

# Implementing Moodle as a Tool to develop the Isra University e-learn system

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## Summary

Moodle is introduced as an e-learn system in many courses at the Information Technology faculty in Isra University. Prior to using Moodle at the university, there had been many obstacles relating to course management such as the finding an appropriate time that suits all students to carry out tests and quizzes; marking and providing feedback to the students within a short period of time; registration for tutorial sessions; and providing lecture materials and general faculty announcements. In this research, 20% of computer skills students were surveyed to shed some light on their perceptions of using Moodle as an e-learning system in Isra University. The evaluation results of using Moodle platform shows promising opportunities to support and improve upon this platform in Isra University classes. This study helps to introduce the e-learning system to all Isra University students and to support the understanding of the overall learning process, learning motivation, legitimize application of knowledge, and a challenge for improving the teaching behaviors.

## Key words:

*Academic Education; Distance Learning , e-learning, Knowledge Building, Knowledge Exchange, Moodle.*

## 1. Introduction

Isra University (IU) ([www.isra.edu.jo](http://www.isra.edu.jo)) is a private university offers twenty two disciplines in various fields, three of which are in Information Technology (IT). The university follows two-semester per academic year with an optional summer semester. In each semester there are about 300 – 450 students from the twenty two disciplines enrolled in the computer skills course that is normally offered in the first semester of the four years program. Students are distributed over to selected programs, and hence there are twelve classes of 20-45 students each with its own timetable. A team of eight instructors including a course coordinator are allocated to teach the Computer Skills Course (CSC). Managing such a course in this particular setting is rather cumbersome. The common problems experienced by the team includes: handing out course materials, student-instructor communications, and

registration for tutorial sessions, scheduling and conducting common quizzes/tests. Further more, the manual grading adds an extra burden to the instructors and it is almost impossible to provide immediate results and feedback.

Nowadays, many higher education institutions use course management system (CMS), as a tool to assist delivering course materials to students, either as a supplement to courses delivered traditionally or as an entire course offered online [1-7]. A CMS system is an alternative teaching method that reduces methodology problems associated with managing large classes. Initiative to implement Moodle as an e-learning platform in IU, was first started during 2007, as part of the development program for entrancing the teaching and learning process.

This paper describes the experience in managing the CSC. A Moodle survey activity was conducted for the students' course to obtain feedback relating to the features used in Moodle and the management of the course.

The paper is organized as follows: firstly in section 2, a brief background description of the computer skills course is given. How Moodle was used as a tool to help managing the course, is described in section 3. Section 4 however, presents the results of the survey. Finally, the conclusions is presented in section 5.

## 2. Moodle Platform e-Learning System

The word Moodle (<http://moodle.org/>) is an acronym for modular object- oriented dynamic learning environment, which is mostly useful to programmers and education theorists. Moodle is a tool that teachers can use to facilitate student collaboration in many ways that use not possible otherwise [3, 8-10].

Moodle is a great tool for teachers because it is a platform to save and achieve teaching material easily and a

collaborative online platform for teachers and students to learn together. Besides creating courses, it is also useful to join online community to keep user updated with the world and to establish a circle of scholars that will truly encircle the globe. Many modules can easily be found in the moodle.org website which is very useful to enrich the Moodle site with video illustrative materials. These tools help making the teaching process more effective [9-11].

There are thousands of Moodle systems worldwide ranging from a single-teacher site to a 40,000-student university site [12-16]. Nevertheless, some organizations that have adopted commercial CSM (WebCT or Blackboard) are considering or have considered using Moodle as an alternative. Today, nearly 4000 organizations in over 100 countries have registered Moodle sites. Moodle is used in public schools, private schools, home schools, universities and corporate training institutions. Learners using Moodle range from elementary school students to college scholars and beyond [15,16].

### 3. Computer Skills Course (Case Study)

The CSC is offered to all students in their first semester at the university. The typical number of students enrolled in this course is between 360 – 450 students each semester, and a team of instructors are assigned to manage this course. The students attend two hours of theoretical lectures and one hour of tutorial per week.

Moodle was introduced to IU in early 2007. Although Moodle has not been utilized to its full potential yet, it is found that e-learning platform is able to assist the assigned course. Table 1 shows the activities that been arranged by the instructor in Moodle platform at the computer skills course.

After any exam or quiz, a Model solution is made available for student's reference. Every student in the mode is able access the test. When a instructor open the Moodle site, the site news and all the available courses are displayed in the main screen, also the information updating or important information will be presented in the middle of the main screen as shown in Figure 1. On the left hand side of the main screen, several blocks list the available courses. On the right hand side however, the messages, calendar, and online user are displayed.

Any course can be accessed by clicking the course name in the course block, and a new screen will appear automatically as a consequence, as shown in Figure (2). There are three columns in this screen; the far- left and

far-right columns contain tool blocks, while the center block contains the course content and activities.

For adding resources and activities to the course the "Editing Mode" must be on, Figure (3) shows the main screen in "Editing Mode", there are two dropdown menus in this screen, the "Add a resource" option and "Add an activity" option. The "Add an activity" menu gives the instructor interactive tools to add, such as forums, quizzes, lessons, workshops, assignments, and other activities. The "Add a resource" menu gives the tools for adding static content, such as web pages and word processing documents.

### 4. Student Survey Result and Discussion

In order to evaluate and analyze the effects of the IU e-learning system Moodle, and the learning experience, the students were asked to complete a small survey near the end of the course. The survey was conducted by 86 undergraduate computer skills students; it was setup using the Moodle platform survey. Students were asked to identify the following questions (Figure 4 shows the same results):

(I).Do you like using computer (85% of student listed it as they like the use of computer).

(II).You used computer for (3% fun, 55% education, and 42% information collection)

(III).Do you find the e-learning useful (77% agree, 5% not sure and 18% disagreed)

(IV).Do you see that the use of e-learning exchange the style of your study (56%agree, 8% not sure, 36% disagreed).

(V).Do you need a training for using e-learning (36% agree, 18% not sure and 46% disagreed).

(VI).Do you find it difficult to download lectures from e-learning site (25% agree, 19% not sure, 56% disagreed).

From the above survey it can be concluded that the student like to improve their computer skills as a learning tool and many of them (97%), used computer for learning and collecting information. Many of IU students used e-learning system for the first time, 77% of students agree that e-learning is a useful tool for education, e-learning system have changed the study style of 56% of student, and for 46% of student e-learn system was simple to deal with.

On the other side, 18% of student do not like to change the traditional teaching techniques with the e-learning system, 36% of student do not agree that e-learning system did change their style of studying, however 36% of the students find that e-learning system in IU needs a training lectures, and 25% of the student face certain difficulties to download lectures from the e-learning system.

## 5. Conclusion

A literature survey has been conducted to shed some light on the Moodle e-learning systems, clearly indicated the advantages of such techniques over many other related systems, and this had stimulated the idea of this research.

The questioner conducted shaved the salient benefits and drawbacks resulting from using Moodle as an e-learning system in IU. The advantages however introduced by using student were indicating the importance of the existing Moodle site as an e-learning tool.

It is concluded that this research increases the student's motivation to read and search for this e-learning system, due to the fact that it does save a lot of time, also organize and manage different concurrent classes for a particular course.

Using computer for collecting information was not a new idea for the students. But using the computer as an e learning system was indeed new.

This survey encouraged the university's top management enforce the use of this platform in all other faculties. The Moodle site contributed to change the study style amongst students.

On the other hand the drawbacks that site are noticed from this survey were the need for a student's guide to use this survey, and the difficulties in downloading the appropriate material.

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Table 1: The Computer Skill Activity

Name	Description	Download
Involving student	Selected individually from available students pool, the whole class, or selected groups a	Started after registration of the student to the course.
Exam	First and second exam questions arranged randomly from a pool of previously submitted questions.	Two days started before the exam and remained until exam end. Student grads are saved from the exam.
Quiz	Four quizzes during the course, questions arranged randomly from a pool of previously submitted questions.	Started at semester begin and reminded until semester end. Student grads are saved after the exam.
Time Table	Three time tables (first, second and final exam) arranged according to the university exam time table.	Setup before each exam, and removed after finishing the exam.
Material	Lecture from the text book of Doc or ppt file format.	Start at semester begin and remained until semester end.
Syllabus	A pre computer skill description taking from the IT Faculty of Isra University courses description file.	Start at semester begin and remained until semester end.
Chat	Student always send question about the lectures.	Started from the first lectures.
Survey	Selected from a pool of previously submitted survey template.	At the end of the semester.
Glossary	Dictionaries of terms that used in the course	Start at semester begin and remained until semester end.

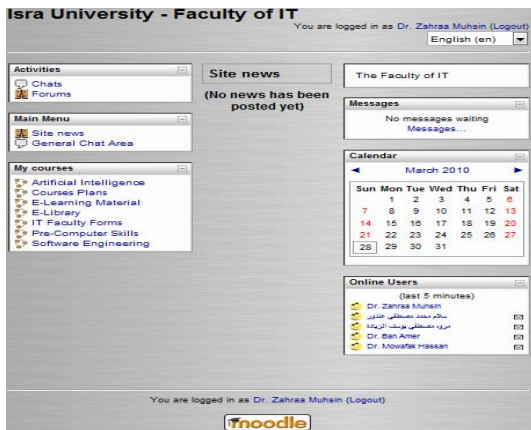


Figure 1 The Main Screen

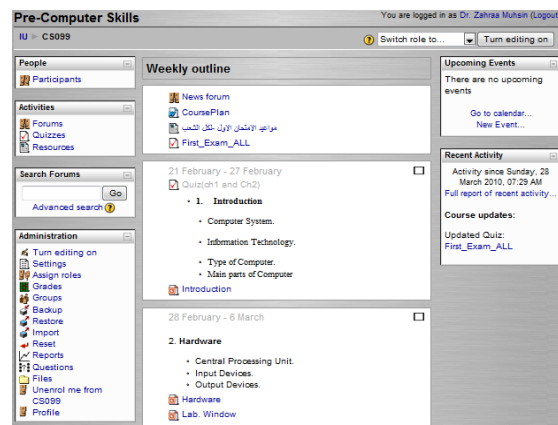


Figure 2 Course Layouts

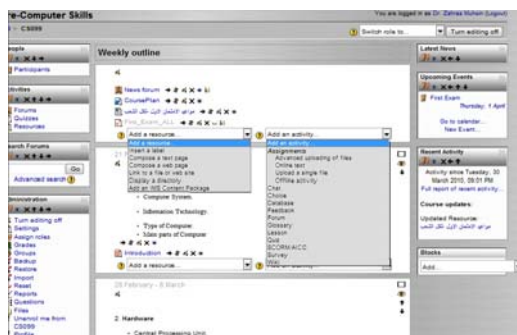


Figure 3 Editing Mode Activity and Recourse Menu is Active Student Survey Questions and Results

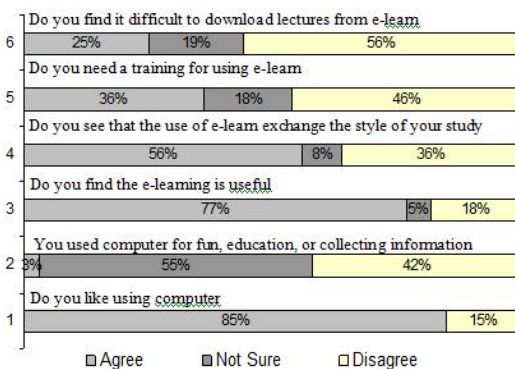


Figure 4 Student Survey Questions and Results