

E-Learning Obstacles in Examination Module Process – MEDIU Case Study

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Abstract: The objective of this study is to identify the problems faced by students conducting an online exam run by the Al-Madinah International University (MEDIU). The research has been applied in the Department of Computer Science, Faculty of Computer Science and Information Technology with 86 students during the semester in February of the academic years 2017-2018. Data obtained from e-mail messages for students about the problems in the examination process are parsed descriptively. The data were read twice by different researchers and then organized into symbols. Topics that have been discovered are created as a result of assembling the encodings into a meaningful structure to display to the reader. The results showed that the following problems occurred in the process of students who passed the online tests, the level of literacy for students, the new testing environment for students, the presentation of questions in the computer environment and technical difficulties. The ability of students to use computers is an important factor in the emergence of problems. The main finding of the research is the need for a mentoring program to help students with Internet tests and online courses.

Index Terms: Distance learning, e-learning, on-line exam module, on-line learning, on-line testing.

I. INTRODUCTION

The fast expansions that have been occurring in the domain of science and technology since the last few years have resulted in countless dramatic changes within the domain of education [1]. Not only that, globalization has also impacted the systems of education. Among schools and universities, they are undergoing dramatic changes since their first organized usage of printed books around 300 years ago [2]. The most important thing is the rapid advances in computer technology and the Internet, and its application in education has generated the concept of e-learning, and the need for e-learning has been increasing in recent years because of the diverse educational needs people [3].

At present time, the factors of development in the approach of e-learning are highly crucial. For students, to have e-learning environment that is free from the restriction of time and space is important [4]. Additionally, for those with not much study time due to work or other commitments and those with physical restrictions, e-learning is an excellent opportunity [5]. Accordingly, in the Malaysia context, electronic learning programs for undergraduate, postgraduate and certificate programs seem to have gained popularity [6].

Accordingly, the software of learning management system has been commonly employed among educational institutions. It provides students with services including

registration, course registration, concurrent course monitoring, asynchronous access to teaching resources, evaluation as well as assessment activities [7]. In the context of learning, measurement and evaluation are among the most pressing issues. In e-learning, the process of evaluation and measurement using computers or the Internet through online test modules are carried. Also, it seems that the test results of the students taking the Internet environment are very similar to those in the classroom environment [8]. Also, people appear to have preference towards taking tests within the Internet environment. Somehow, issues can arise from the user or from the system. Also, there are many possible limitations in regards to the online assessments in e-learning [9].

Like most institutions that offer e-learning services, online tests are used in programs conducted by the MEDIU's examination department. However, there were emerging problems associated with online tests used in the Master's Degree in Remote Control Program Planning and Economics at the Institute of Social Sciences within the Department of Educational Administration. This study will therefore attempt to identify the factors that lead to these problems and then recommend steps to improve the measurement and evaluation process. [10], [11].

II. OBJECTIVE OF RESEARCH

The study aim is determining the problems faced by graduate program students of examination department in the midterm exam period, particularly prior to, during and following the exam.

III. METHODOLOGY

The qualitative approach was employed in this study, grounded upon a case study research model. Case study was deemed appropriate for this study because it allows the researchers to pinpoint specific cases with the most specific details. For the study context, the researcher could focus on specific subjects or condition, and then describe the cause-effect relationship among variables.

IV. PARTICIPANTS

The participants in this study were the degree program students of MEDIU, Department of Computer Science, Faculty of Computer Science and Information Technology students; the examination department has conducted the sample in February semester for the academic year 2017/2018. These participants were selected using the

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purposeful sampling technique. A total of 86degree program students with at least 5 years of teaching experience were selected to partake in this study.

V. DATA AND PROCEDURE

Data collected at three stages of time are before, during and after the midterm test online, and this data was collected from students through emails. In addition, students were given details of the study through e-mail. In data processing, first, raw data was converted from e-mail format to text format. This is followed by data encryption by reading texts in a way that refers to the student's published movement, which is then converted to subjects by using one or two words in the encodings. Two different researchers independently conducted this process. Then, comparisons were made to the subjects identified by the researchers and to subjects that indicated the best data was confirmed. The opinion of each student was explained using these subjects. Also, direct citations were used by students in topic mode. This was to support the comments as well as convince readers.

VI. RESULTS AND DISCUSSION

Accordingly, the research findings as can be divided into three categories.

A. Before the Exam

At the start of the academic year, the researchers distributed the online questionnaire through the system. From the responses made by the students, it can be deduced that the students had no issues in employing the Websites (e.g., social networking sites, e-school, and vitamin). As such, it can be assumed that the students had adequate computer skills. Accordingly, to have access to the exam module, the students were required to use password. Some of the comments provided by the students (via e-mails) are as follows:

As indicated by students, password denial by the system is the most common problem when trying to access the online testing unit. One common reason why non-numeric characters are not used is to create their own password. This password is not considered safe by the system. The other major reason for password denial is the confusion that students face in using the password to access the concurrent learning environment using the password used to log on to the online testing module.

There are also problems of not being notified through e-mail regarding the online exam module, as reported by some students. Apart from that, some students expressed their wish to change the email address provided to them when they registered with the department.

B. During the Exam

Among students of distance education, they were facing issues in the online examination process, and many of these students would report their problems to the officials through e-mails. As can be construed from these sent emails, various problems had been faced by these distance education students.

During the exam, among the problems that are reported to have arisen include the problem of Internet connection.

Also, these other technical problems have been faced by these students, especially in terms of using the "save without submission" function. It was pointed out that the Internet browser and the Internet connection used by students may generate problems with the use of "save without submission" functionality. It is therefore necessary to have an Internet infrastructure with the ability to provide seamless connectivity so that the online testing module can be used without interruption, and students can take the exam without hindrances.

C. After the Exam

After completing the exam process, inform students about the problems they encountered (via email) in terms of online testing or their results. From the e-mail frequency, it appears that a large number of students were requesting a retest due to technical problems.

Apart from technical issues, the students also expressed their curiosity about how the evaluation was carried out. Instead, some were carrying out their objections to the test results because apparently, some students were unaware of the fact that it was the online testing module system that determined the exam results.

Finally, many students reported a system shutdown at the end of the specified time.

VII. CONCLUSION

In short, a number of problems were reported by the students in regards to the on-line examination before, during and after the exam. Before the exam, the reported problems include failure to provide the required passwords due to the use of unacceptable characters and confusion about the passwords specified for the concurrent learning environment and the on-line testing module.

During the examination, students reported several problems including Internet connection failures which adversely impact the process of examination. Nonetheless, the failure of correctly using the function of "Save without submit" was the most common problem.

Owing to the technical issues, several students sent emails to request test retaking. Apart from that, some students were expressing their objection towards the test evaluation and test results. This objection apparently was caused by their ignorance of the fact that it was the system that did the evaluation to the test and it was also the system that produced the test results.

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