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The Degrees To Which Teaching Faculty At The Preparatory Year Know And Practice Computer-Based Simulation And The Extent To Which They Employ It From Their Point Of View

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Abstract:

The study aimed to investigate the extent to which teaching faculty at the Preparatory Year knows and Practices Computer-Based Simulation applications at Imam Abdurrahman Al-Faisal University. The sample of the study involved 123 instructors who completed the questionnaire including two domains: (1) instructors' background knowledge on computer-based simulation and (2) the degree of using computer-based simulation. The results of the study showed that teaching faculty practice computer-based simulation more than they are versed with the background knowledge of the computer-based simulation. The results also showed that knowledge and practice did not differ by sex and specialty.

Keyword: computer, faculty members, teaching.

Introduction:

The Ministry of Education and Education has provided all the means and tools to educate and develop the modern methods, so it has become necessary to employ modern technologies in education, in the heads of computing automatic which is now the most important area of life. Let us live today in the light of scientific and technological progress, with the rapid expansion of modern technology in all spheres of political, economic and military life, including the field of education.To prepare the emerging generations and arm them with the fundamentals of computer automatic and use the most appropriate means to train them; cannot coexist with the world of modern, world of information technology and information (Ata allah 2015).

It is believed that education based on computer assistance plays a significant role in decision-making and problem-solving in the real world, from the methods and methods of education developed by educational programs to the various methods: as private education, training, and practice, which significantly contribute to the enlarging of educational practice, the accomplishment of educational goals, and the realization of individual differences between

students (Al zhrani 2013). Using the calculator serves to highlight the value of education by inspiring students' interests and desires for studying, investigating, and exploring facts, information, and a wide range of knowledge. Fasting repeatedly (Soderberg & Price, 2003). The employment of teaching techniques in the learning process can be accomplished by instructing the students through examples and observations that they see in order to attain the learning methods that they find and to the educational goals (Jarada 2020). Given that the calculator has the capability of diversifying in the sphere of education, it also enables the student to know the manifestations and to look at the places without any risks or charges. It is possible to ensure that the student's problem has been defined by offering a range of information, making an appropriate decision to address the problem, investing in the computing system, and providing a range of information. They are process representations of natural phenomena, human, dynamic, political, or economic events or processes, as they are aware (Al reaani 2012), and they are given in a thorough manner to explain the components involved, the interactions between these factors, and the results involved.

emphasizes the value of employing the educational and social studies teaching system in all areas, as well as the value of it in assisting students in obtaining knowledge that could be dangerous while they are studying. He is required to study true knowledge, which is challenging to locate due to the time and effort required to do so as well as the chance of making mistakes without serious implications endangering his life. Students can build a mental model (Introduction to the System Endrus), comprehend information, discover information in an interactive way, develop skills and the ability to think differently, and participate in the discussion of work results. They also have knowledge of how events occurred while they were in positions of observation and study. They also help to shape the traditional environment that is tied to the actual environment in which they live. (2012) Pinter and others.

Also emphasized the significance of the use of the teaching tool in the educational practice in the field of graphic engineering, as it helps to develop students' skills in the recognition of the kinds and concepts and bodies of the secondary and third dimensions in the empty, when the student uses the computer tool, it forms a fundamental part of teaching the subject; for the formation of the lines of the two-dimensional engineering machine clearly and accurately, it is a vital component of the teaching of the subject. 2018 Letters of the Year. It is highlighted the importance of employing the teaching skills in the educational industry in developing the skills of learners in creating the teachings and consultations, developing models and reports, and designing and implementing the learning skills for the purpose of designing, implementing and applying the data systems. (Authorship of the Holy Spirit, 2010). In the field of scientific materials, among them matters of life, they are matters characterized by rapid development in the advanced technologies, especially in the program of math’s of computing, as one of the methods of development of scientific laboratories, and

the use of student experience in the integration of modern technology in the day-to-day laboratory, this type of learning is considered to be the latest means of integration with modern technology (The Representative) in the learning and the least harmful, where the computer uses in the sphere of the declaration of living beings in a systematic manner, without using dangerous substances in the investigation, which makes the student use the math's easily, and then applies them in reality negatively with the application of program of the practice (Alzheimer, 2013). Whereas, therefore, it is necessary to train teachers to employ apprentices in the learning process; whereas it leads to learning activities within the room of the classroom, helps the student to obtain information at the least possible time, as well as educational activities; where the computer is used in the teaching process, whereas color's help the learner to learn and be able to interpret and analyze unfamiliar phenomena, and also to make sense of the information contained in the program.

I backed up some studies on the value of using computers, computing, and honing their skills, like the Jarada study (2020), which focused on identifying real-world applications of learning strategies in the area of technology in secondary education and on verifying research hypotheses by putting into practice measures of actual computing program use. The results that follow are derived from the results that follow: - Grades of use of the teaching methodology in the secondary school art school in the areas of science and technology from the perspective of teaching the law of law of art. - there are variations in the ways that the challenges brought on by the application of these technological methods are organized in the educational programs offered by the third school of technology and the second school of science and art; - there are variations in the kinds of arrangements that are opposed to the use of those methods. - The amount of money employed in the instructional programs for the second year of the school of arts has increased. Additionally, the 2018 goal was to learn how to use computers in the University of Algeria's teaching department to produce technical works. Is composed of (41) employees who work in the study, theater, music, and art departments. These individuals are chosen using researchers from the department of education at the university of studies. The findings of the research into the extensive use of computers in producing technical works by faculty members at the University of Almeria, as well as the comparison of statistical data in changing (gender, specialization), and the availability of statistics in changing (academic data at the appropriate level, professor participant), and of the good number of years of experience (more than seven years). In order to enable them to perform, researchers recommended contracting training sessions and training sessions for teaching members, developing the use of computing instruments in technical activities, as a targeted study Ata allah (2015) to assess the impact of Employing Computers and offer that Announced on facilitating networking skills for students at the University of Oklahoma and for researchers to apply tools study and components of test computing, and Card of attention on students of study groups component of (148) students),

and applied results have Tagged with statistics at the level (a 0.05) in average grades reporting students of group curriculum (Pinter et al, 2012), which targeted the use of scientific computing materials in the field of science. and showed the results of the study exists Statistical reports, and skills of scientific transactions between students who taught the subject using the computer program, and those who studied the subject in the traditional way and the best of the research group.

In 2011 al Heyawi and Salih which aimed at recognition of the use of material in the supply of the second year in the department of physics, and the connection of the study to find material for the statistical supply of materials in the field of industry, and of goods in the sector of trade. There is also no statistical difference between average growth and average growth towards average growth. Also study Al Zhrani (2013) which aims to discover the effectiveness of the program of predictions in acquiring skills of instruction and reducing time learning in matters of life at the university of sciences, and connected the study to the effective program of the ability to develop their skills, in particular to solve problems and to think that is important. Likewise, studies in physics (Zasharia, 2005) aimed at determining the effectiveness of the use of computers using computers in the teaching of scientific studies in physical sciences, and the connection of studies with computers to improve the understanding of scientific concepts while teaching scientific sciences.

In (2012) Al Reaani developed study targeted to identify the possibility of employing a program of social studies on the Internet in teaching social studies from the perspective of teaching teachers in the country of Oman where the results pointed to the weakness of the ability to employ educational studies in the world of society for the program of online social studies in Oman, as well as the results indicated that teachers are interested in developing their skills in using a programme of social research on the internet, and that there is no gender gap between men and women. After reviewing the previous studies that conducted the study using the electronic calculator, it is noted that some studies showed that there were effects of the current study in the other methods used. As Zasharia (Zasharia, 2005) also showed some other functions to use programs computer stimulation in exhibition of some educational and practical skills, which are necessary for teaching thinking in different courses. On these studies we conducted the study of life (2013) and on other studies (Pinter et al, 2012).

From this point of view, the researcher emphasizes the importance of using the program stimulation in teaching at the members of the teaching body, where education is a phase important paying the development of the community, it is important to learn all the different ways in different fields, as well as to understand all the developments that modern education faces in the field of using computers to be a fundamental element in this system to improve, develop and promote how it coincides with new approaches, and to use the apparatus

computers an important role in explaining concepts and explaining them in all different materials, and so on will the generation contribute to the building of an advanced society.

Study problems and questions

The diversity in the use of means and methods in teaching strives to eliminate weak students in the skills to think, especially skill to think differently and solve problems, but some of the methods of teaching the applicant does not seek to concentrate on taking care of them and away from the application and use of computers automatically. Likewise, many curricula need to interact with the learner through the use of the brahma's curriculum which helps them to understand and understand their matters through the process of experimentation and experimentation, as well as to follow the needs of the student in experimenting and trying, error and learning and discovery; for all this involves the ability to think higher as it has a role in increasing the interaction between learns and the materials studied electronically.

In the fields of science research and research and in the field of scientific research and studies, researchers did not find research and study at the level of knowledge of the teaching department in the general level of education at the university of science and technology department.

To this objective, the school tries to answer the following questions:

- What is the knowledge of the teaching department of the university of the University of Oregon in the field of education?

- What is the possibility of employing computers in teaching from their point of view?

- Are there any differences in the degree of practitioner of the university of the University of Oregon for the program of the academic programme for the help of academic institutions in the field of education and education?

Objective of study

Diploma in the field of education at the University of Edinburgh, and the degree of ability to learn from their perspective.

Importance of study:

Show the importance of current studies through the following points:

- The importance of programming in the development of educational activities, to facilitate practical learning and education in order to communicate the content of teaching activities.

- Instructions for conducting research in the field of education at the University of Oregon, and the possibility of employing them in teaching from their point of view, film which conduct any study on this subject within the boundaries of research.
- benefit from them the employees in the general year of preparation to prepare members of the board of teaching in their training and guide them in the use of the company in teaching.
- To promote literature in the field of studies, and to promote other problems that require new studies.
- It can help raise the level of skill to think differently, including to think critically and creatively, and to solve problems with students, thus lifting the detail of study.

Implementation of penalties:

Facilities provided by computers:

Group of Computational Measures that are carried out with the help of the educational program of the curriculum, which consists of documents and movements that deal with the actual situation of the Curriculum.

Members of the Board of Education:

They are members of the teaching establishment who conduct teaching in the general year of preparation at the University of Saudi Arabia for the academic year 1437/1438 h.

Importance of study:

Show the importance of current studies through the following points:

The importance of programming in the development of educational activities, to facilitate practical learning and education in order to communicate the content of teaching activities.

Instructions for conducting research in the field of education at the University of Oregon, and the possibility of employing them in teaching from their point of view, film which conduct any study on this subject within the boundaries of research.

- benefit from them the employees in the general year of preparation to prepare members of the board of teaching in their training and guide them in the use of the company in teaching.

To promote literature in the field of studies, and to promote

Specialized in Teaching, Teaching and Computing.

Boundaries of study:

It is possible to find out the results of the study on us below:

- Importance of study:

Show the importance of current studies through the following points:

The importance of programming in the development of educational activities, to facilitate practical learning and education in order to communicate the content of teaching activities.

Instructions for conducting research in the field of education at the University of Oregon, and the possibility of employing them in teaching from their point of view, film which conduct any study on this subject within the boundaries of research.

- benefit from them the employees in the general year of preparation to prepare members of the board of teaching in their training and guide them in the use of the company in teaching.

To promote literature in the field of studies, and to promote

Limits of understanding: Identify the terms of study by understanding the conditions of study.

Importance of study:

Show the importance of current studies through the following points:

The importance of programming in the development of educational activities, to facilitate practical learning and education in order to communicate the content of teaching activities.

Instructions for conducting research in the field of education at the University of Oregon, and the possibility of employing them in teaching from their point of view, film which conduct any study on this subject within the boundaries of research.

- benefit from them the employees in the general year of preparation to prepare members of the board of teaching in their training and guide them in the use of the company in teaching.

To promote literature in the field of studies, and to promote

Humanity limits: reduce this study to members of the board of directors at the University of Saudi Arabia.

Limits of its place and time: Economic Studies on the second year of study 1437/1438 H, in Deanship of Academic Development, in Imam Abdulrahman Bin Faisal University in Saudi Arabia kingdom.

Study Approach

The researcher used the descriptive method to identify the degree of knowledge of the teaching staff in in Deanship of Academic Development, in Imam Abdulrahman Bin Faisal

University computer-assisted simulation program and the degree of possibility of using it in teaching from their point of view.

The study population and its sample:

The study population consisted of (320) faculty members in the Deanship of the Preparatory Year at Imam Abdul rahman bin Faisal University, represented by educational and scientific disciplines and computers.

The study sample:

The study sample consisted of (123) faculty members from Imam Abdulrahman bin Faisal University for the academic year 1437/1438 AH, which were selected using a simple random method. Table (1) shows the distribution of the study sample according to the study variables.

Table No. (1). The study sample according to the study variables

Variable	Level	Number	Percentage %
Gender	Male	57	46.3%
	Female	66	53.7%
specialization	Scientific	39	31.7%
	Educational	38	30.9%
	Computer	46	37.4%

study tool

For the purposes of applying the study, the researcher developed a questionnaire consisting of two axes, related to the degree of knowledge of faculty members of the computer-assisted simulation program, which consisted of (14) items, and the degree of the possibility of employing simulation in computer assistance in teaching, which consisted of (9) items. The researcher followed the following steps: In its preparation:

• Review studies, research, sources and references related to the subject of the study, such as the study of Mustafa (2007), the study of Al-Zahrani (2013), and the study of Al-Hayawi and Saleh (2011) in developing the study tool.

• Preparing a list of the items of the questionnaire in the light of the computer-assisted simulation program. According to the five-point Likert scale.

Validity of the study tool

To ensure the validity of the questionnaire, the researcher presented it to nine arbitrators with expertise and specialization in curricula and teaching methods, four arbitrators, two arbitrators in psychology, and two arbitrators in measurement and evaluation, at Imam Abdul Rahman bin Faisal University and other Saudi universities, where the tool was presented to them in its initial form. They were asked to state their opinion in terms of: the extent to which the paragraphs belong to the fields under which they were included, the clarity of the phrases, the accuracy of the linguistic formulation, and the suitability of the tool for the purpose of the study. The arbitrators' observations were used to reach the best formulation of the questionnaire paragraphs. Among these observations, some similar paragraphs were deleted, and some of the three paragraphs were reformulated, and some paragraphs were added to the tool, the number of which was one paragraph. Until the tool appeared in its final form.

Scale correction

A five-step Likert scale was adopted for measurement, where the answer was given very much (five degrees), The answer is great (four marks), the answer is medium (three marks), the answer is low (two marks), and the answer is very little (one mark).

stability of the study tool

In order to verify the stability of the study tool, the Cronbach alpha equation was used to calculate the stability coefficient for all fields of the study tool, which numbered two fields, and the value of stability calculated on the basis of the total score was (0.82).

Statistical processors

The researcher used the following statistical treatments:

To answer the first and second questions, the mean and standard deviations were calculated.

To answer the third question, the mean, standard deviations, and multiple analysis of variance were calculated.

Study results and discussion

It includes a presentation of the statistical results that were reached after analyzing the data of the study tool, and the indications of differences for the study variables were revealed, and the nature of the relationship between the variables was revealed, through answering the study questions.

The results related to the first study question: What is the degree of knowledge of the faculty members in the Deanship of the Preparatory Year at Imam Abdul Rahman bin Faisal University about the computer-assisted simulation program?

In order to answer this question, the researcher extracted the arithmetic means and standard deviations for the fields of the study tool, as shown in the following table:

Table No. (2). The arithmetic means and standard deviations of the study instrument domains are arranged in descending order according to the arithmetic means

number	domain	arithmetic mean	standard deviation
1	Knowledge of faculty members about the computer-assisted simulation program	3.5883	.23047
2	The degree of the possibility of employing computer-assisted simulation in teaching	4.1807	.39487
	The total utility is	3.8845	.27633

It is clear from the previous table that the arithmetic averages for the fields of study ranged from medium to high, where the degree of the possibility of employing computer-assisted simulation in teaching got an arithmetic average of (4.18), while the field of knowledge of the faculty members about the computer-assisted simulation program was He obtained an arithmetic average of (3.588). As for the overall tool, it got a high score with an arithmetic average of (3.88), and this indicates the degree of possibility of employing computer-assisted simulation in teaching by faculty members. It helps them in employing modern technology in the educational field. The researcher also extracted the arithmetic means and standard deviations for the items in the field of faculty members' background on the computer-assisted simulation program. The results of the current study differ with the study of Al-Riyani (2012), whose results indicated that social studies teachers could not employ the simulation program via the Internet in the Sultanate of Oman, and the results indicated that the teachers were interested in developing their skills in using the simulation program via the Internet. While there were no studies.

Table No. (3). Arithmetic means and standard deviations of the faculty members' background field on the computer-assisted simulation program

Number	1. paragraphs	arithmetic mean	standard deviation	level
1	The evolution of the traditional classroom environment into a more realistic one.	4.4634	.91699	high
2	The formulation of the scientific material focuses on information and knowledge more than merging it with pictures and movements.	4.3496	.80961	high
3	The computer-assisted simulation program is concerned with the skill aspects of students' learning.	3.7073	1.08440	high
4	I am interested in developing your skills in preparing, designing and implementing programs by attending training courses.	3.5854	.49467	average
5	I have the desire to employ a computer-assisted simulation program within my specialty.	3.5691	.49723	average
6	I took courses in the computer-assisted simulation program	3.5528	.49923	average
7	Employing a computer-assisted simulation program enhances the student's motivation to learn.	3.4878	.99479	average
8	The computer-assisted simulation program is concerned with the emotional aspects of student learning.	3.4553	.53181	average
9	I have seen a computer aided simulation program in relation to my major.	3.3902	.48980	average

10	I learned about the computer aided simulation program through the Internet	3.3821	.48789	average
11	The computer-assisted simulation program is realistic and verifiable.	3.3659	.48364	average
12	Achieving the desired objectives of the course directed to the students	3.3577	.70281	average
13	I have clear knowledge of computer aided simulation software.	3.2846	.45305	average
14	The computer-assisted simulation program is concerned with the cognitive aspects of student learning.	3.2846	.67168	average

It is clear from the previous table that the arithmetic averages for the items in this field were medium to high, as the paragraph that reads (the development of the traditional classroom environment into a more realistic one) ranked first with the highest arithmetic mean of (4.4634), and a standard deviation of (.91699), The researcher attributes this to the technological tools provided by the Deanship of the Preparatory Year at Imam Abdulrahman bin Faisal University in the university hall, in terms of the presence of a computer, the Internet, comfortable seats, spacious classrooms, and appropriate lighting that drives faculty members to implement the simulation program in a successful way, using modern technology and developing the environment. The classroom from a traditional environment to an environment linked to real reality.

The current study agrees with what the educational literature indicated about its contribution to the development of the traditional classroom environment into an environment linked to the real reality in which one lives, such as the study of Pinter et al, (2012) and the study of Al-Sultam (2005). As for the last place, the paragraph that reads (the computer-assisted simulation program is concerned with the cognitive aspects of student learning) came with an arithmetic mean (3.2846) and a standard deviation (.67168). It is of a medium degree, and the researcher attributes this to the fact that the computer-assisted simulation program mainly aims to provide models that are useful in formulating a realistic process by simulating that model, and training in operations that are difficult to perform in actual situations. Simulation is the process of representing or creating a set of situations, as a representation or imitation of real-life events, in order to facilitate their presentation and

depth. To explore its secrets and get to know its potential results closely. The need for this type of program arises when it is difficult to embody a specific event in reality, due to its cost or its need to perform many complex operations, not just knowledge. The current study agrees with what the educational literature indicated with the study of Al-Rayani (2012) and the study of Al-Zahrani (2013).

The results related to the second study question: What is the degree of possibility of employing computer-assisted simulation in teaching from their point of view? In order to answer this question, the researcher extracted the arithmetic means and standard deviations for the fields of the study tool, as shown in the following table:

Table No. (4). Arithmetic means and standard deviations for the degree of possibility of employing computer-assisted simulation in teaching

Number	paragraphs	arithmetic mean	standard deviation	level
1	The presence of viruses on the devices hinders the implementation of the computer-assisted simulation program.	4.4715	.53294	high
2	The time allotted for the lecture does not help me to employ the computer-assisted simulation program.	4.4228	.52804	high
3	The lack of internet at the university helps me to employ a computer-assisted simulation program.	4.3577	.87899	high
4	The absence of a mechanism that regulates the process of employing computer-assisted simulation software in laboratories.	4.2602	.78758	high
5	. I find it difficult to use the computer-assisted simulation program because it is in English	4.2439	.87161	high
6	Students' weakness in the use of computers impedes the use of a	4.1301	.84891	high

	computer-assisted simulation program.			
7	There is not enough time to prepare a material in which to use the computer-assisted simulation program.	4.1301	.77839	high
8	The degree of possibility of employing computer-assisted simulation in teaching.	4.1807	.39487	high
9	The availability of laboratories and the number of equipment in the university helps me to employ a computer-assisted simulation program.	3.4146	.93148	Average

It is clear from the previous table that the arithmetic averages for the paragraphs of this field were medium to high, as the paragraph that reads (the presence of viruses on devices hinders the implementation of the computer-assisted simulation program) ranked first with the highest arithmetic mean of (4.4715), and a standard deviation (. 53294), and the researcher attributes this to the fact that the presence of viruses on the devices hinders the implementation of the simulation program, because it does not enable faculty members to carry out activities and tasks in the manner and procedures that they have prepared to implement their lectures, which are difficult to study in traditional ways. Laboratories and the number of devices in the university helps me to employ simulation software using a computer) with a mean (3.4146) **and** a standard deviation (.93148). The researcher attributes this to the fact that the implementation of the computer-assisted simulation program requires computers and hardware equipment with special specifications, in order to clearly represent complex phenomena, and requires a great deal of planning and programming to become effective, influential, and similar to natural conditions. Where the Deanship of the Preparatory Year provided laboratories in the Department of Science and Engineering Drawing of equipment and tools in the laboratories that enabled the faculty members to implement the programs successfully. The current study agrees with what the educational literature referred to as the study of Saeed (2009) Which emphasized the importance of using computer simulation in the educational learning process in the field of engineering drawing in developing students' skills to recognize and understand shapes and two- and three-dimensional objects in space. Results related to the third question: Does the degree of knowledge of the faculty members in the Deanship of the Preparatory Year at Imam

Abdulrahman bin Faisal University differ in the computer-assisted simulation program due to gender and specialization?

Table No. (5). The degree of knowledge of faculty members in the Deanship of the Preparatory Year at Imam Abdulrahman Al-Faisal University in the computer-assisted simulation program is attributed to gender and specialization

variable	The statistical	the knowledge of faculty members about the computer-assisted simulation program gender	the degree of the possibility of employing computer-assisted simulation in teaching	the total tool.
	The arithmetic mean	3.6065	4.2710	3.9387
	Issue	57	57	57
	Standard deviation	.22309	.30719	.22291
	The arithmetic mean is	3.5725	4.1027	3.8376
	Issue	66	66	66
	Standard deviation	.23723	.44500	.30934
	The arithmetic mean is	3.5883	4.1807	3.8845
sum		123	123	123
	Standard deviation	.23047	.39487	.27633
Specialization Scientific	arithmetic mean	3.5733	4.1311	3.8522

	Issue	39	39	39
	Standard deviation	.27000	.37016	.28820
Educational	arithmetic average	3.5733	4.0468	3.8100
	Issue	38	38	38
	Standard deviation	.23748	.50067	.33707
	The Issue	38	38	38
computer	Intermediate arithmetic	3.6134	4.3333	3.9733
	Issue	46	46	46
	Standard deviation	.18722	.24456	.17263
	The arithmetic mean sum is	3.5883	4.1807	3.8845
	Issue	123	123	123
	Standard deviation	.23047	.39487	.27633

The previous table shows that there is a discrepancy in the arithmetic averages of the degree of knowledge of the faculty members in the Deanship of the Preparatory Year at Imam Abdulrahman bin Faisal University in the computer-assisted simulation program due to

experience and specialization, and to find out the significance of the differences, a binary variance analysis was performed, as follows:

Table No. (6). Multiple variance analysis of the effect of study variables on the degree of knowledge of faculty members in the Deanship of the Preparatory Year at the University of Dammam in the computer-assisted simulation program attributed to gender and specialization

The degree of possibility of employing computer-assisted simulation in teaching.	-.064	1	.064	.443	.507
Total utility	.032	1	.032	.440	.508
The degree of possibility of employing computer-assisted simulation in teaching.	1,001	2	,500	3,454	,035
Total utility	.458	2	.229	3.178	045
The degree of possibility of employing computer-assisted simulation in teaching.	17,099	118	.145		
The total utility is	8,513	118	.072		
The degree of possibility of employing computer-assisted simulation in teaching.	2168.	815	123		

	The total utility is	1,865	,275	123		
	The degree of possibility of employing computer-assisted simulation in teaching.	19,022	122			
	utility is	9,316	122			
Domain	Variables	Sum of squares	Degree of freedom	Mean of squares	P value	Statistical significance
Gender	The background of the faculty on the computer-assisted simulation program.	.011	1	.011	.211	.647
Specialization	The background of the faculty members on the computer-assisted simulation program	.147	2	.073	1.457	.237
Standard error	The background of the faculty members on the computer-assisted simulation program	5,947	. 118	.050		

The corrected model - The total	The background of the faculty members on the computer assisted simulation program.	6,480	122	
The total	background of the faculty members on the computer-assisted simulation program	1590	.189	123

It is clear from the previous table that there are no statistically significant differences at the level of the degree of knowledge of faculty members in the Deanship of the Preparatory Year at Imam Abdulrahman bin Faisal University in the computer-assisted simulation program due to gender and specialization in each of the fields of study. The researcher may attribute this to the lack of differentiation of faculty members based on academic qualification, despite the fact that some have obtained high qualifications - in addition to the fact that faculty members undergo the same related courses and workshops, which allowed them to develop professionally, and there is usually no division of work. According to the academic qualification, in addition to the availability of the means available for that in the classrooms, so their performance was close and there were no statistically significant differences between them, whether at the level of gender or specialization. The current study agrees with the study of Al-Rayani (2012), which indicated that there were no differences in sex between males and females.

Recommendations

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

- Developing study materials in line with the capabilities provided by simulation programs to facilitate the learning process and improve the level of student achievement.

- Holding training courses for faculty members, training them to use the computer simulation method, and how to activate it in the classroom.

References

Al-Hayawi, Moheb Al-Din, and Saleh, Omar (2011). The effect of modeling (simulating) astronomy on the achievement of second-grade students in the Department of Physics and developing their attitude towards it, Journal of Education and Science, Vol. 18, p. 4,310-332.

Social studies from the point of view of teachers in the Sultanate of Oman. Journal of Education, p. 2 (46).

Al-Dhiabat, Bilal (2018). The extent to which computer simulations are employed in the production of artworks by faculty members at Yarmouk University. Journal of Research in Specific Arts and Sciences. Ps. 9,13-46

Atallah, Mahmoud (2015). The effect of employing computer simulations and presentations on developing the skills of using computer networks among female students of Al-Aqsa University. Unpublished master's thesis, Islamic University, Gaza, Palestine.

Gerarda Warda (2020). The reality of employing the simulated learning method in the subject of technology for the departments of the technical-mathematical section in the secondary school. Unpublished master's thesis, Islamic University, Mohamed Boudiaf University, Algeria.

Al-Rayani, Ahmed (2012). The possibility of employing online simulation programs in teaching social studies from the point of view of teachers in the Sultanate of Oman. Journal of Education, Sultan Qaboos University, p. 2 (46), Sultanate of Oman.

Al-Zahrani, Abdulaziz (2013). The effectiveness of a simulation program in acquiring anatomy skills and reducing learning time in biology for students of the Faculty of Science in Al-Makhwah. Unpublished master's thesis, Al-Baha University, Saudi Arabia.

Saeed, Wael (2009). The degree of effectiveness of a proposed program for teaching based on computer simulations in engineering drawing for the development of spatial intelligence for students majoring in decoration and advertising. P19, p1, educational technology, a series of peer-reviewed research studies

Al-Tabbakh, Hasnaa, and Abdulaziz, Yasser (2011). The effectiveness of using the electronic simulation program in developing database management skills among students of the Education Technology Division in the faculties of specific education. The twelfth annual scientific conference "E-learning technology between present challenges and future prospects".

Soderberg, P., & Price, E. (2003). An examination of problem – based teaching and learning in population genetics and evolution using evolve a computer simulation. International Journal of Science Education, 4 (9), 25 – 55.

Pinter. R., Radosave, D & Cisar, S. (2012) Analyzing the impact of using interactive animations in teaching, Int.J. of Computer, Communications & Control, VII (1), 147 - 162.

Zacharia,C.(2005).The Impact of Interactive Computer Simulations on The Nature and Quality of Postgraduate Science Teachers Explanations in Physics, International Journal of Science Education,27(14):17**41-1767**