

Employment and Explore the Willing For Utilizing E-Learning Platform (Moodle) By Engineering College Students at the University of Thi-Qar in Iraq

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Abstract

Nowadays, the coming of information communication and technologies (ICT) to Universities has improved the teaching and learning process. It is therefore reasonable to suggest that the benefits of online learning and discussion should translate into improved the performance of engineering students. This study aimed to explore students' willing towards utilizing the online-courses through Moodle platform, various search engines, and some platforms websites important in academic education, usage purposes and the difficulties faced by students while using online-courses, with all students within fourth stage, in five departments of engineering college at Thi-Qar university in Iraq, questionnaires survey was distributed to all fourth-year students in five department of engineering college. The questionnaire consisted details regarding demographics, 15 questions with five Likert-scale responses, and some open-ended questions. Results: of the 240 students, 145 responded (rate of response; 60.2%). The engineering colleges' students perceived that using the E-Learning platform (Moodle) and various search engines, was very decisive for their academic success. Udemty platform "Academy of You", Udacity platform, open classrooms platform, Lynda platform, Open Education Consortium platform, Google scholar and YouTube were the most visited sites by the participants. The responses of students were not significantly different through the five departments of engineering college at the University of Thi-Qar in Iraq.

Keywords: Engineering College, E-learning, Moodle, platform sites, Internet.

INTRODUCTION

The utilizing of E-Learning platform (Moodle) among university students has considerably expanded. The learner life is unaffected by the utilize of the Internet[1, 2]. The internet is one of the most effective techniques of communication. It is a fast and effective tool for engineering education systems, as long as many important tools, applications, online databases, and sources of up-to-date information [3]. Moreover, the employ of the Internet gives an efficient means to access online journals, conferences, seminars and textbooks[4]. This utilize of the online resources encourages the integration of technology into the classroom [5, 6]. New Technology helps students meet their students' capability and expectations. The make use of technology inspire new opportunities for students to be successful and influence their future profession. Employ E-Learning platform (Moodle), specifically by students of college, has been familiar as a necessary way of getting information because it supplies a treasure of information on engineering learning systems[7]. A study conducted at Thi-Qar University in Iraq, showed that male students choose the Internet gat for gaining their information. As well, students of university utilize the Internet as much for Communication and do their education tasks[9]. It has been recognized that most students focused on the Internet and they utilize main search engines to gather their information needs.[10] Recommended the need for universities workshops among students for increasing information knowledge and literacy skills. Lots of researchers have exposed the impact of new technology into the curriculum on the excellence of learning and teaching. In Iraq the integration of technology into the curriculum is powerfully recommended by the (UNESCO) as one of the planned learning result domains[11].many other researchers have referred that employ E-Learning platform (Moodle) is a

potentially powerful instrument for expansion educational opportunities and beneficent the efficiency of the teaching process[12, 13]. Because revolutions in the technological direction, the multiplicity of students are using mobile phones and smart devices with their computers, which push them to reached online information and an innovative trend of communicating. Many students utilize the Internet for different kinds of social networking sites to originate and maintain with each other in their relations[14]. This observable fact seems to be increasing rapidly among university students: they post anything they want, create personal accounts and profiles, upload, download and send or text of personal messages[15]. Research has fixed positive relationships between the use of new technology in education E-Learning platform (Moodle) and students' success. As well as, positive correlation between the use of new technology (Moodle) and student engagement.[16] showed an important relationship between the use of course materials and student participation, an empirical study pointed a positive correlation between E-Learning platform (Moodle) usage and student engagement at classroom [17, 18]. The researcher of this investigation have found lack research in terms of conducted in Iraq university regarding to the employ of new technology for learning as E-Learning platform (Moodle). Lots studies pointed positive willing among Iraqi students in respect of the general utilize of new technology in colleges of Engineering. These results are confirming by another study issued in Japan [19, 20].

This study was managed to assess the employment of new technology among engineering college' students at the University of Thi-Qar in Iraq. Unnecessary to refer, the use of new technology is limited by some difficulties or barriers. There are challenges to the employ of new technology as (Moodle platform), these challenges involve technical support, intensive workload, adaptation of employment new technology, and limitation in the instructors skills through using modern technology and collapse of devices. [21]some studies have also mentioned that some lecturers and students at the university field are agreement with just emails or traditional teaching and are less concerned in utilizing the new technology in the course, This research was designed to examine students' willing towards employ the E-Learning platform (Moodle) in learning, addition, their employment purposes and challenges aced by students when utilize the Moodle via Internet, in five departments of engineering college at the University of Thi-Qar, Iraq. To fulfill this purpose, a questionnaire survey was distributed to all of the students in five departments of engineering college to detection answers to the following questions of research:-

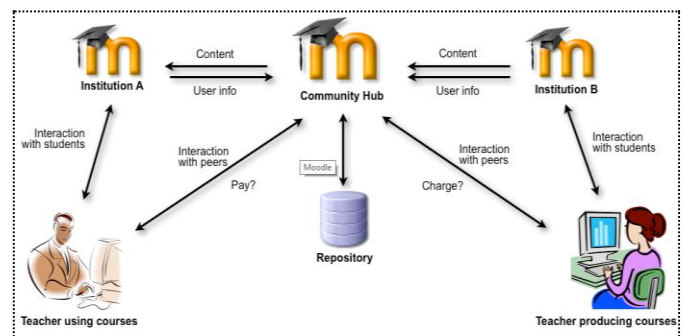
- 1) Are the engineering students willing towards the utilizing E-Learning platform (Moodle) in the learning process?
- 2) What are the most common smart devices utilized by the engagement students to browse the Internet and access (Moodle)?
- 3) Which are the most common websites are utilized by the engineering students regarding courses materials?
- 4) What are the websites of social media are utilized by

the engineering students?

- 5) Is there a significant difference among departments of college in their utilizing the E-Learning platform (Moodle) for rising scores and helping students in their works?
- 6) What are the difficulties that face students when utilizing E-Learning platform (Moodle) in learning?

E-LEARNING PLATFORM (MOODLE)

Moodle is the education platform website most commonly utilized by institutions involved in E-learning. It enables reaching to educatuin materials and connected resources such as forums and interactive quizzes, also online tool for handling in assignments and collecting corrected scripts. Moodle helps educators to download learning materials and methodology sheets in PDF format and to discussion with staff of teaching and other classmates [24-22].



MATERIALS AND METHODS

The study was managed at the University of Thi-Qar, which is located in south of the Iraq. The college has five Departments (Electric and electronic, oil and Gas, Medical Engineering, Mechanic, and Civil), Students of the fourth stage were shared in this study. All of students were Iraqi. A questionnaires survey was distributed to all Students of the fourth stage (240 participants) in the five departments of engineering college. The sample of the research was collected of 145 all years students at fourth stage from the engineering college at the Univ

Figure 1: Platform e-learning Moodle fifteen questions with five Likert-scale responses, Questionnaire's Scale were [1.Strongly Disagree (SD), 2.Disagree (D), 3.Not Sure (NS), 4.Agree (A), and 5. Strongly Agree (SA)] [41], and some open-ended questions with demographic. As well, a Likert scale was modified in order to form two groups or categories. This is mentioned in section of results. Answers of 1 & 2 on the Likert scale were considered (Disagree), also 4 & 5 were considered (Agree), answer 3 on the scale was dropped as it refers the neutral point, the value of reliability was 0.70. Three experts professional at Ph.D. level in the engineering College validated that the questions/ contents and questionnaire were appropriate for the aims of this research. The research was tested quantitatively, responses frequencies were fixed, and to locate if any significant differences

appeared among the five departments of college regarding the utility of the E-Learning platform (Moodle), the researcher was used the SPSS program in analysis [25].

OUTCOMES

Descriptive analysis

After identifying the participants and associated classes, the researcher firstly gave a brief demonstration about the purpose of this study to all the participants. Instructors were advised by the researcher to promote students' use E-Learning platform (Moodle) in learning activities. In this study survey, the respondents were 145 students, a response rate was 55%, which is reflected population representative, the participants' division is showed in Fig2. The electric and electronic department had the maximum number of students, and the oil and gas department had the minimum number of students. The outcomes pointed that roughly 90% of all students specified that utilize the E-Learning platform (Moodle) is important and indicated for surpass in their various courses. Only 9% of the participants disagreed that employ E-Learning platform (Moodle) is important. 92% of students alleged that it is an importantly for their departments to supply wireless Internet on all departments. 75% of the students' pointed that they cannot study effectively without using E-Learning platform (Moodle). They urged that the E-Learning platform gives learning and teaching process more motivating. 73% of the participating students backing utilizing the E-Learning platform (Moodle) in their studying. Moreover, roughly 95% of students think that the utilizing of the E-Learning platform helps them to find any information they want in terms of their courses and they can save their time. As well as, 73% of them confirmed that the employ of E-Learning platform (Moodle) get better grades. On the other hand, when they were asked regarding the difficulties which are facing them in utilizing the E-Learning platform in their departments, 60% of the students replied that utilizing the E-Learning platform is not a matter for them. Only 19% of the students have matter with utilizing the E-Learning platform (Table 1).

Table 1: Engineering College students willing to use of E - learning platform (Moodle)

Item	Disagree	Agree
Utilizing the E - learning platform (Moodle) is decisive to surpass in the various courses.	09%	90%
Utilizing the E-learning platform Moodle) is essential for colleges to make the available wireless Internet in their campuses and communicate with each other.	03%	92%
I will face difficulties to study effectively without employ E-learning platform (Moodle) and Internet.	15%	75%
I support employ E - learning platform (Moodle) and all Internet applications in all of the courses.	11%	73%
I think that the use of E - learning platform (Moodle) and Internet application helps me explore for any information And assist me to do good papers of research.	03%	95%
The use of E - learning platform (Moodle) enhance my degrees.	17%	73%
Using the E - learning platform (Moodle) is not a matter for me.	19%	60%

All challenges and barriers which faced students in college while using the E - learning platform (Moodle) are detected clearly. Students declared that there was a lack wireless Internet; technology materials need servicing, and need to training on how to build conversation and sharing information in order to reach cooperative learning and academic information. The students certain that having E-learning platform (Moodle) would highly help them to search for relevant information regarding their study, download academic courses and discussions, review , sharing documents, make realizing their learning objectives easier. Answer students about which seeking engines using to get wanted information, all students referred that they were utilizing Google, especially Google Scholar site. When students asked about using the E-learning platform (Moodle) for, they answered that they generally utilize it to reach and get courses materials and sharing their study activities to achieve academic tasks. When students asked which E - learning platforms sites they were utilizing if need some information or lessons, 70% of the students indicated (Udemy platform "Academy of You", udacity platform, open classrooms platform, Lynda platform, as well as YouTube and Google scholar) roughly visited sites (Fig:3).

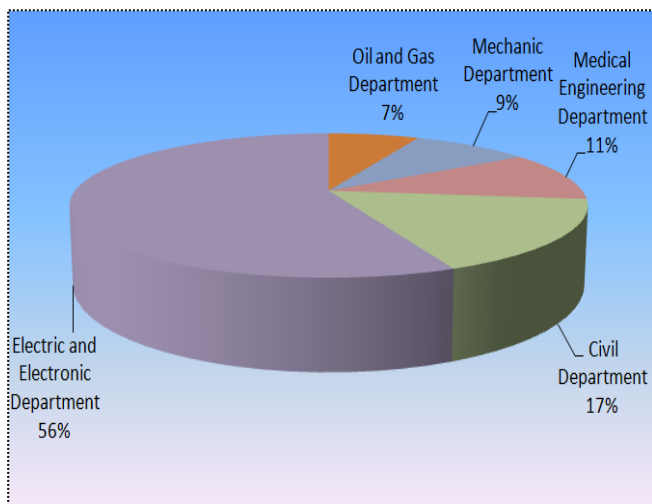


Figure 2: division of the students in the five departments of engineering college

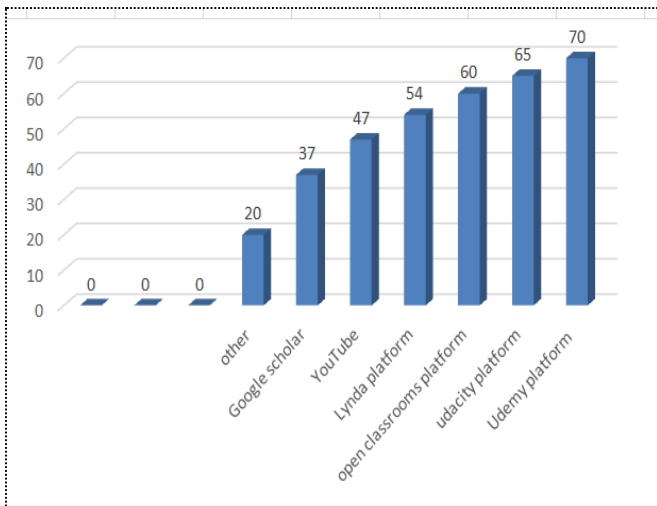


Figure 3: platforms learning sites students were utilizing in the five departments of engineering college

Deductive analysis

When they asked to talk about if there are significant differences found among the five departments of college regarding the utilize of E - learning platform (Moodle) for increasing their achievements and enhance their studying, assisting them in their academic tasks and researches, and the necessary of having services of wireless Internet in each department. 90% of The students approved that the utilizing of the E-learning platform (Moodle) was essentially for all courses in their departments. Thus, no significant differences founded among the five departments, pointing that all participants backing the necessary of using the E - learning platform (Moodle) with all courses. $\chi^2(4, N = 95) = 3.01$ and $\rho = .57$, Participants across five departments indicated that new technology as E-learning platform (Moodle) increases and enhanced their scores. In addition, roughly all students (97%) approved that there must be a good wireless Internet servicing in all of the five departments of college in order to access the platform easily. Also, this study indicated that were no significant differences among five departments of an engineering college. $\chi^2(4, N = 135) = 2.97$ and $\rho = .58$, The data of study were analyzed by SPSS software.

DISCUSSION AND CONCLUSION

This research was proceed for students of the all fourth stage in engineering college (Electric and electronic, Oil and Gas, Medical Engineering, Mechanic, and Civil) in engineering college at University of Thi-Qar, Iraq. The aim of the study was to hold a wide domain of responses about of adopting E-learning platform (Moodle) in education contexts. The results like many previously studies which managed at various universities [26-28]. Totally , participants (90%) presented positive willing towards utilizing the E-learning platform (Moodle) for teaching objectives. on the other hand, roughly three quarters (76%) of responders showed they were eligible to study effectively utilizing the E-learning platform, as well

they felt that it creates learning environment more enjoyable and interesting and upgrades their performance and scores. also, This conclusion corresponded with research proceed by [29, 30]. The data emerging got from this research is very essential, due to the Internet and an E-learning platform provides a fortune of scientific information and innovative oncoming [31-33]. For another platforms in education field, (Udemy platform “Academy of You”, Udacity platform, open classrooms platform) were the most utilized learning site visited by the students. This result emphases reports made on the generally comon learning platforms sites as stated from [34-36]. The students in this research use E-learning platform to stay on touch with other classmate and lecturers all time and to sharing and discussions regarding courses materials like (homework, assignments, quizzes and so on) a long semester. [37] Showed that the major employ of the e-learning platform among students of college boost communication and raising their understanding ability. (Udemy platform “Academy of You”, Udacity platform, open classrooms platform looks) sites well-suited to smooth learning and education communication such as a forum to encourage student’s discussion provides information about their studying activities. This phenomenon has constantly caught the promise of enhancing learning process as well as can produce teaching exceedingly student centered. The outcomes clearly evidenced that approximately 95% of all fourth stage students are utilizing the platforms sites to get information for studying and their researches. Also, 73% of students confirmed that the employ of the platforms sites improve their academic grades and academic skills. The outcomes proved that roughly all of fourth stage students are utilizing Google scholar as academic search engine when they need more information. In addition, [38] pointed out that there is a lack in adapting technology for enhanced learning in most of the Iraqi Universities. Therefore, Sadkhan acknowledged that Iraqi universities should attempt to focus on adapting new technology in order to examine its effects on the student performance to learn science and develop competitive research abilities that stimulates creativity and establish new bridges to production activities. So the outcomes exposed some challenges faced the students in the engineering college at Thi-Qar University. Students declared that there was poor signal of wireless Internet, that E-learning platform (Moodle) need high signal of wireless internet, to accomplish their academic tasks when they inside campus or classroom.

A study was pointed that students’ utilize of the platforms sites will develop if universities provide good services of Internet and make the access for platform interface easier. Institutions have to be proposed the solutions to cope these challenges. Teachers need to promote student centered learning oncoming over the beginning and establishment of fundamental learning systems for all departments of engineering college at the university in order to assist students meet and become acclimated to requirements for professional adequacy: The mostly of engineering college students at Thi-Qar university pointed a positive willing towards the utilize of the E-learning platform (Moodle), and their experience and knowledge with employment the new technology (E-learning platform) in the academic scope should be supported and encourage.

RECOMMENDATIONS

Additional studies are needed to carry on observing students' employment and willing towards the E-learning platform (Moodle). Each department should be give more courses training also must central at the college should organize training programs to guide students with advanced techniques of searching for various database engines. Researcher also recommends that college officials provide wireless aperiens to all departments' laboratories and classrooms. Furthermore, researcher recommended implementation of strategic planning style in which lecturers work simultaneously to perceive additional effective utilizes of new technology in the methods that preferable meet their instructional needs. This can be get through high online access to course content and exchange of resources, more flexibility in scheduling, best access to alternative teaching options and, academic discussion regarding courses activities...etc.

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