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Learning transformation during the covid-19 pandemic among faculty members at princess nourah bint abdul rahman university

Abuso sexual y auto- Transformación del aprendizaje electrónico durante de los miembros de la facultad de la universidad princess nourah bint abdul rahman durante la pandemia Covid-19

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ABSTRACT

It seeks to shed light on the problems of the transition to e-learning during the Covid-19 pandemic among the collaborators of the Princess Nourah Bint Abdul Rahman University faculty, through a descriptive and analytical approach. The tool was represented with the help of a questionnaire organized by the researcher divided into 3 axes, concluding that organizational problems such as problems of slowness, download problems, conversation failure and their obstacles, have the need to articulate activities, criteria of evaluation and questions according to the specifications and tests of distance education.

Keywords: Faculty members, E-Learning and covid-19, pandemic, descriptive and analytical approach, conversation failure.

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RESUMEN

Se busca arrojar luz sobre los problemas de la transición al e-learning durante la pandemia de Covid-19 entre los colaboradores de la facultad de la Universidad Princess Nourah Bint Abdul Rahman, a traves de un enfoque descriptivo y analítico. La herramienta fue representada con la ayuda de un cuestionario organizado por el investigador dividido en concluvendo aue los problemas organizacionales como problemas netos de lentitud, problemas de descarga, falla de conversación y sus obstáculos, tienen la necesidad de articular actividades, criterios de evaluación y preguntas acordes con las especificaciones y pruebas de la educación a distancia

Palabras clave: Miembros de la facultad, E-Learning y covid-19, pandemia, enfoque descriptivo y analítico, fracaso de la conversación



INTRODUCTION

It has increased the importance of e-learning in educational institutions to cope with the consequences of a COVID19 pandemic, as it provides this method of ease in the practice of education activities and works remotely while maintaining the quality of the output, becoming the institutions that paid in advance attention the most comfortable, where you pay crises and competition to development and the adoption of best practices to achieve goals and excellency (Radha et al.: 2020, pp. 1088-1099). That modern education should be based on the idea of training and continuing education; the world is dynamic and changing in a very fast pace, which requires relying heavily on the exchange of information and processed in order to survive, so the role of education is human to respond effectively to these changes to prepare when they occur, as crises and opposition power development. And adopts first-rate practices to acquire dreams and differences. Modernday training ought to be primarily based on the concept of schooling and continuing schooling as the world is dynamic and is changing at a very fast tempo. Which calls for heavy reliance on records exchange and processing to continue to exist. So the role of education is to put together humanity to respond efficiently to those changes once they occur. The creation of appropriate changes and the development of societies must combine the reality and how to employ technological facilities in it by making use of the various experiences in e-learning (Aboagye et al.: 2020, pp. 1-8).

Consequently, universities, with their diverse faculties and deanships, pay splendid interest to their development plans to house societal adjustments commensurate with the spirit of the technological age. Taking into account the progressive issue of information and technology and the financial dimensions it carries, reaching society's goals depends on the performance of the educational gadget in accomplishing its improvement desires.

And primarily based on the nation's imaginative and prescient 2030, which incorporates in its packages the improvement of human competencies. to enhance the outputs of the education and schooling machine through packages that maintain pace with the tendencies and requirements of the instances and are in line with the needs of improving the neighborhood and global exertions marketplace and the necessities of the fourth business revolution, and contribute to the improvement of all additives of the education and training system consisting of teachers (Alqahtani & Rajkhan: 2020, pp. 210-216).

The National Transformation Program 2020 has resulted in a weak educational environment that stimulates creativity and innovation, weak interpersonal skills, and critical thinking skills, and reliance on traditional teaching methods. So the Ministry of Education has made one of its most important goals improving the educational environment that stimulates creativity.

It is worth noting that e-learning is one of the best ways to improve the educational environment. as it does not mean merely teaching curricula and storing them electronically (Adedoyin & Soykan: 2020, pp. 1-13). but the essence of remote interaction means the existence of mutual interaction and discussions between students and their teachers away from indoctrination, which focuses on the effectiveness of the learner. So the educational organizations found in it The ideal haven to fulfill its mission during the Corona pandemic (Aboagye et al.: 2020). The positive returns achieved by e-learning during the pandemic's spread for not completely disrupting the educational process. Some challenges faced this process due to the lack or non-availability of the necessary technological infrastructure. The lack of specialists to manage learning systems (Hoq: 2020, pp. 457-464). and the lack of a culture Distance education and its tools (Adedoyin & Soykan: 2020). including the mechanism for initiating effective dialogue and providing conditions for communication between the teacher and the learner (El Refae et al.: 2021; Lassoued et al.: 2020, pp. 210-232).

Study problem

Princess Nourah Bint Abdul Rahman Faculties is chargeable for getting ready prominent girl graduates in a hastily changing technological generation through accomplishing its undertaking based on being a prominent Faculties with its instructional management and scientific studies that contribute to constructing the know-how financial system with a community and global partnership, as well as accomplishing its values based on

belonging, excellence, distinction and dedication to exceptional professionalism and professionalism approximately (5600) guides have been provided in line with semester through (102) instructional applications for approximately (30.000) lady students. And these publications range extensively in their nature and methods of presentation between theoretical and practical. Area or scientific publications.

The university was suddenly compelled in the course of the pandemic to convert all publications and programs to electronic and faraway methods. Together with (118167) written tests and (820) oral tests. similarly to (1092) graduation papers. (421) commencement initiatives and (116) discussions For scientific dissertations and research initiatives for postgraduate studies (www.pnu.edu.sa). Hence, The Corona pandemic expanded the hole of new horizons and triumphed for e-learning, which has suffered from stagnation and weakness in normal circumstances. For motives together with a lack of knowledge of its advantages. The marginalized view of it in assessment to the view of conventional schooling and the failure to recognize and approve its outputs (Adnan & Anwar: 2020, pp. 45-51).

Therefore, education leaders at the moment are confronted with the truth imposed on them via the emergency scenario that pushes them to adopt choices commensurate with it from providing the infrastructure and growing appropriate programs. and working on getting ready cadres to cover the want of tutorial institutions. With an emphasis on adopting the philosophy of this educational fashion and not simply the use of it as a tool to preserve tempo with knowledge progress. And the superb technical and to bridge the gap among our university and global universities.

The venture today is to lessen the negative consequences of this pandemic on learning and education as much as possible and to benefit from this revel in to return to the route of improving getting to know at a faster pace by way of adopting a new philosophy of schooling and settling a brand new role for the learner within the framework of a complicated and changing technological philosophy of purpose and style via working to unfold a culture E-learning (Bahasoan et al.: 2020, pp. 100-106). Research confirms the significance of learning about the philosophy of e-learning and its use within the lecture room to make the instructional adventure exciting and interesting. A few studies have indicated a set of demanding situations going through e-learning along with the shortage of enough technical expertise for each party to the training procedure, in addition to the want to prepare substances educational services further to the unavailability or loss of necessary infrastructure.

E-learning additionally faces challenges associated with private preferences, which have nothing to do with the efficiency of the system nor the fine of the technological infrastructure needed to aid it. Because the transformation technique for e-learning confronted a set of demanding situations and limitations, which discovered that anxiety is one of the greatest pressures, he confronted Faculties students of the university of schooling at King Saud Faculties at some point of the Corona pandemic, and their issue lies about the quilt of the semester, exams and checks. They have a look at Arshad. The importance of ensuring net connectivity for school individuals within the workplace as well as at home given that the instructional method is based totally on it all through the duration of the ban (Aliyyah et al.:2020, pp. 90-109).

Study Zero (2020) confirmed that despite the many efforts made to complete the educational process during the Corona crisis, faculty members of various specializations face various difficulties (Aladwan: 2020, pp. 60-64). This applies to the status of members at Princess Nourah Bint Abdul Rahman University. Despite the efforts made in it. But there are some difficulties they faced. The current study seeks to shed light on the difficulties faced by faculty members during the Corona pandemic in various faculties of the university by answering the main question: What are the difficulties of switching to e-learning during the Corona pandemic among faculty members at Princess Nourah Bint Abdul Rahman University.?

Which is divided into the following questions:

- 1- What are the technical and organizational difficulties for the transformation of e-learning during the Corona pandemic from the viewpoint of the faculty members at Princess Nourah Bint Abdul Rahman University.?
- 2- What are the difficulties related to faculty members for the transition to e-learning during the Corona pandemic from the viewpoint of the faculty members at Princess Nourah Bint Abdul Rahman University?
- 3- What are the difficulties related to female students 'transition to e-learning during the Corona pandemic from the viewpoint of the faculty members at Princess Nourah Bint Abdul Rahman University.?
- 4- What are the methods for overcoming the difficulties of switching to e-learning during the Corona pandemic among faculty members at Princess Nourah Bint Abdul Rahman University?

The importance of studying

The importance of the study is represented in the following:

- 1- It helps officials and those interested in the education sector to know the difficulties of e-learning in educational programs and to find appropriate solutions to them.
- 2- It is useful for officials and decision-makers at Princess Nourah Bint Abdul Rahman University to identify the difficulties facing e-learning and to work on avoiding them.
 - 3- Development of educational programs in e-learning commensurate with training and material needs.
- 4- Providing solutions to face the difficulties that may encounter the e-learning system during the Corona crisis
- 5- Shedding light on the efforts of Princess Nourah Bint Abdul Rahman University. in addressing the obstacles that faced e-learning during the Corona crisis.

The limits of the study

The study is limited to faculty members at Princess Nourah Bint Abdul Rahman University who taught remotely through the blackboard system during the Corona pandemic. In the second semester of the academic year 1441/40 AH and the first semester of the academic year 1442/41 AH.

LITERATURE REVIEW

First. E-learning

The idea of e-studying has developed consistent with the levels of technology development. Because it acquires its concept in line with the nature of its employment. Naidu (2006) described it as training based on the usage of information and communication technology networks. E-learning procedure because of interplay with digital content material and community-based offerings and technology the use of computers. Either remotely or head to head (Kagoya: 2020, pp. 233-240). a complete educational, technological device. And a meant and ruled schooling system. Based totally on philosophical thought and new instructional theories. Wherein the learner stories deliberate and studied studies via his interplay with diverse digital sources systematically and sequentially in step with procedures and activities learning organized in bendy electronic gaining knowledge of environments primarily based on computer systems and networks to assist learning tactics and facilitate their incidence at any time and place (Bogdandy et al.: 2020).

It's far clean from the previous definitions how the idea of re-learning has advanced from being merely supporting the computer and using its skills as a tool. Passing via the development of technology. Applications, data, and communication era media and the unfold of clever devices till we emerged from the restricted changes in a selected time, place, and surroundings to attain the extensive and flexible concept To take advantage of all bureaucracy and environments of technology in facilitating the educational process and

enhancing overall performance via creating a bendy digital surrounding that fits and integrates with the character of novices teachers and academic content with an emphasis on techniques, not gear.

As a result, e-learning can be defined as a machine of special ethical approaches and practices to facilitate training and improve overall performance. Based totally on integration among the outputs of instructional theories. Equipment and environments of information and conversation generation. To create an incorporated academic technology system that works to reap know-how get entry to throughout networks and simultaneous and asynchronous interaction among numerous events and all (Algahtani & Rajkhan: 2020).

The most important goals of e-learning

- 1- Making the educational material available to the learner and teacher electronically.
- 2- Improving teachers 'effectiveness by increasing their experience in preparing educational materials.
- 3- Access to information sources easily to take advantage of them in the educational process.
- 4- Increase the level of understanding. Culture and creativity among the learners.
- 5- Compensation for the shortage of educational personnel.
- 6- Facilitating communication with all parties to the educational process in an organized and accessible manner.

E-Learning Recruitment Forms

E-learning can be employed in several ways. depending on the need and the available services:

- 1- Auxiliary form (partial): where some e-learning techniques are used with traditional education.
- 2- The blended model: E-learning and traditional education are combined here.
- 3- Single (complete) model: In this case. E-learning is used as a complete alternative to the traditional one.

The researcher believes that integrated e-learning is one of the patterns that appeared as a compromise between the electronic style and the traditional pattern of education to ensure the presence of the teacher and his directions with reliance on the use of electronic media that students master. And from here, its importance emerged because of its clear impact on the educational environment and the level of teaching this way. The advantages of traditional and electronic education will be used together, which were already used in universities during the Corona pandemic, and in several models to ensure the continuity of education. In addition to modernizing the intellectual and knowledge structure. The role of e-learning in renewing the goals of higher education in line with the changes in the knowledge age to raise the level of contribution to the overall development of society is highlighted. In addition to his role in providing innovative methods using communication tools that call for the quality of introducing modern technology in university education. On the other hand. The competencies it provides to solve problems such as weak financial capabilities and mobility difficulties. Whether for learners or faculty members (Aini et al.: 2020, pp. 57-65).

From the above. We see the potential of e-learning in the continuity and quality of the educational process. as we lived through the need for many countries to transform the methods of their traditional educational institutions to slow the spread of the Coronavirus. Technology has become an essential part of our daily life. As e-learning tools such as the Internet and smart devices have been used dynamically in the process. Education. E-learning using various applications such as zoom. Teams. So we need to be familiar with the technology and the methods of its use. The researchers also recommend teachers use e-learning tools in the classroom in natural situations and encourage students to do so to make the educational journey enjoyable and exciting. The importance of benefiting from the results of other countries' experiences of this type of education in developing our education(Sefar & Ammar: 2020).

E-learning was the reason for many people to complete their education in many countries in light of the Corona pandemic crisis because of its capabilities and advantages. Including raising the creative competence of teachers and gaining technological expertise through professional growth. The study also recommended

mastering the practical applications of using computers. Information networks and databases in teaching specialization subjects. And limiting themselves to using one platform and relying on it to not stress teachers and not distract students. Teacher training on the TIMES program and preparing them for e-learning to be continuous and a strategic plan for the future and not just a necessity for a temporary period. It also recommended conducting attendance tests. Taking into account the precautionary measures.

E-learning problems and challenges

The researcher believes that one of the best difficulties and demanding situations going through elearning is the lack of community recognition of its ideas. The level of time and effort spent in education teachers and leaders of tutorial fields on the way to cope with its gear. In addition to the rejection of many teachers and leaders for non-public reasons that fluctuate from cloth to psychological.

The high monetary value of its implementation is likewise a challenge. Further to the safety risks that it entails. Along with plagiarism. Theft and penetration. Which makes the academic technique unsafe. The mission isn't always most effective in recruiting curricula and curricula and converting them from conventional training; however, it also in localizing the new position of the learner inside the framework of a complicated and converting technological philosophy in goal and fashion. And we should make paintings to discover answers to these barriers with the aid of focusing on spreading his subculture and recognition of its significance, despite the advantages provided through e-learning. The hassle of keeping educational requirements associated with satisfaction represents the main trouble going through it. Particularly inside the interplay between instructor and learner and the steerage and counseling, it includes. The unexpected transition of e-learning at some point of the Corona pandemic has caused a prime disaster in a few countries due to the loss of increased training. Vulnerable infrastructure and the modest economic state of affairs of society. In addition to the shortage of schooling and enough experience in using specialized gaining knowledge of control systems. And for this reason, a massive lodge has been made to the social media applications in the move, consisting of WhatsApp. YouTube. Facebook. and others, and a few also used radio channels to attain rural and far-off areas.

The enjoyment of e-learning is still the latest for some. and it wishes strategic plans. Field research. And non-stop evaluation and evaluation to reach sensible and tangible effects. As the difficulties in infrastructure and laboratories in the areas of verbal exchange and statistics era. Further to the shortage of non-stop electric powered power, and the weak spot of the internet service as compared to nations other, and the absence of unified structures for digital tests. Further to the need to train administrative and coaching groups of workers. In addition to Faculties students. The results of several studies affirm that the principal trouble in e-learning at some point of the pandemic is the dearth of sufficient technical information for each party to the education technique. Further to the need to put together academic materials, the crisis helped reveal the talents of real instructors in the technological aspect. As found out using instructors' warning and apprehension about making use of e-studying formally. And the lack of revel in of a few with technological capabilities. Which led to the presence of intense tension they have approximately the enjoy (Morsy: 2020). Additionally, discovered the decline inside the contributions of the instances program. That's approved inside the Madrasati platform for the Ministry of education. And the issue of controlling electronic checks. Which confirmed that forty% of novices in Saudi public education did not obtain the anticipated go back from education in Corona length thru the contents and environment of instructional systems. And that 56% of them had trouble using those systems. E-studying can update traditional schooling if the fundamental requirements are furnished in its platforms. Such as the virtual classroom function. The ability to record lectures. And a consumer interface with capabilities to improve getting to know and motivate newcomers.

Pronounced an increase inside the obstacles associated with the talents of Faculties participants. And the limitations related to the infrastructure and system used in university education inside the e-learning machine at some stage in the Corona pandemic. From the viewpoint of the school members at Jazan Faculties, Categorized boundaries to e-learning in universities in five axes:

- 1- Organizational boundaries: along with adopting the philosophy of e-learning as an accredited gadget and bearing the technological infrastructure in its diverse bureaucracy.
- 2- Technical barriers: they're all associated with communication networks in terms of exceptional. Potential and protection.
- 3- Self-imposed obstacles: these encompass what is related to the beginners and save them from accepting this form of education. Whether psychological. Material. Technical or medical factors.
- 4- Pedagogical limitations: it is represented using the school contributors 'lack of acceptance of this sort of education because of the double efforts it calls for them to prepare and apply.
- 5- Societal obstacles: the emergence of a few terrible traits in the direction of e-learning in society and no longer accepting it.

Look at encouraged growing curricula and display approach to match e-studying. Intensifying cooperation among the ministries of conversation and schooling to remedy the technical troubles that preclude the progress of e-learning, and that the evaluation procedure is non-stop for all elements of the e-learning process to deal with weaknesses and expand strengths. Additionally, endorsed the need to instruct network participants approximately the significance of e-learning and forming nice developments towards it, and inspiring faculty participants to sign up for education courses to broaden their capabilities in the usage of e-learning gear.

Take a look at foreseen the transformation of e-learning to hold tempo with the technological development within the globe. As a way to be done sluggishly and more than one degree, and that Saudi Arabia is one of the first Arab countries that seek this variation through the (destiny Gate) application. E-learning is the future of training. In particular for agencies that need to analyze with boundaries that save them from attending traditional schooling, which includes students who cannot get the right of entry to Faculties. And people connected to paintings. And justifies the dearth of a misunderstanding of some academic institutions inside the use of us for the duration of the Corona pandemic in the presence of unique protocols for emergencies, which include risky weather phenomena and seasonal influenza. Depend upon using e-learning equipment to compensate for the inability of Faculties students to head to high school. And these faculties educate their students earlier on numerous e-learning of equipment. In addition to that, there are a few establishments and groups that had been operating from domestic In regular conditions. as a type of approach to elevate the performance of labor. which made it additionally one of the sectors that have been not exposed to bad results surprising crisis.

Second. The university's efforts to overcome the problems of transitioning to e-studying during the COVID19 pandemic (E-learning branch at Princess Nourah Bint Abdul Rahman Faculties. 2020)

The sudden transformation of e-learning has brought about the emergence of many problems and troubles that international locations and educational institutions have treated. in percentage to their cloth. scientific and technological capabilities. and one of the most a success reports domestically is the revel in of Princess Nourah Bint Abdul Rahman Faculties. which succeeded in overcoming maximum of the troubles they confronted because of this alteration. the subsequent is a presentation of the challenges that I confronted and the methods to overcome them. which can be divided into comprehensive demanding situations and solutions for the Faculties as an entire and internal and unique one stemming from inside each faculty in line with its unique issues (Adedoyin & Soykan: 2020). demanding situations and boundaries that faced the Faculties and the way to address them:

- 1- Organizational demanding situations and their answers:
- Scheduling of virtual classes for all publications: A digital study room device (MS groups) has been furnished with a capability that consists of all users so that all guides are scheduled as they're within the educational system.
- holding digital final exams for all guides: the checks were rescheduled at more than one durations

to healthy the systems 'capacity. And the work of testing committees that work to make certain the firstrate of the checks. their comprehensiveness and compatibility with the modern state of affairs.

- 2- Technical challenges and their solutions:
- absorbing the re-learning gadget for all university users: work has been made to elevate the gadget's capacity using 300% within forty-eight hours to ensure that the instructional system maintains stably.
- Creating an electronic trying out device: An digital question Mark machine has been supplied to accommodate all checks for all publications.
- The dearth of technical surroundings prepared for female Faculties students to enable them to retain studying: greater than 400 gadgets and internet chips have been furnished to lady Faculties students and added to them after figuring out the wishes of the faculties.
- 3-The Faculties. represented through the overall management of facts and communication generation. furnished a fixed electronic structures as simple solutions. which include:
 - Leam Blackboard e-learning management system.
 - Collaborate Blackboard Virtual Classroom System.
 - Microsoft Teams virtual classroom and remote meeting system.
 - Question Mark electronic testing system.
 - Blackboard Analytics reporting system.

At the end of the academic year, 1441/40 AH. the university represented by the General Administration of Information and Communication Technology and the E-Learning Department developed an integrated plan to equip the systems and technical solutions necessary to achieve the integrated environment and the different needs of all users for the new academic year 41/1442 AH. which includes the completion of the following works during the summer period:

- 1- Blackboard (Learn, Ally, Contact, Collaborate) upgrade to the latest version.
- 2- Complete upgrade of Blackboard Analytics' reporting system to the latest version.
- 3- Developing the technical support system.
- 4- Developing electronic curricula to be compatible with electronic quality and achieving outputs.
- 5- Developing and implementing training programs for university employees.

Examples of the specific challenges and obstacles that faced some faculties and how to deal with them:

- 1- Faculties of Education: The e-learning unit in the Faculties organized sessions (30 minutes per session) throughout the week to support individual members of the faculty in how to deal with the Blackboard and its various tools. and at different times during the school day. whether for training or answering inquiries. The unit also provided advisory sessions through specialists in e-learning and educational design from faculty members to support members of the educational body in how to design content to be presented by quality standards for e-learning. The Faculties was keen to provide channels of communication and support for members by answering their questions and providing them with guidelines throughout the study period and final examinations remotely.
- 2- Faculties of Dentistry: This faculty is considered one of the first Faculties in the Kingdom that launched the electronic examination system using the Exam soft program. which made its use during the pandemic more smooth due to the program's advantages such as analyzing learning outcomes to give a comprehensive perception of the students' performance. Due to the nature of the clinical study in recent years at the Faculties, the use of the Axium electronic file program, which is the first of its kind in the Kingdom, contributed to the analysis of the percentage of students' completion in clinical courses and the monitoring of cases that are in the process of treatment, which facilitated the decision-making process and the analysis of data without the presence of members or students. To the workplace.
- 3- Faculties of Pharmacy: The Faculties trained members on remote work methods by providing workshops and continuous support through the e-learning unit and producing detailed introductory videos

for the steps of preparing electronic exams and feeding question banks. The Faculties was keen not to delay the graduation of its students in the last year. so it activated internship training with accredited remote training bodies within the specializations that do not require the presence of the pharmacist in the workplace. such as drug information and drug administration. The Faculties also provided a remote clinical course during which cases were presented from the daily practice of the profession and the student was evaluated according to approved forms.

4- Faculties of Nursing: The Faculties transferred all requirements that require interaction and discussion to the electronic method through the Blackboard system and Microsoft Teams. Female students were evaluated instead of the practical aspect of clinical training by doing research and presenting hypothetical clinical cases of patients and focusing on critical and analytical thinking in them.

METHODOL OGY

The study used the descriptive and analytical approach to find out the difficulties of the sudden transformation of e-learning during the COVID19 pandemic among faculty members at Princess Nourah Bint Abdul Rahman University.

Society and the study sample

The study population consists of all the faculty members at Princess Nourah Bint Abdul Rahman University. whose number is (2078) members. divided into (15) Faculties with various specializations ranging from a humanitarian. scientific. health. and community Faculties. Table (1) shows the distribution of members among the Faculties of the university.

Table (1). Show distribution of	faculty men	nbers in the	Faculties of	the university
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Percentage	Number of members	Faculties	s			
	Human Fac	ulties				
14.6	303	Literature	1			
13.4	279	Education	2			
7.9	164	Designs and arts	3			
7.2	149	Languages	4			
3.2	67	Social Service	5			
	Science Faculties					
15.1	313	Sciences	7			
8.3	173	Management and business	8			
8.0	167	Computer and Info sciences	9			
1.1	23	Engineering	10			
	Health Fac	ulties	11			
6.2	129	Health and Rehabilitation Sciences	12			
3.6	74	Human Medicine	13			
3.4	71	the pharmacy	14			
2.7	57	dentist	15			
2.5	52	Nursing	16			
	Community Faculties					
2.7	57	Society	18			
100.0	2078	Total	•			

As for the study sample. it consisted of (355) faculty members who taught remotely via the blackboard system during the Corona pandemic in the second semesters of the academic year 1441/40 AH and the first of the academic year 1442/41 AH. and Table (2) shows the description of the sample members:

Table (2). Show distribution of the stud	v sample according to the Faculties
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Percentage	Repetition	Faculties	S
22.3	79	Education	1
20.8	74	Literature	2
13.5	48	Sciences	3
9.0	32	Languages	4
6.8	24	Designs and arts	5
5.4	19	Computer and Info sciences	6
4.8	17	Human Medicine	7
4.5	16	Management and business	8
3.9	14	Dentist	9
2.0	7	Engineering	10
2.0	7	Social Service	11
1.7	6	Health and Rehabilitation Sciences	12
1.7	6	Nursing	13
1.1	4	The pharmacy	14
0.6	2	The society	15
100	355	Total	

Table (2) shows the distribution of the study sample according to the Faculties. where the Faculties of Education formed the highest percentage of responses by (22.3%). followed by the Faculties of "Arts" by (20.8%). then the Faculties of "Science" by (13.5%) While the lowest percentages were for the Faculties of Pharmacy (1.1%). followed by the Faculties of "Community" at (0.6%).

Study tools

The questionnaire-based on theoretical frameworks for education and e-learning and related previous studies and according to the e-learning administration report on activating distance education during the pandemic at Princess Nourah Bint Abdul Rahman University was used to investigate the views of the study sample about the difficulties they faced during the sudden shift to e-learning during the pandemic Corona. The initial image of the tool was built into (30) phrases. listed on the triple Likert scale (always). (sometimes) and (never).

Tool Validity and Stability

1- Virtual honesty

The initial image of the questionnaire was presented to a group of distinguished referees specialized in the field of educational technology. curricula and teaching methods. Some of the phrases were modified and others deleted, and in light of their opinions, the final version of the questionnaire was reached, which consisted of (25) phrases that fall under three axes: Technical and organizational difficulties (14) phrases, difficulties about faculty members (6) phrases, and difficulties of female students (5) phrases.

2- Validity of internal consistency

After verifying the apparent validity of the questionnaire. the researcher calculated the correlation coefficient Pearson between each statement and the total degree of the axis to which it belongs. and this is evident from the following tables:

Table (3). Show the validity of the internal consistency of the axis of technical and organizational difficulties

Correlation coefficient	S	Correlation coefficient	S
0.736**	8	0.469**	1
0.646**	9	0.436**	2
0.608**	10	0.686**	3
0.595**	11	0.706**	4
0.587**	12	0.725**	5
0.616**	13	0.719**	6
0.665**	14	0.699**	7

^{**} Significant at the level of 0.01.

Table (4). Show the validation of the internal consistency of the faculty members' difficulties axis

Correlation coefficient	S	Correlation coefficient	S
0.774**	4	0.668**	1
0.747**	5	0.733**	2
0.653**	6	0.562**	3

^{**} Significant at the level of 0.01.

Table (5). Show the validation of the internal consistency of the students' difficulties axis

Correlation coefficient	S	Correlation coefficient	S
0.803**	4	0.773**	1
0.716**	5	0.834**	2
		0.866**	3

^{**} Significant at the level of 0.01.

It is evident from Tables (3. 4 and 5) that all statements are positively and statistically related to the total degree of the axis to which they belong at significant levels (0.01). which means their internal consistency and validity.

Stability

The researcher used the Alphakronbach coefficient (α) to ensure the stability of the questionnaire of the study tool. and the results were as shown in the following table:

Table (6). Show Alphakronbach coefficients for the questionnaire axes

Stability coefficient	S	Axes of the resolution	S
0.886	14	Technical and organizational difficulties	1
0.772	6	Difficulties for faculty members	2
0.859	5	Difficulties for female students	3
0.905	25	Total stability	

Table (6) shows the values of the Alphakronbach reliability coefficients for the guestionnaire axes. where all its stability coefficients were statistically high, which ranged between (0.772 and 0.886), and the overall stability was high, reaching (0.905), which indicates the stability of the questionnaire and its validity for application.

RESULTS

To achieve the objectives of the study and answer its questions, the data were analyzed by any appropriate statistical methods using the Statistical Package for Social Sciences, which is symbolized by an acronym (SPSS). After the data was coded and entered, and to determine the length of the three scale cells for the tool axes, the range was calculated (5 - 1 = 4), then divided by the number of scale cells to obtain the correct cell length i.e. (4 ÷ 5 = 0.80) after that these were added The value to the lowest value in the scale to determine the upper limit of this cell. and thus the length of the cells became as follows:

- 1- From 1.00 to 1.66 (never).
- 2- From 1.67 to 2.33 (sometimes).
- 3- From 3.00 represents (always).

The following is a detailed answer to the study questions First. The answer to the first question

To answer the first question, which states: What are the technical and organizational difficulties for the transformation of e-learning during the Corona pandemic from the viewpoint of the faculty members at Princess Nourah Bint Abdul Rahman University.? The viewpoint of the study sample about technical and organizational difficulties was reviewed through frequencies, percentages, averages, and standard deviations of their responses, as follows:

Table (7). Show the study sample's viewpoint on technical and organizational difficulties

Arrangement	SD	Mean	1	Answer alternatives		Paragraphs	S
			Never	Sometimes	Always		
10	0.59	1.48	202	135	18	Lecture times conflict with other lectures or	1
			(%56.9)	(38.0%)	(%51)	exams	
13	0.58	1.0	271	62	22	Limiting the permissible period for a single	2
			(%76.3)	(%17.5)	(%62)	lecture on the blackboard	
1	0.61	2.34	26	182	147	Internet problems such as: slow. download problems. connection failure	3
			(%7.3)	(%51.3)	(%41.4)	· ·	
2	0.60	2.13	44	221	90	The system does not allow some students	4
			(%12.4)	(%62.3)	(%25.4)	to enter the lecture	
4	0.61	2.11	49	218	88	Complete the system for some students	5
			(%13.8)	(%61.4)	(%24.8)	from the blackboard	
6	0.62	1.95	76	219	60	Taking out the system for some students	6
			(%21.4)	(%61.7)	(%16.9)	from one of the tools inside it. such as discussion forums or exams	
5	0.60	2.08	51	223	81	The blackboard broadcast was interrupted	7
			(%14.4)	(%62.8)	(%22.8)	by some students during the lecture	
7	0.67	1.66	161	154	40	Some tools such as virtual classes. discussion forums. student preparation. e-	8
			(%45.4)	(%43.4)	(%11.3)	mail, screen sharing. did not display the icon	
3	0.57	2.12	38	235	82		9

			(%10.7)	(%66.2)	(%23.1)	Sound problems such as choppiness. lag Interruptions	
9	0.65	1.57	185 (%52.1)	139 (%39.2)	(%8.7)	Files such as PowerPoint cannot be displayed in virtual classes	10
11	0.61	1.48	205	128	22	A malfunction in the lecture recording process	11
			(%57.7)	(36.1%)	(%6.2)	process	
14	0.53	1.29	266	76	13	Errors in grades that appear to students	12
			(%74.9)	(%21.4)	(%3.7)		
12	0.62	1.48	207	124	24	The lack of questions for some students in	13
			(%58.3)	(%34.9)	(%6.8)	some tools such as discussion forums or assignments	
8	0.62	1.63	157	171	27	Female students 'responses are not	14
			(%44.2)	(%48.2)	(%7.6)	received in some tools such as discussion forums or assignments	
	0.39	1.76		General mean			

Table (7) presents the viewpoint of faculty members on the technical and organizational difficulties during the Corona pandemic, and it was found through the overall average of responses that they (sometimes) face technical and organizational difficulties during the Corona pandemic, as the overall average was (1,76 out of 3).

It is also evident from the table that the technical and organizational difficulties that appeared permanently are limited to only (Internet problems such as slow, download problems, connection failure). With this result, the viewpoint of the faculty members at Princess Nourah Bint Abdul Rahman University agrees with the members at Jazan University in regarding the high obstacles related to the infrastructure of the e-learning system during the Corona pandemic, but it was identified at Princess Nourah Bint Abdul Rahman University with Internet problems. This result is also consistent with the findings of the study that there are high-impact administrative and organizational obstacles in the ability of educational institutions to continue their basic educational services remotely during the Corona pandemic (Karpov: 2017, pp. 804-810). The viewpoint of the current study sample also demonstrated that the lack of information and communication technology infrastructure may limit access to new technologies and that societies need a strong partnership between the public and private sectors in terms of providing and disseminating that infrastructure. The Internet is its foundation. The current result is also in line with cooperation between the Ministries of Communications and Education should be intensified to solve the technical problems that hinder the progress of e-learning (Naidu: 2006). The researcher believes that the speed and quality of communication networks has a great impact on the level of achieving the desired goals of e-learning, emphasized the importance of ensuring Internet connectivity, given that work in the periods of the ban is based on it completely (Markus: 2008).

Second, The answer to the second question

To answer the second question, which stated: What are the difficulties related to faculty members to switch to e-learning during the Corona pandemic from the viewpoint of faculty members at Princess Nourah Bint Abdul Rahman University.? The viewpoint of the study sample about the difficulties related to the members was reviewed through the frequencies, percentages, means and standard deviations of their responses as follows:

Arrangement	SD	Mean	Α	Answer alternatives		Paragraphs	S
			Never	Sometimes	Always		
6	0.78	1.95	117	139	99	Lack of training before the pandemic on using	1
			(%33.0)	(%39.2)	(%27.9)	the blackboard system	
5	0.74	1.95	106	161	88	Lack of experience in using the Blackboard	2
			(%29.9)	(%45.5)	(%24.8)	system	
1	0.66	2.58	33	83	239	Extended and unlimited working hours	3
			(%9.3)	(%23.4)	(%67.3)		
4	0.60	2.51	19	136	200	Activities need to be modified to suit the	4
			(%5.4)	(%38.3)	(%56.3)	method of distance education	
3	0.58	2.54	16	130	209	Building new evaluation criteria to suit the activities used remotely	
			(%4.5)	(%36.6)	(%56.9)		
2	0.62	2.57	25	103	227	Preparing questions commensurate with the specifications of the remote tests	
			(%7.0)	(%29.0)	(%63.9)		
	0.46	2.35			0	General mean	

Table (8). Show The study sample's viewpoint on the difficulties related to faculty members

Table (8) presents the results of the difficulties related to the faculty members from their point of view, where the overall average of the responses indicates the existence of four difficulties out of six that they faced permanently and came in the following order:

- 1- The extension and unlimited working hours, as we find that 67.3% of the members faced this difficulty (always) and 23.4% (sometimes), while 9.3% did not (never).
- 2- Preparing questions that fit the specifications of remote exams, and 63.9% of the members face this difficulty (always) and 29.0% (sometimes), while 7.0% did not (never).
- 3- Building new evaluation criteria to suit the activities used remotely. 58.9% of the members face this difficulty (always) and 36.6% (sometimes), while 4.5% did not (never).
- 4- The necessity of modifying activities to suit the method of distance education. We find that 56.3% of the members were facing this difficulty (always) and 38.3% (sometimes), while 5,4% did not (never).

This indicates that the majority of the faculty members were constantly facing difficulties related to them, and the researcher believes that those difficulties that the study sample faced as a whole are related to the quality standards of e-learning, which constitute a strategic goal for university education as each university seeks to reach the quality of its electronic courses, and for Princess University Noura bint Abdulrahman has made great contributions in this field, which were previously mentioned. Recommended that faculty members be encouraged to train to develop their skills in the use of e-learning tools, and the use includes many skills, including those related to time management and those related to electronic content management ((Raheem & Khan: 2020, pp. 3135-3138). Also, e-learning makes a vital contribution to the teaching and learning process from home and makes it a fun and interesting process by providing teachers with creative ideas that help in owning their electronic style (Sudevan: 2020).

The current study agrees with the importance of the availability of basic standards in e-learning platforms to improve education and motivate learners. It also agrees with what was recommended on the necessity of developing curricula and the way they are presented to suit e-learning and for the evaluation process to be continuous for all components of e-learning. The previous results are also consistent with what regarding the

problem of maintaining academic standards related to quality, especially in the interaction between teacher and learner. I also agreed with the study that the main problem in e-learning during the pandemic lies in the lack of sufficient technical expertise for both parties to the education process, in addition to the need to prepare high-quality educational materials. This study that the pre-preparation on using Blackboard that Jazan University provided to all its members through mentoring sessions had a great impact in helping them to make the most of the system's multiple advantages in the educational process (lacuzzi, et al.: 2020, pp. 1-6).

Third, The answer to the third question

To answer the third question, which states: What are the difficulties related to female students switching to e-learning during the Corona pandemic from the viewpoint of the faculty members at Princess Nourah Bint Abdul Rahman University.? The viewpoint of the study sample about the difficulties related to the female students was reviewed through the frequencies, percentages, averages, and standard deviations of their responses, as follows:

Tal	ole (9).	The study	y sample's viewpoint on the difficultie	s related to female students
nent	SD	Mean	Answer alternatives	Paragraphs

Arrangement	SD	Mean	Answer alternatives			Paragraphs	S
			Never	Sometimes	Always		
3	0.65	2.19	47	192	116	Lack of experience in using the	1
			(%13.2)	(%54.1)	(%32.7)	Blackboard system	
2	0.70	2.25	53	162	140	The lack of an appropriate technical	2
			(%14.9)	(%45.6)	(%39.4)	environment	
5	0.74	2.06	86	161	108	Low motivation towards using e-learning	3
			(%24.2)	(%45.4)	(%30.4)	1	
4	0.72	2.15	69	162	124	Lack of seriousness in working through	4
			(%19.4)	(%45.6)	(%34.9)	distance education	
1	0.65	2.39	32	154	169	Feeling anxious when dealing with	5
			(%9.0)	(%43.4)	(%47.6)	electronic tests	
	0.55	2.21	General mean				

Table (9) displays the results of the difficulties related to female students, and indicates

DISCUSSION

the general direction of the difficulties for the option (sometimes), as four out of five difficulties refer to this option, and they came in the following order:

- 1- The lack of an appropriate technical environment, as we find that 39.4% of the faculty members view the existence of this difficulty (always) and 45.6% (sometimes), while 14.9% think that it does not exist (never).
- 2- Lack of experience in using the blackboard system, as 32.7% of faculty members views the existence of this difficulty (always) and 54.1% (sometimes), while 13.2% think it does not exist (never).
- 3- Lack of seriousness in working through distance education, and we find 34.9% of the faculty members came to view this difficulty (always) and 45.6% (sometimes), while 19.4% believed that it did not exist (never).

4- The lack of motivation towards the use of e-learning, as 30.4% of the faculty members view the existence of this difficulty (always) and 45.4% (sometimes), while 24.2% think that it does not exist (never). 5- As for the phrase (feeling anxious when dealing with electronic tests), it referred to the option (always), as 47.6% of faculty members believed that this difficulty existed (always) and 43.4% (sometimes), while 9 0% thought it (never) existed.

The first three results are consistent with seeing that the lack of confusion of some educational institutions in the United States of America during the Corona pandemic came through the existence of permanent protocols that rely on the use of e-learning tools to compensate students if they are unable to attend school. By training them in advance on various e-learning tools, the researcher believes that the current result is a reflection of Princess Nourah Bint Abdul Rahman University's efforts in e-learning and empowering students and members of its tools. These results differ with the findings of regarding the need for university students to train on e-learning platforms and tools, regarding learners 'lack of experience with technological skills, which led to their fear of e-learning (Arshad, et al.: 2020).

As for the fourth and fifth results, they agree with the, which identified academic pressures by examining the concerns and fears that students of the Faculties of Education at King Saud University face during the Corona pandemic, whose results revealed that the biggest problem in students 'tension lies in their anxiety about the end of the semester and the exams (Moawad: 2020, pp. 100-107). Accordingly, the principle examine query become replied: What are the difficulties of changing to e-learning of all through the Corona pandemic among Faculties individuals at Princess Nourah Bint Abdul Rahman University.? thru the outcomes of answering the sub-questions shown in tables (7, eight and nine), which are summarized as follows:

First, Technical and Organizational difficulties

The standpoint of the Faculties individuals inside the look at sample become that there are technical and organizational problems always restricted to (net problems together with slow, download problems, connection failure), and there had been different difficulties, but they appear from time to time, and they may be as follows (Hautemo & Uunona: 2018):

- 1- The gadget does now not permit a few Faculties students to go into the lecture
- 2- Sound issues inclusive of choppiness, lag, interruption, and echo
- 3- Casting off the system for some Faculties students from the blackboard absolutely
- 4- The blackboard broadcast turned into interrupted by some students in the course of the lecture
- 5- Doing away with the device for a few students from one of the gear interior it, inclusive of dialogue boards or checks.

Second, Difficulties related to school members

The viewpoint of the Faculties participants of the look at the sample become that the difficulties associated with them, which they faced completely, have been the following:

- 1- Extended and limitless running hours.
- 2- Making ready questions commensurate with the specs of the far-flung tests.
- 3- Constructing new evaluation standards to suit the activities used remotely.
- 4- The need to amend the activities to suit the technique of distance education.

Third. Difficulties related to female students

The viewpoint of the faculty members in the study sample was that the difficulties related to female students always exist are: (Feeling anxious when dealing with electronic tests).

CONCLUSION

Based on the results of the study, the researcher recommends the following:

- 1- Being guided by the difficulties faced by faculty members at Princess Nourah Bint Abdul Rahman University to develop e-learning at the university.
- 2- To benefit from the results of the current study in identifying the problems of e-learning that faculty members face in various Saudi universities.
- 3- Benefiting from the results of the study in giving indications of the e-learning problems that public education faces.
- 4- Being guided by the difficulties faced by faculty members at Princess Noura bint Abdurrahman University to solve the problems of e-learning to develop it in Saudi universities.
- 5- Difficulties of switching to e-learning during the Corona pandemic among students of Princess Nourah Bint Abdul Rahman University.
- 6- Difficulties of transforming e-learning during the Corona pandemic among the leaders of Princess Nourah Bint Abdul Rahman University.
- 7- Difficulties of transforming e-learning during the Corona pandemic among faculty members at King Saud University.
- 8- Difficulties of switching to e-learning during the Corona pandemic among female students of King Saud University.
- 9- Difficulties of transforming e-learning during the Corona pandemic among King Saud University leaders.
- 10- Evaluating the distance learning experience at Princess Nourah Bint Abdul Rahman University during the Corona pandemic from the faculty members' point of view.
- 11- Evaluating the distance education experience at Princess Nourah Bint Abdul Rahman University during the Corona pandemic from the female students 'point of view.

BIBI IOGRAPHY

ABOAGYE, E, YAWWSON, J, A, & APPIAH, K, N, (2020). "COVID-19 and e-learning: the challenges of students in tertiary institutions". Social Education Research, pp. 1-8.

ADEDOYIN, O, B, & SOYKAN, E, (2020). "COVID-19 pandemic and online learning: the challenges and opport0unities". *Interactive Learning Environments*, pp. 1-13.

ADNAN, M, & ANWAR, K, (2020). "Online learning amid the COVID-19 pandemic: studen RAHEEM ts' perspectives". *Online Submission*, 2(1), pp. 45-51.

AINI, Q, BUDIARTO, M, PUTRA, P, O, H, & RAHARDJA, U, (2020). "Exploring e-learning challenges during the global COVID-19 pandemic: a review". *Jurnal Sistem Informasi*, 16(2), pp. 57-65.

ALADWAN, A, (2020). "Governmental measures towards the Coronavirus crisis management: an applied study from the viewpoint of faculty members in Jordanian universities". *Modern Applied Science*, 14(6), pp. 60-64.

ALIYYAH, R, R, RACHMADTULLAH, R, SAMSUDIN, A, SYAODIH, E, NURTANTO, M, & TAMBUNAN, A, R, S, (2020). "The perceptions of primary school teachers of online learning during the COVID-19 pandemic period: a case study in Indonesia". *Journal of Ethnic and Cultural Studies*, 7(2), pp. 90-109.

ALQAHTANI, A, Y, & RAJKHAN, A, A, (2020). "E-learning critical success factors during the COVID-19 pandemic: A comprehensive analysis of e-learning managerial perspectives". *Education Sciences*, *10*(9), pp. 210-216.

ARSHAD, M, ALMUFARREH, A, NOAMAN, K, M, & SAEED, M, N, (2020). "Academic semester activities by learning management system during COVID-19 pandemic: a case of Jazan university".

BAHASOAN, A, N, AYUANDIANI, W, MUKHRAM, M, & RAHMAT, A, (2020). "Effectiveness of online learning in pandemic COVID-19". *International Journal of Science, Technology & Management*, 1(2), pp. 100-106.

BOGDANDY, B, TAMAS, J, & ToTH, Z, (2020). "Digital transformation in education during COVID-19: a case study". 2020 11th IEEE International Conference on Cognitive Infocommunications (CogInfoCom).

EL REFAE, G, A, KABA, A, & ELETTER, S, (2021). "Distance learning during COVID-19 pandemic: satisfaction, opportunities and challenges as perceived by faculty members and students". *Interactive Technology and Smart Education*.

HAUTEMO, A, M, & UUNONA, G, N, (2018). "Knowledge society for Africa: ICT development in the education sector in Namibia". 2018 IST-Africa Week Conference (IST-Africa).

HOQ, M, Z, (2020). "E-learning during the period of pandemic (COVID-19) in the kingdom of Saudi Arabia: an empirical study". *American Journal of Educational Research*, 8(7), pp. 457-464.

IACUZZI, S, FEDELE, P, & GARLATTI, A, (2020). "Beyond Coronavirus: the role for knowledge management in schools responses to crisis". *Knowledge Management Research & Practice*, pp. 1-6.

KAGOYA, S, (2020). "The use of digital transformation to address education challenges caused by COVID-19 in developing countries". *Social Sciences*, 9(6), pp. 233-240.

KARPOV, A, O, (2017). "The problem of separating the notions of "knowledge" and "information" in the knowledge society and its education". *Procedia-Social and Behavioral Sciences*, 237,pp. 804-810.

LASSOUED, Z, ALHENDAWI, M, & BASHITIALSHAAER, R, (2020). "An exploratory study of the obstacles for achieving quality in distance learning during the COVID-19 pandemic". *Education Sciences*, *10*(9), pp. 210-232.

MARKUS, B, (2008). "Thinking about e-learning proceedings FIG international workshop sharing good practices: e-learning in Surveying, geo-information sciences and land administration".

MOAWAD, R, A, (2020). "Online learning during the COVID-19 pandemic and academic stress in university students". Revista Românească pentru Educație Multidimensională, 12(1 Sup2), pp. 100-107.

MORSY, N. S. (2020). "E-learning in light of the Corona pandemic: a case study on department of Libraries, documents and information, faculty of arts, Tanta universi". *International Journal of Library and Information Sciences*.

NAIDU, S, (2006). E-learning: A guidebook of principles, procedures and practices. Commonwealth Educational Media Centre for Asia (CEMCA).

RADHA, R, MAHALAKSHMI, K, KUMAR, V, S, & SARAVANAKUMAR, A, (2020). "E-learning during lockdown of COVID-19 pandemic: a global perspective". *International journal of control and automation, 13*(4), pp. 1088-1099.

RAHEEM, B, R, & KHAN, M, A, (2020). "The role of e-Learning in COVID-19 crisis". *International Journal of Creative Research Thought (IJCRT)*, 8(3), pp. 3135-3138.

SEFAR, AMMAR (2020). "Obstacles to distance teaching and learning in the state of Kuwait's public education during the outbreak of the coronavirus (COVID-19) pandemic from the viewpoint of faculty members at Kuwait university: an analytical exploratory study".

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