluations at shows following things for Moodle Software

- All faculties claimed to have enjoyed using the web-based aspects of blended courses.
- Students perspective Moodle had helped them learn the subject and that they would like future modules be blended in this way.

MOODLE has a number of features.

- MOODLE is easy to install, upgrade and use.
- Installed on as many servers as involved without an additional cost.
- MOODLE does not require modification on Unix, Linux, Windows, Mac OS and any other systems.
- Using Process is very easy and simple.
- Each user is given an account and password to access the MOODLE portal site..
- Lecturers are registered as users that can edit the course's site, including modifying the activities and marking students.

- The types of resources are: text files, (X)HTML files, links to WebPages, images, multimedia files and links to uploaded files; while the activities commonly used are quiz, chat, forum, choice and assignment.
- The only issue is the fact that Moodle is not fully developed to cope with big projects. While it may be useful for colleges or universities of small to medium size.

Literature review

Numerous research papers evaluating Moodle do not only define it as the most widely implemented open source solution in higher education but also the most user-friendly [5] (Paulsen, 2003; Alexander, 2006; Machado, 2007; Cavus; 2009).

According to Harris et al., moodle is defined as a Course Management System (CMS) (also referred to as a Virtual Learning Environment or Learning Management System) and is today one of the most commonly used e-learning platforms worldwide [8] (Moodle, 2013; Harris et al., 2013).

Bremer & Bryant and some academics think and argue that further development of Moodle is necessary [9] (Bremer & Bryant, 2005).

The University of Aveiro (UA), Portugal that analyses the functionalities and tools of the Moodle platform and their use by the students. Then students recognize the importance of the use of other functionalities of this platform in order to promote the success of the teaching/learning process.

A Case Study at the German Jordanian University Rana El Bahsha and Mohammad I. Daoudb Evaluating the Use of Moodle to Achieve Effective and Interactive Learning [10].

Academics agree that students find that Moodle has a positive impact on learning progression.

Aim of the study

The aim of the study is to find out how students appreciate the courses provided in moodle e-learning environment. While technology can act as a catalyst for practical and greater learning.

Material and Method

At the end of the courses a questionnaire was given to all groups of students. The questionnaires were given for 60 students in the ECE I year students. (100% were filled). Students had to answer to following questions:

1. When you start e-learning
2. How do you appreciate the e-learning environment?
3. Which part of the course was most interesting for you?
4. Which part of the course was unclear for you?
5. What do you like to learn more?
6. For assessment which format you like and why? Quiz, open book Test, learning by doing
7. Write positive points of e-learning
8. Write negative points of e- learning
9. How you correlate the topic with real world applications.
10. How do you will to use obtained knowledge in practice?

Results

Of respondents 100% answered that moodle e-learning environment is very effective learning tool. Students wrote that they are encouraged and motivated to learn more in moodle e-learning environment and they do not like to learn courses which are not in moodle e-learning environment.

1. When you start e-learning

Answer: 70% students said B.Tech I year I semester, only 30 % before B.Tech. Use e-learning when a particular concept is not fully understood and if we also want a deeper learning then we use e learning.

2. How do you appreciate the e-learning environment?
Answer: e-learning is one of the best way of learning a particular concept, as there are certain things which cannot be explained on the board thus with e learning we and understand all the 3d related topics like 3d geometry (maths) and solid structures (chemistry)

3. Which part of the course was most interesting for you?
Answer: The course which involved a real life experience is always most interesting or which involved a new derivation.

4. Which part of the course was unclear for you?
Answer: None of the part was unclear as in e learning we can quickly ask the doubts to the lectures in the e learning site

5. What do you like to learn more?
Answer: Concept, which is based on application point of view

6. For assessment which format you like and why? Quiz, open book Test, learning by doing
Answer: The most effective method would be the quiz type as it would encourage a student to be competent and active throughout the course

7. Write positive points of e-learning
Answer:
- As you have access to the net 24x7, you can train yourself anytime and from anywhere also.
- It is a very convenient and flexible option; above all, you don't have to depend on anyone for anything.
- Not only can you train yourself on a day to day basis, but also on weekends or whenever you have the free time to. There is no hard and fast rule.
- Through discussion boards and chats, you are able to interact with everyone online and also clear your doubts if any.
- The video instructions that are provided for audio and video learning can be rewound and seen and heard again and again if you do not

happen to understand the topic first time around.

8. Write negative points of e- learning
Answer:
- Most of the online assessments are limited to questions that are only objective in nature.
- There is also the problem of the extent of security of online learning programs.
- The authenticity of a particular student's work is also a problem as online just about anyone can do a project rather than the actual student itself.
- The assessments that are computer marked generally have a tendency of being only knowledge-based and not necessarily practicality-based.

9. How you correlate the topic with real world applications.
Answer: We use our textbook knowledge and our life experience to co-relate the topic and real world applications.

10. How do you will to use obtained knowledge in practice?
Answer: Use the obtained knowledge and use it in daily life.
   ex. try to create an app with help of c programming

Over all conclusion About Questioners

Moodle e-learning environment is very useful for learning from each other obtaining new knowledge. Some students wrote that availability of course materials and activities in moodle e-learning environment encourage their interest for classroom activities and the face to face contact with teacher is now in a new level. Students appreciate that they can learn in moodle e-learning environment the time and place suitable for each student. Some students wrote that the experience of learning in moodle e-learning environment is helpful for development of their self- discipline.

Conclusions

Moodle is among the most widely used open-source Learning Management Systems in the educational. It provides various functionalities that are very important to support interactive and effective learning in the 21st century, where structural changes in our industries and economics, globalization of our world need more focus on new challenges for the higher education and learning culture are continued and new possibilities, dimensions and solutions are opened for students.

Moodle is mainly used as a repository to exchange course materials. However, the interactive learning tools of Moodle are not effectively utilized. The students demonstrated a positive perspective towards expanding the use of e-learning tools in the educational process. The results of our study suggest that university leaders and instructors are encouraged to expand the use of Moodle in the educational process, with particular focus on employing the interactive learning tools.

Moodle e-learning environment is a very effective learning tool supporting blended learning which encourages the student's motivation for learning activity and interest to the course, developing the learning culture. The rapid development on Moodle e-learning environment develops new possibilities and solutions for developing the learning culture. Students experience and usage of Moodle is likely to increase, and consequently increase the value of Moodle as an essential tool throughout our university education.

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