

E-Learning Facilitator Team solution of Problems and Challenges in the distance education

(University of Gharyan Case Study)

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Abstract—

The new era of distance education opens up a new problem space for researchers to redefine educational needs. The COVID-19 lockdown with its tremendous consequences has affected the way of thinking and acting and has highlighted the merits of distance education. One of the most important of these problems is the inability of the lecturer technically to manage and present remote lectures, which resulted in the student's dissatisfaction with distance education. In this research, we have studied how to facilitate the work of the lecturer, who suffers from many problems, including the technical issues that need technical competencies in the field of information technology and modern technologies used in distance education, including the simulation system and displaying the system via the Internet, studying how to help the student also, in receiving distance education techniques and dealing with the programs used by the lecturer in skillfully presenting educational curricula. For that, the research focused on studying how to use a team to facilitate this work called the E-Learning Facilitator Team. This team plays a vital role in developing and maintaining an online program that is effective, and smooth, and that will support the realization of the planned learning outcomes. Faculty delivering courses online must be more than transmitters of knowledge; they must become facilitators of learning. Some highly seasoned instructors from the traditional on-ground environment will quickly adapt to the online model, while others may find the transition challenging at first [10].

Index Terms— e-learning, distance education, e-learning facilitator, educational technology tools.

I. INTRODUCTION

Case Study Problem:

Focuses on finding the satisfaction of the student with using distance education (University of Gharyan electronic platform) in receiving his education, and researching the problems and disadvantages that the student faced through distance education through the electronic platform University of Gharyan

Problems and obstacles that faced the distance education experience at Gharyan University:

Despite the many advantages of distance education, there are obstacles and problems that need to be studied to find appropriate solutions. These problems are related to all the basic elements of distance education and affecting the quality of teaching, including those related to curriculum and their development, or with the skills of the lecturers, and their use of the electronic environment, or the student's receipt of the developed educational curriculum. All of these problems are reflected in the student's satisfaction level in distance education. In order to identify these problems, the researchers prepared a questionnaire in which students from the College of Science, at the university of Gharyan, participated, and the number of participants in the research was 280 out of the total number of students of the College of Science who received distance education through the electronic platform of Gharyan University, and their number was 960 students [1].

Objectives and importance of the case study:

The study aims to survey student satisfaction and focus on the insufficiency of distance education and propose appropriate solutions and recommendations to avoid them, increase the level of student satisfaction with them, and pay attention to the quality of distance education at Gharyan University. This study

distinguishes its interest in the quality of distance education by focusing on and knowing the level of student satisfaction with receiving his education through distance education.

The boundaries of the study:

Objective boundaries: The current study is limited to evaluating the experience of the Faculty of Science at Gharyan University in distance education through the electronic platform of Gharyan University.

Human boundaries: This study targeted the students of the Faculty of Science in Gharyan

Time boundaries: This study targeted two semesters for the year 2020.

Spatial boundaries: Faculty of Science, University of Gharyan.

II. METHODOLOGY OF STUDY

The researchers followed the descriptive and analytical approach as they are appropriate to achieve the objectives of this study by analyzing the data and obtaining quantitative and descriptive indicators of the variables included in the study and their impact on the level of success of distance education, where descriptive and quantitative measures were used in analyzing the data.

Variables of Study: These variables include the quality of the curriculum and the quality of the lecturer's performance. In this study, the researchers targeted all the students of the College of Science, who are 960 male and female students, through an electronic questionnaire that contains two main titles: the curriculum and the lecturer's performance. The number of returned questionnaires was about 280 items, of the random sample in the subject of the study, where their numbers were distributed according to the departments. This is consistent with the result of the equation for measuring the size of the sample in relation to the size of the total of the students according to the equation of Stephen Thompson. Where their numbers were distributed according to the scientific departments. The definitional and demographic characteristics of the case study were also described, which include gender, number of sample members, and percentages, as well as the number of sample members in each scientific section as shown in Table (1) and (2).

No.	Department	Student No.	Percentage
1	Computer	240	25%
2	Zoology	224	23.3%
3	Botany	100	10.41%
4	Physics	21	2.1%
5	Chemistry	120	12.5%
6	Math's	25	2.6%
7	Resources	110	11.4%
8	Geology	90	9.3%
9	Statistics	30	3.1%
	Total	960	100.0%

TABLE (1) THE NUMBER OF STUDENTS' BY SCIENTIFIC DEPARTMENTS AT THE FACULTY OF SCIENCE AT GHARYAN UNIVERSITY WHO RECEIVED DISTANCE EDUCATION IN THE FALL AND SPRING SEMESTERS

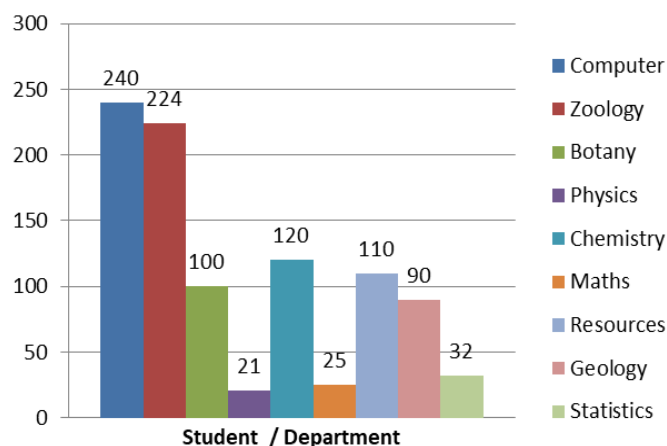


CHART (1) THE NUMBER OF STUDENTS' BY SCIENTIFIC DEPARTMENTS AT THE FACULTY OF SCIENCE AT GHARYAN UNIVERSITY WHO RECEIVED DISTANCE EDUCATION IN THE FALL AND SPRING SEMESTERS

Study tool: Questionnaire is the primary source:

Questionnaire: The researchers designed an electronic questionnaire to facilitate data collection and to be more accurate. The questionnaire contains the following two topics: -

The first topic: Includes questions about the student’s opinion on the curriculum through the university platform.

The second topic: Includes questions about the student's opinion on the performance of the lecturer on the platform.

No.	Department	Student No.	Percentage
1	Computer	60	25.0%
2	Zoology	4	1.8%
3	Botany	9	9.0%
4	Physics	16	76.2%
5	Chemistry	77	64.2%
6	Math’s	22	88.0%
7	Resources	48	43.6%
8	Geology	12	13.3%
9	Statistics	32	29.1%
	Total	280	100.0%

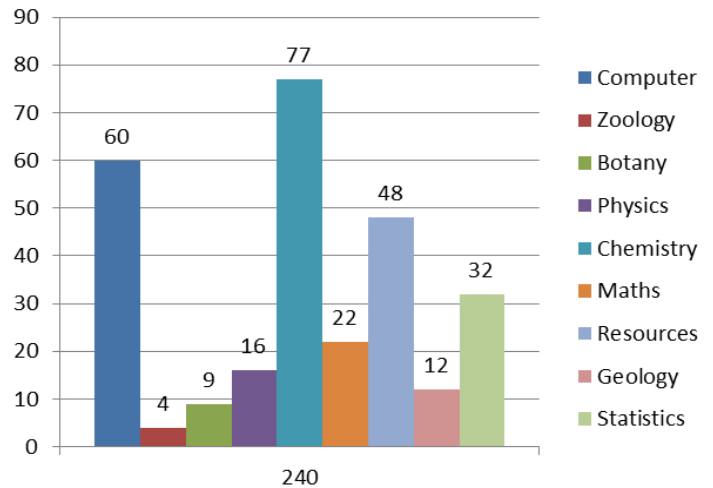


TABLE (2) THE NUMBER OF STUDENTS BY SCIENTIFIC DEPARTMENTS AT THE FACULTY OF SCIENCE AT GHARYAN UNIVERSITY WHO PARTICIPANTS IN THE QUESTIONNAIRE

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Case study tool test, Data analysis and hypothesis testing: The results of this questionnaire were tested and the quality of the curriculum variable and the study tools variable was measured using the Cronbach alpha α . It is noted from the test results that the value of the internal consistency coefficient of Cronbach’s alpha of the two closely related to the variables is $\alpha = 0.788286$ and the ability to be reliable in conducting statistical tests on them.

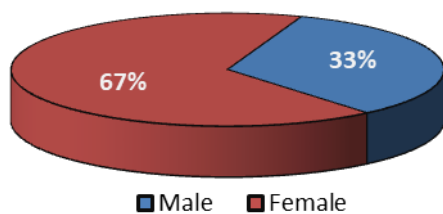


CHART NO. (3) THE NUMBER OF STUDENTS' BY GENDER

Gender	Male	Female	Total
Number	320	640	960
Percentage	33.33%	66.66%	100%

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To measure the sample responses, the Five Likert Scale was used in the questionnaire questions, and the five answers were coded to (1,2,3,4,5) with a standard average of 3.4, which is the percentage to be verified in the respondents' answers. For the direction of the respondents' answers to the questionnaire questions, five answers were identified with a length of 0.8 between each period.

Analysis of the results of the case study through the questionnaire:

From the result of the research, the focus was on the student and the extent of the student's satisfaction with this method, and the following recommendations [1] were drawn:

1. From the case study, it showed that the opinion of the students on the extent of the student's ability to view the content of all materials and deal with the files attached to them on the platform was medium, with an average of 3.23, where the percentage of agree responses was 32.97% and much agree was 16.85%, and this is attributed This is due to the technical disadvantages that coincided with distance education.

[Reason: slow speed of the internet - the high cost of using the internet].

2. The case study also showed that the opinion of the students about evaluating their comprehension of the distance lectures via the platform compared to traditional lectures was medium with an arithmetic mean of 3.05, and the percentage of sample responses was 61%. The researchers also noted that 30% responded not good, and this is due to a disadvantage in the way the lecturer is explained and the lack of direct interaction sometimes.

[Reason :Most of the lectures were recorded in advance - the lectures were prepared in advance in traditional methods - the inability of the lecturer to explain by the new methods - Failure to use the advanced electronic environment].

3. The level of students' satisfaction about evaluating their comprehension of the lecture via the platform, which contains simulation experiments (video presentation), was also medium, with an average of 3.35 sample responses and a standard deviation of 1.52, and the sample responses were 62%. The degree of relative importance of the student's level of satisfaction with his comprehension of the lecture via the platform, which contains the simulation experiments (video presentation) is medium.

[Reason : The inability of the lecturer to present or produce a good simulation system - shortage of programs that help in producing a good simulation system - Laboratory experiments with the simulation system were not recorded in a good technical way in terms of accuracy in poorly crafted visual recording and technical output not good].

4. The study shows that the respondents' level of satisfaction about communicating with the professor of the subject via the platform to inquire or question about the topic of the lecture was medium, and that the average responses of the sample members were 3.30 and with a standard deviation of 1.51, and the percentage of sample responses was 66%. Therefore, the relative importance of the level of student satisfaction to communicate with the professor of the subject via the platform to inquire or question about the topic of the lecture is medium.

[Reason : The inability to communicate well with the lecturer, as there are no specific office hours, which enables the student to communicate directly with the professor of the subject to ask questions that are not understood].

5. In general, there is satisfaction, but at a medium level, with the student receiving his distance education at the level of Statistical significance ($\alpha = 0.05$) and the degree of freedom (279), about (communication with the lecturer - presentation of practical experiences) In the video - reviewing the content of the study materials), the study also showed the student's dissatisfaction with his comprehension of the remote

lecture compared to the direct lecture, at a statistical significance level ($\alpha = 0.05$) and a degree of freedom (279).

Suggested solutions to the obstacles and problems of the study: Through the analysis of the results of the case study, it became clear that there are a number of obstacles, including the inability of the lecturer technically to manage and present lectures remotely, which resulted in the student's dissatisfaction with distance education. Therefore, for the success of distance education, there must be logistical support that accompanies the professors and helps them achieve and implement education plans by achieving the objectives of their courses. It also helps students to receive distance education technologies and use its tools. This job requires:

1. Specialists in the content making (content maker).
2. Specialists in the implementation of training programs that enable the professor to use techniques, tools, and skills to help them in the distance education process.
3. A work team to solve the problems that arise in the implementation of the plans of the educational process.
4. Implementing workshops for professors and students and explaining the importance of distance education and how to solve the problems they face.
5. Implement periodic questionnaires through which the course of the educational plans used is evaluated and visions are developed for improving the outcomes of distance education.
6. Providing a good e-learning environment in the field of distance education.

Denis, Watland, Pirotte, Verday [6], and Peart [3] affirm that professors have to develop a multitude of strategies for distance education in order to enhance students' engagement. Apparently, according to the research results Treki et al [1], many professors are now acting as lecturers online in order to support distance education, which made the Students dissatisfied with communicating with the professor of the subject via the platform. Hence the idea of facilitating the work of professors and helping students receive distance learning techniques.

These lectures can be divided into two parts:

1. Lecturers with strong teaching experience, but little or no experience with distance teaching via the Internet. (This group needs to have good fundamentals in digital media).
2. Lecturers work as online lecturers, often because of their inclination towards digital media, but they have not received systematic training for this task, and often also lack modern distance education techniques. (This group, in particular, needs some training in modern digital technologies; they may also benefit from some more advanced knowledge regarding the use of digital media, so that they can use new, more different tools in appropriate ways, and thus, raise the general quality of their use).

Therefore, the thinking was to facilitate the work of professors and help students receive distance learning techniques through a team that facilitates this work called e-learning facilitator team, and with regard to the role of e-facilitator, there is a set of tasks that he can perform , and there are a group of Problems can also be solved for the professors and the students

III. CONCLUSION

Summary of what was concluded during this research for the role of the e-learning facilitator team.

In this research, e-learning facilitator team roles were studied and summarized in the following points:

- Supporting professors in using technology and appropriate educational technology tools to receive educational materials and specialized courses in an appropriate and modern manner and present the curriculum in a manner that allows the student to translate theories into applications.
- Managing Online virtual classroom.
- Storing and archiving educational materials in a simple way for the students to be used later.
- Conduct periodic surveys to follow up on technical plans and improve education outcomes and ask students to send feedback and follow the process
- Technical support for the professors and the development of appropriate solutions for them.

- Technical support for students and help them use the techniques and tools necessary for distance education and giving students the appropriate tools to transform theory into practical reality.
- Establish an e-learning environment that utilizes educational experiences as a key element in the learning process in order to make it meaningful.
- The E-Learning facilitator team guides the learner by providing guidance, feedback, and advice throughout the learning process, in addition to helping to develop knowledge and skills[3].
- The work of the e-learning facilitator team is an active and direct teaching assistant whose roles are to create an atmosphere for study, help students reach their goals, encourage social interaction between professors and students, keep students aware of the curriculum content and to what volume has been achieved and evaluate the curriculum on a regular basis (i.e. weekly updates of what has been delivered and what is missing).
- Give the student timely and quality feedback on student contributions to discussion, homework, and quizzes.
- The facilitator should be online everyday (at a minimum 5 of 7 days).

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