



Evaluating the teaching Performance of the Technical Medical Institute in Baghdad according to the Concept of Digital Competence

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ABSTRACT

The current study aimed to identify and evaluate the performance of teachers at the Medical Technical Institute in accordance with the concept of digital competencies, in order to identify the teaching performance at the institute and to identify the standards that must be met by the teaching staff at the Medical Technical Institute and to achieve academic performance in light of the digital transformation and to identify the standards that must be met by teachers, as a random sample of (60) members was tested and used in the study as a study tool. One of the most important results is an impact on the digital competence of the institute's teachers. There is a significant impact of the obstacles that occur on the effectiveness of digital competency, and this is what encourages digital transformation in dealing with software and technical support methods, and one of the most important recommendations.

Keywords: evaluation, performance, teaching, digital competence.



Chapter One: Definition of the Research

Research Problem

The term e-learning appeared after the Corona incident, which started in China and spread to countries around the world. The school year began after the pandemic by using technological technology to deliver information to students using electronic platforms (Al-Shammari and Al-Shafei, 2023). After that, the world turned to e-learning in educational institutions, and thus the need for student education was considered. A number of studies have indicated this (Karim and Othman, 204). Those who follow the educational process notice that e-learning did not appear suddenly, as Al-Shafei and Al-Fatlawi (2017) indicate that our educational institutions have begun using technology in education. Thus, digital technology in education has become one of the most prominent features of current education. Also, the teacher cannot contribute well if he is not qualified for the requirements of education. Therefore, this requires the presence of a creative and capable trainer (Khatawi, 2017)

The importance of the research

Science is a civilizational phenomenon in which scientists have made great efforts to benefit from it in practical and scientific life, as science has become a contributor to the cognitive construction of man, the formation of his mind, and the development of his motivation (Hussein, 2018), as you find that the world is witnessing a clear and rapid development in human and technological knowledge. The need has called for the necessity of taking into account the characteristics and features of development within educational policies (Ertman, 2005) and because education is what determines the elements of success at all levels, which led to the world's awareness of the fact that higher education is very important and also has a prominent role in providing the country with scientific capabilities and academic expertise (Al-Taie, 2019). Universities are among the most important institutions of comprehensive development and within the scope of comprehensive educational policy, which contributes to achieving the goals of the individual and society and ensuring sound development towards the goals that seek to advance society and advance in various tools for achieving social change and achieving security in society (Badran and Salman, 2008). Faculty members face many challenges in the information and technology revolution in all aspects of life and taking The teaching staff should be able to accomplish what is required from the data and modern developments in education (Al-Shafi'i and Al-Ajili, 2020). For this reason, it leads to evaluating performance and giving it great attention, because performance is the most contributing factor in achieving the university's main goal, which is survival and continuity to exploit the capabilities and resources available to all (Al-Rikabi et al., 2020). The process of evaluating the performance of a faculty member is one of the most important processes that contribute to achieving distinction in the outcomes of the educational process (Al-Hakami, 2003). Since the faculty member is the main pillar in building and advancing the university, the teaching staff had to adopt all aspects of success and seek to master it and apply it with the teaching methods or scientific research they possess (Al-



Fatlawi, 2008). The educational and teaching process has witnessed rapid development in light of the rapid development of digital technology. This development has been accompanied by the development of teaching methods, especially after the emergence of the digital revolution, which included all sectors without exception (Khalifa, 2020). Digital competence represents the confident, creative and critical use of technology. Information and Communication A low level of digital competence can leave a university professor at a disadvantage not only in the labor market, where almost all jobs require a certain level of digital competence (atuna@elal, 2017).

Research objective:

The current research aims to identify the evaluation of the performance of the teaching staff of the Technical Medical Institute / Baghdad according to the concept of digital efficiency

Research limits

The research is limited to the teaching staff of the Technical Medical Institute for the academic year 2023-2024

Time limits: This study was applied in the first semester of the academic year 2023-2024

Defining terms

Evaluation

It was defined by both

(Al-Gharawi 2008) as a comprehensive process (issuing a specific judgment in light of which development and improvement are carried out (Al-Gharawi, 2008)

As a process of preparing and planning information that helps in transforming or forming judgments used in making a better decision among multiple alternatives of decisions (Sami, 2009)

Procedural definition

Is issuing a judgment on the level of activities and events included in the performance of teachers

2-Performance

It was defined by:

-(Obeidat, 1995)

The process by which the level of performance of workers is measured and evaluated and the actual achievement rates of workers are known in a specific period of time



(Obeidat, 1995)

-(Al-Laqani, 1999)

What the individual returns from behavior to give a dazzling effect and is based on a specific cognitive and emotional background and this performance is usually at a specific level that shows the ability to do something (Al-Laqani, 1999)

Operational definition of performance: It is the process in light of which the level of performance of the teachers of the Technical Medical Institute / Baghdad is determined to know the extent of their efficiency to accomplish the tasks directed to them in a specific period of time for the first stage of the academic year 2023-2024

Technical Medical Institute: The institute was established in the year

It consists of eleven departments and two branches

3- Digital Competencies

(Degam, 2016)

The ability of the individual to use technology effectively in order to develop literacy skills and enhance his capabilities within the information complex (Degam, 2016)

Shalabi et al., 2018

Education that takes place in a digital environment depends on the use of digital in its various forms in creating the required education, and presenting the content and what it includes of activities, skills and privileges to achieve the desired educational goals (Shalabi et al., 2018)

The operational definition of digital competence: A set of digital knowledge and skills possessed by the instructors of the Baghdad Medical Institute, which appear in their behavior at a certain level of performance characterized by efficiency and effectiveness



Chapter Two: Theoretical Framework and Previous Studies

First: Theoretical Framework

First Axis: Performance Evaluation

The Importance of Evaluation:

The evaluation process is an important process for students, teachers, parents, school administrators or supervisors from many different aspects. For students, we find that evaluation provides them with feedback that helps them clarify the progress they have made or the weaknesses they still suffer from. The evaluation process also clarifies their specific goals, which helps them know what is important for them to learn and develops their ability to think critically and do work that will benefit them in the future. (Saada, and Ibrahim, 2014: 352)

Evaluation Foundations:

Evaluation in this concept is based on a set of foundations and principles, the most important of which are the following:

1-Evaluation is not only a means of judging the effectiveness of the educational process, but it is also a basic plan for the process of educational change and development. Evaluation is the first and most important step in development.

2-Evaluation is a process directly linked to the educational goals that we seek to achieve. Evaluation is the process by which we judge the extent of our success in achieving the educational goals that we seek. Rather, it is the process by which we judge the value of these goals themselves.

3-Evaluation is a process of enhancing the performance of individuals and groups. It develops their motivations for more work and production. Reinforcing positive behavior supports and establishes it, and at the same time leads to correcting incorrect behavior. Therefore, the results of the evaluation must be presented to those who are subject to evaluation, whether they are students, teachers, managers, or curriculum designers.

4-The tools used in evaluation should be diverse, the more diverse the evaluation tools are, the more information we have about the work, phenomenon, situation, behavior, or student we are evaluating. Consequently, our judgments will be accurate and our treatment will be effective.

5-The evaluation process should be honest, stable, and objective. What is meant by honesty is that the evaluation tool measures what it was designed to measure. What is meant by stability is that if the tool is reapplied to the same sample or another equivalent sample, we will get almost the same results.

6-The evaluation process should be economical in terms of effort, time, and cost, as expensive and long tests may take a long time to answer. Thus, they represent a heavy burden on the student, teacher, or school.

7- The evaluation process should take into account the individual differences between students and the different levels of performance between them. A good test is one that reveals the differences between students and the abilities that each of them possesses.



8-It must be emphasized that the evaluation process is a human process. Evaluation is not a punishment for the student or revenge against him, but rather an effective positive process for getting to know oneself and achieving oneself by addressing aspects of deficiency and developing aspects of strength.

(Madkour, 2001: 260)

Characteristics of good evaluation:

Good evaluation is characterized by a set of characteristics that can be summarized as follows:

1- Consistency with objectives:

Evaluation must be consistent with the desired objectives. If one of the objectives of the curriculum is to develop skills in using some educational devices, then the appropriate evaluation method is to use an observation card to evaluate the level of students' performance in the skills related to operating the devices. If one of the objectives is to develop students' attitudes towards preserving the environment, then the appropriate evaluation method is to use a scale that includes situations to identify students' behavior in these situations.

2- Continuity:

The evaluation must be comprehensive, i.e. it covers the aspects related to the phenomenon to be evaluated:

- In the case of evaluating the impact of the curriculum on the student, the evaluation must cover all aspects of physical, mental, spiritual and social development.
- But in the case of evaluating the curriculum, the evaluation must address all elements of the curriculum: objectives, content, teaching methods, learning activities, and evaluation methods.
- In the case of evaluating the teacher's teaching skills, the evaluation must address all teaching skills: planning skills, implementation skills, and evaluation skills.

3- Continuity:

The evaluation must accompany the educational process from beginning to end, in order to help create the appropriate conditions for learning. Since the purpose of evaluation is to identify progress in all aspects of development for the purpose of diagnosis and treatment, this is only achieved when the evaluation is continuous and accompanies the educational process in all its stages and steps, so that the strengths and weaknesses of the phenomenon to be evaluated can be identified, in order to treat the weaknesses and support the strengths.

4- Cooperation:

Students, teachers, and all those concerned with educational work must participate in the evaluation process. This does not mean that they should participate in developing



and designing tests, but rather in participating with constructive criticism and proposing appropriate solutions to evaluation problems in the areas to be evaluated.

5- Economy:

It is preferable for the evaluation to be economical, i.e. it helps to save expenses in time, effort and money. The disadvantages of traditional exams are that they take a long time in most cases, and a lot of effort, and huge expenses, especially public exams, such as the high school exam.

6- Scientific criteria:

It is necessary for the evaluation to have scientific criteria, which are the criteria of honesty, reliability, objectivity, discrimination and accuracy of formulation.

- Honesty means: that the test measures what it was designed to measure.
 - As for reliability: it is that the test gives almost the same results, if it is reapplied to the same students and under the same conditions.

- Objectivity: the test results are not affected by subjective factors from one evaluator to another, nor with the same person from time to time, and objective tests are characterized:

such as true and false, completion, multiple choice and interview (pairing) by being highly objective.

- As for discrimination: it is the ability of the test to distinguish between strong students and weak students. A test that students cannot answer is a non-discriminating test.

- Taking into account the rules for constructing objective questions (true or false - completion - multiple choice - interview or pairing) as well as essay questions.

7- Diversity:

Diversity means using more than one evaluation tool, so that these tools complement each other and ultimately give a true picture of the phenomenon to be evaluated.

(Al-Laqani, 2013: 123)

Second axis: Digital competence

Digital competence is one of the latest concepts that describe skills related to technology, as digital competence represents a new idea within the field of educational technology, containing creativity and production within new units that can be used in many educational situations through what it provides of new applications in the field of information technology (Adeyemon, 2009: 85)

It is necessary to clarify the concept of digital competence, which means that the digital future will apply modern technologies intensively only if individuals are able to deeply and clearly understand all alternatives and aspects of digital technology, i.e. develop a strong critical position (Warnick, 2001: 22)

In view of the technological development, the digital revolution and the fourth



industrial revolution, it has become necessary for educational institutions to keep pace with the rapid development with what it contains new, with the aim of enabling teachers to acquire the skills required by their new roles in the field of technology and employ them in teaching methods, and from here the concept of digital competence in education emerged.

(Almas & Krumsvik, 2007) define digital competence as the ability of teachers to employ technology and integrate it with educational content in a manner consistent with teaching and learning strategies (Almas & Krumsvik, 2007: 97)

Digem (2016) defines digital competence as the ability of an individual to use digital technology effectively in order to develop life skills and enhance his capabilities within the information society. (Digem, 2016: 8)

(Hershkovitz, 2021) defines digital competence as the safe, critical and responsible use of digital technologies and interaction with them in order to learn, work and participate in society (Hershkovitz, 2021: 22)

The researcher defines digital competence theoretically as: the ability to deal with information and communication technology easily, smoothly, efficiently and effectively, and to benefit from it to the maximum extent possible in the teaching and learning process, by providing digital tools to individuals, and giving them freedom and responsibility through training, in dealing with them within the safe limits of technology.

Digital competence areas

According to the European Digital Competency Framework classification, digital competence consists of five areas, they are:

- Information literacy (information and data): It means clarifying the information needs to identify and retrieve data, information and digital content to judge the relevance of the source and its content to store, manage and organize data, information and digital content.
- Communication and collaboration: It means communicating, cooperating and interacting through digital technologies with
- Awareness of cultural diversity to participate in society through public and private digital services.
- Digital content creation: It means creating and editing digital content to improve and integrate information and content into an existing body of knowledge with an understanding of how to apply copyright and licenses. And to know how to give understandable instructions to the computer system
- Safety and information security: This means protecting devices, content, personal data and privacy in digital environments, and awareness of digital



technologies for social welfare and social integration. Being aware of the environmental impact of digital technologies and their uses.

- Solving technological problems: This means identifying needs and problems and solving problems in digital environments and using digital tools (Calvani &etal, 2012:45)

Digital Competence Objectives

The objectives of digital competence can be highlighted as follows:

- Enhancing the competitiveness of educational institutions through digital competence to keep pace with technical development in information and communication technology (digital revolution).
- Providing learners with information literacy skills and knowledge, lifelong learning, and training them in line with the needs of modern society, and acquiring the features and characteristics of the information age
- Making learners more aware and motivated for digital competence.
- Meeting the expectations of the information society through the optimal use of digital technologies.
- Supporting the infrastructure of higher education institutions to use technology and digital technologies.(Parker. A & etal,2018:76)

Second: Previous studies

Study (Dawood, 2022) Evaluating the performance of kindergarten teachers in scientific experiences in light of quality standards

"There is no doubt that scientific development in the field of science has had a prominent impact on human life throughout scientific history. This development has resulted in many scientific and technological discoveries and inventions that have saved human effort and time. The current research sample consisted of (120) teachers from government kindergartens affiliated with the Baghdad Directorate (Rusafa I, Rusafa II, Rusafa III) and is part of a community of (1037) distributed over (96) kindergartens. The researcher formulated the research objective as follows (Evaluating the performance of kindergarten teachers in light of quality standards.) To achieve the research objective, the researcher built a scale (Performance Evaluation) based on the National Standards for Science Education (1989) and reviewing previous theories and studies. The scale was prepared in its initial form, and the researcher verified the validity of the scale using the (apparent validity) method by presenting the scale to experts and arbitrators, who are Their number is (15) experts and the



indicators of construct validity were verified by analyzing the scale paragraphs and calculating the discriminating power and correlation coefficient between the criteria. The overall stability of the scale appeared to be (0.93) by the Cronbach's alpha equation. As for the stability of each scale, the stability of each of (the science criterion as a method of derivation was (0.67)), while the biological sciences criterion reached (5.65), while the (history and nature of science) criterion reached (0.70), and the (physical sciences) criterion reached (0.76), and the (earth and space science) criterion reached (0.77), while the (science from theorists) criterion reached (0.79). After processing the data statistically using the t-test for one sample, Pearson's correlation coefficient and the arithmetic mean, the results showed that the level of evaluating the performance of kindergarten teachers in scientific experiences in light of quality standards is high according to the average relative importance and according to the approved criterion. The current research recommended:

1- Applying the national standards for teaching science in other educational stages. 2- Paying attention and focusing on including the national standards in teaching science within the curriculum for kindergarten students. The most important thing that the research suggests is:

- 1- Evaluating the performance of teachers in other educational stages according to quality standards.
- 2- Factors that negatively and positively affect the teaching of science in kindergartens.

Study (Past, 2010): Evaluating the performance of science teaching methods teachers in teacher training institutes in light of their educational competencies

"The importance of the current research stems from the importance of the science subject and how to prepare scientific cadres capable of keeping pace with the changes of the era and interacting with these changes. The research aims to evaluate the performance of science teaching methods teachers in teacher training institutes in light of their educational competencies. In order to achieve the research objectives, the researcher prepared a questionnaire consisting of (60) competencies distributed over (5) fields. After presenting the list of competencies to a group of specialists and experts in science curricula, teaching methods, measurement and evaluation, some modifications and deletions were made and the educational competencies in their final form became (50) competencies. The researcher used statistical methods in this, including: Pearson's correlation coefficient to calculate the stability of the tool. The weighted mean to calculate the severity of the paragraph. The percentage weight to indicate the value of each paragraph of the tool. After reaching the results, a set of connections and proposals were developed, including: introducing teachers with a bachelor's degree in courses Continuous qualification in teaching methods.



Chapter Three: Research Procedures

This chapter includes a description of the research methodology, its community and samples, in addition to the research tools used and their psychometric characteristics. It also includes a presentation of the statistical methods used in the research procedures.

First: Research Methodology

To achieve the objectives of the current research, the researcher relied on the descriptive method due to its compatibility with the study procedures and objectives, as the descriptive method is one of the most common and used methods in the humanities.

Second: Research Community

The research community includes all teachers of the Technical Medical Institute / Baghdad for the academic year 2023-2024.

Third: Research Sample:

A stratified random sample of (60) male and female teachers was drawn according to a set of the following demographic variables:

1-Demographic variables by gender

Table (1) Demographic variables by gender:

Variables	N	%
Gender		
Male	30	50
Female	30	50
Total	60	100

2-Demographic variables according to academic qualification

Table (2) Demographic variables according to academic qualification:

Variables	N	%
Qualification		



Teacher Dr.	30	48%
Assistant professor	15	26%
Professor	15	26%
Total	60	100%

3. Demographic variables of the sample according to work experience

Table (3) Demographic variables according to work experience:

Variables	N	%
Occupational experience		
Less than 5 years	15	25%
5-10	15	25%
10 year or more	30	50%
Total	60	100%

Third: Research tool

1- Building the questionnaire

After the researcher reviewed a group of previous studies related to the study problem, reviewed a group of questionnaires for previous studies, and surveyed the opinion of a sample of experts and specialists through an informal personal interview, the questionnaire was built according to the following steps:

1-Formulating paragraphs to measure the evaluation of teaching performance at the Technical Medical Institute / Baghdad

2-Presentation of the questionnaire to a group of experts and specialists to show the validity of the questionnaire in its apparent form.

After taking into account the comments of the honorable arbitrators and their amendments, the questionnaire became composed of:

First: Demographic variables (gender, academic qualification, years of experience)

Second: Research variables related to evaluating the performance of the teaching staff at the Technical Medical Institute / Baghdad. The number of paragraphs reached (30) paragraphs, and in front of each paragraph there are four alternatives (very large, large, medium, small) and are given grades (4, 3, 2, 1).



2. Experiment of clarity of paragraphs and instructions

In order to identify the clarity of paragraphs and instructions, the researcher applied the questionnaire to a sample of (10) individuals outside the sample of statistical analysis and final application as shown in the following table:

Table (4) Experiment of clarity of paragraphs and instructions

Variable	Sample
Male	5
Female	5
Total	10

It became clear from the sample's answers and the questions on the paragraphs that the instructions were clear as well as the paragraphs and that the average time required to answer the paragraphs was (8) minutes.

3. Psychometric characteristics of the questionnaire

First: Apparent validity

The researcher presented the questionnaire paragraphs to a group of experts and arbitrators to state their opinion on the validity of the paragraphs in their apparent form. The researcher adopted the criterion (80%) of the experts as a criterion for the paragraph to remain, and on this basis, no paragraph was dropped. The researcher also took into account the comments of the experts and arbitrators and modified the questionnaire in light of it.

Second: Stability

Stability was calculated in more than one way as follows:

1- Test – Retest method:

Stability calculation according to this method, which is called the stability coefficient over time, is required. This is done by reapplying the questionnaire to the same stability sample with a specified time difference. Therefore, the questionnaire was applied a second time to the same stability sample of (10) individuals after (15) days. After completing the two applications, the questionnaire stability coefficient was calculated by calculating the scores of this sample with its scores in the first application. The "Pearson" correlation coefficient was used between the scores of the two applications, and the correlation coefficient was (0.81), which is a good stability



coefficient.

2- Cronbach's Alpha method (Alpha Cronbach, 1951):

To extract stability in this way, the researcher applied the (Cronbach's Alpha) equation to the scores of the sample members, numbering (10) individuals, and the value of the scale's stability coefficient was (0.85), which is an additional indicator that the questionnaire's stability coefficient is good.

Chapter Four: Research Results, Conclusions and Recommendations

First: Research Results

Through this chapter, we will discuss the overall descriptive and hypothetical results related to the study variables. We will also discuss the verification of the three hypotheses related to the demographic variables of the research sample, in addition to coming up with a set of recommendations and proposals as follows:

Descriptive statistics to evaluate the performance of the students of the Technical Medical Institute in Baghdad.

To achieve this goal, the researcher applied the questionnaire to the research sample consisting of (30) paragraphs. After processing the data statistically, it was found that the arithmetic mean of the sample members' scores was (74.32) with a standard deviation of (21.37). When comparing the arithmetic mean with the theoretical mean * of the questionnaire of (60), and after testing the significance of the difference between the two averages using the T-test equation for one sample, it was found that the calculated T-value (12.465) is greater than the tabular T-value (1.96) at a significance level of (0.05) and a degree of freedom of (59) and in favor of the arithmetic mean, which indicates that the level of evaluation of the performance of the teaching staff at the Technical Medical Institute in Baghdad according to digital competence was at a high level, as shown in Table (5).

Table (5) T-test results to reveal the significance of the difference between the theoretical mean and the arithmetic mean of the scores of the research sample members on the evaluation of the performance of the teaching staff at the Technical Medical Institute in Baghdad according to digital competence.

No.of sample subjects	Arithmetic mean	Standard deviation	Theoretical mean	Accounted T- value	Tabular T - value	Function
60	47.32	21.37	60	12.465	1 96	Functional

This result can be interpreted as a natural indicator because the general trend of the ministry for years has been to develop technical and digital work in university work at the level of teaching and the performance of scientific conferences and cultural



seminars. Therefore, we find that the level of evaluation of the performance of instructors came at a high level.

Second: Verification of the hypotheses

Main hypothesis

There are statistically significant differences at the significance level ($0.05 \geq \alpha$) in the evaluation of the performance of the teaching staff at the Technical Medical Institute / Baghdad according to digital competence attributed to (gender, age, academic qualification, work experience)?

To answer this hypothesis, arithmetic means, standard deviations, and the One Way Anova test were used, as follows:

1. Gender:

Table (6) Arithmetic means and standard deviations for evaluating the performance of the teaching staff at the Technical Medical Institute in Baghdad attributed to (gender)

Variable	Categories	Arithmetic mean	Standard deviation
Gender	Males	2.946	.713
	Females	2.925	.757

Table (6) shows an apparent variance in the arithmetic means and standard deviations of the differences with statistical significance at the significance level ($0.05 \geq \alpha$) in evaluating the teaching performance of the Technical Medical Institute / Baghdad attributed to (gender) due to the difference in the categories of gender variables (males, females). To show the significance of the statistical differences and the essence of these differences between the arithmetic means, the one-way analysis of variance and Table (7) were used.



Table (7) Results of the analysis of variance (One way Anova) for the differences in the answers of the study sample attributed to

Variable	Variance source	Sum of squares	Freedom degree	Mean squares	Calculate d F value	Tabular F value	Significance level
Gender	Among groups	5.746	1	5.74	12.69	3,92	.001
	Within groups	237.10	58	.476			
	Total variance	242.85	59				

The results in Table (7) show that the calculated F value is (12.069) and its tabular value is (3.92). By comparing them, it becomes clear that the calculated F value is greater than the tabular value. According to the decision rule, if the calculated F is greater than the tabular F, this means that “there are statistically significant differences at the significance level ($0.05 \geq \alpha$) in the evaluation of the teaching performance of the Technical Medical Institute in Baghdad attributed to (gender)” and it is in favor of males, and this is confirmed by the significance level (0.001), which is less than 0.05.

2. Academic qualification

Table (8) Arithmetic averages and standard deviations for evaluating the teaching performance of the Technical Medical Institute in Baghdad attributed to (academic qualification)

Variable	Grades	Aritimitic mean	Standard deviation
Scientific qualification	Teacher	2.913	.769
	Assistant professor	2.971	.787
	Professor	2.932	.771

Table (8) shows an apparent variance in the arithmetic means and standard deviations of the differences in the evaluation of the teaching performance of the Technical Medical Institute in Baghdad attributed to (academic qualification) due to the difference in the categories of the academic qualification variables (teacher, assistant



professor, professor). To show the significance of the statistical differences and the essence of these differences between the arithmetic means, one-way ANOVA was used and Table (9)

Table (9) Results of the One-way ANOVA for the differences in the answers of the study sample attributed to the academic qualification

Variable	Variance source	Sum of squares	Freedom degree	Mean squares	Calculate d F value	Tabular F value	Significance level
Gender	Among groups	.057	2	.029	4.059	3,93	.003
	Within groups	242.79	57	.489			
	Total variance	242.85	58				

The results in Table (9) show that the calculated F value is (4.059) and its tabular value is (3.92). Comparing them, it becomes clear that the calculated F value is greater than the tabular value. According to the decision rule that states that if the calculated F is greater than the tabular F, this means "There are statistically significant differences at the significance level ($0.05 \geq \alpha$) in evaluating the teaching performance of the Technical Medical Institute in Baghdad attributed to (academic qualification)," which is confirmed by the significance level (.003), which is less than 0.05. To determine the source of these differences, the Scheffe Test was used.

Table (10) Scheffe Test results for differences in answers attributed to the educational stage

Grades	Teacher	Assistant professor	Professor	Artgemitic mean
Teacher	—	0.49	0,69	3.919
Assistant professor		—	0,45	3.974
Professor			—	3.942

Table (10) shows that there are differences between the results, as the differences tend to favor the category (professor).



3. Years of work experience

Table (11) Arithmetic means and standard deviations for evaluating the teaching performance of the Technical Medical Institute in Baghdad attributed to (years of work experience)

Variable	Grades	Arithmetic mean	Standard deviation
Experience years	Less than 5 years	2.917	.694
	From five – less than ten years	2.958	.723
	10 years or more	2.962	.775

Table (11) shows an apparent variance in the arithmetic means and standard deviations of the differences in the evaluation of the teaching performance of the Technical Medical Institute in Baghdad according to the variable of years of experience (less than 5 years - 5 years - less than 10 years - 10 years or more).

To show the significance of the statistical differences and the essence of these differences between the arithmetic means, the one-way analysis of variance and Table No. (12) were used.

Table (12) Results of the analysis of variance (One way Anova) for the differences in the answers of the study sample attributed to years of work experience

Variable	Variance source	Sum of squares	Freedom degree	Mean squares	Calculate d F value	Tabular F value	Significance level
Gender	Among groups	.762	2	.381	4.487	3.92	.002
	Within groups	242.08	58	.487			
	Total variance	242.85	59				



The results in Table (12) show that the calculated F value is (4.782) and its tabular value is (3.92). Comparing them, it becomes clear that the calculated F value is greater than the tabular value. According to the decision rule that states that if the calculated F is greater than the tabular F, this means that "there are statistically significant differences at the significance level ($0.05 \geq \alpha$) in the evaluation of the teaching performance of the Technical Medical Institute in Baghdad attributed to (years of experience). This is confirmed by the significance level (.002), which is less than 0.05. To determine the source of these differences, the Scheffe Test was used.

Table (13) Scheffe Test results for differences in answers attributed to years of work experience

Grades	Less than 5 years	From 5 years – less than 10 years	10 years or more	Arithmetic mean
Less than 5 years	–	0.37	0.59	2.917
From 5 years — less than 10 years		—	0.45	2.958
10 years or more			—	2.962

Table (13) shows that there are differences between the results, as the differences tend to favor the category of 10 years and above.

Chapter Five - Conclusions - Recommendations - Suggestions

Conclusions

- 1-There is a high level of performance in evaluating the performance of instructors at the Technical Medical Institute in Baghdad according to digital efficiency.
- 2-There are statistically significant differences in the level of evaluation of the performance of instructors at the Technical Medical Institute in Baghdad according to gender and in favor of males
- 3-There are statistically significant differences in the level of evaluation of the performance of instructors at the Technical Medical Institute in Baghdad according to academic qualification and in favor of the category (professor)
- 4-There are statistically significant differences in the level of evaluation of the performance of instructors at the Technical Medical Institute in Baghdad according to years of experience and in favor of the category (10 years and above)



Recommendations

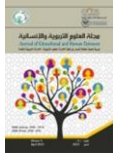
- 1-Developing the skills of the Technical Medical Institute's teachers periodically and continuously in terms of digital competence skills in order to ensure the development of the teaching reality in the institute
- 2-Seeking to provide the necessary material capabilities to ensure the success of teaching based on digital competence

Suggestions

- 1-Holding scientific seminars that shed light on the importance of digital competence in teaching work in technical medical institutes in Iraq.
- 2-Directing researchers to conduct more scientific research and studies related to the problems of evaluating teaching performance for medical institutes

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Appendices

The final search tool

Questionnaire paragraphs

- 1- Possesses the ability to retrieve information and digital data to know special methods for organizing data
- 2- Analyzes students' data using Excel
- 3- Ability to compose digital data
- 4- Possesses a skill in search engines
- 5- Possesses sufficient knowledge of educational sites available on the Internet
- 6- Uses various technological methods to educate students
- 7- Publishes his lectures via YouTube
- 8- Provides educational material in Word and PowerPoint formats
- 9- Provides educational material in a manner that suits the student's abilities
- 10- Directs students on how to use the university email
- 11- Directs students to electronic educational sites
- 12- Encourages students to conduct scientific research
- 13- Uses restricted privileges in teaching
- 14- Divides digital content into axes
- 15- The digital content includes examples that help students understand
- 16- Includes Digital content stimulates scientific thinking in the student
- 17- Digital content includes (audio, image, video)
- 18- Helps students find solutions to learn information



- 19- Works to practice the values of responsible use of information technology
- 20- Directs students to use strong passwords
- 21- Directs students on how to use digital technologies in an ethical manner
- 22- Is able to solve problems they face while using digital technologies
- 23- Includes the use of file protection from viruses
- 24- Warns students against downloading programs from unknown sources
- 25- Includes computer skills
- 26- Uses modern teaching methods
- 27- Helps students solve problems
- 28- Encourages students to exchange ideas to solve the technical problems they face
- 29- Employs digital programs that help display digital content
- 30- Employs digital devices and platforms to exchange experiences with students