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# **Research Article**

# The actuality of utilizing web quests strategy in the educational process by faculty members at Mutah University

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#### **ARTICLE INFO** ABSTRACT The study aimed to identify the actuality of the use of the strategy of modern knowledge means via the internet in the educational process by the faculty members at Mutah University. The faculty members at Mutah University were chosen randomly. The results of the study showed that the reality of using the strategy of modern knowledge means via the internet in the educational process by faculty members at Mutah University came at an average level, and the obstacles facing faculty members at Mutah University came in using the strategy of knowledge means at an average level, and the results showed that there are differences Statistically significant in the reality of the faculty members' use of the strategy of modern knowledge means via the internet in the educational process due to the effect of a variable (years of teaching experience) and in favor of the experience category (less than 5 years), due to the effect of a variable (the educational qualification) and in favor of the scientific faculties, while there was no statistically significant differences due to the impact of the gender variable, and the study recommended the necessity of modifying the curricula of the courses to conform to their application using modern knowledge means, and dissolving all obstacles with knowledge trips, in terms of providing Internet laboratories in universities and colleges and in proportion to the number of students and courses.

Keywords: Actuality, Web, Strategy, Web quests, Faculty members

# Introduction

Recently, communities have witnessed multiple revolutions in all aspects of life, particularly in the educational process, which resulted in many changes aimed at development and progress, which changed the traditional view of education and the search for ways to develop them in order to comply with the requirements of the age that call for the knowledge economy, posing a significant challenge for educational institutions. In order to prepare its curricula and teaching methods in accordance with the preparation of the learner who is capable of adapting to these developments by providing him with the appropriate facts and information based on his age and cognitive maturity, taking care of his skills and developing them to obtain knowledge for himself, and providing him with scientific thinking skills to face problems and solve them on his own, as well as developing his attitudes and thus exercising his role

The tremendous progress in the field of the Internet and data, information, and communication technology is one of the most important things that the current era is witnessing; it is characterized by rapid and successive developments, which made technical and informational progress one of its most important features; as a result, its use in the educational process has become an important and necessary requirement, which educational institutions seek to achieve, in proportion Obtaining knowledge to solve problems in his life through the use of the computer, its networks, its various media, and various modern modes of communication (Hamadneh & Al-Qutaish, 2015).

In this regard, a new educational trend has emerged that calls for taking advantage of the information technology revolution to increase teacher productivity, student learning ability, and life participation with other students. Which it provides by allowing them to control texts and drawings, as well as motivating,

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arousing their interest, improving their behavior, and instilling positive attitudes toward modern knowledge means (Alfar, 2011). The modern knowledge strategy was developed in 1995 by researchers at the Department of Educational Technology at the University of San Diego in California, USA, the most important of whom are Bernie Dodge and Tom March (Al-Wasimi, 2013). Based on modern knowledge as an inquiry-oriented activity in which learners are given a task that requires Internet access (AlSayed, AbdelHaq, Eideeb & Ali, 2016). Knowledge trips across the web are defined as a technological activity that is based on investigation in all or most of it, so that students can work in collaborative environments, or as a group system to know the information related to the units of study and are learned through the use of the learners themselves; To try to complete the educational task, and thus learners take direct responsibility for their own learning (Lara & reparz, 2007). Jadallah (2006) defined it as educational activities based on inquiry and research that aid in the development of learners' abilities to use previously selected electronic tools available on the web that can be supplemented with other sources such as magazines, books, CDs, which he (Al Naqa, 2016) defines as an educational tool. Its goal is to use the web and its various resources in the educational process; to help learners acquire knowledge and critical thinking skills in a new way that can be applied in various academic stages and disciplines. Since the diversity of teaching contributes to meeting the multiplicity and difference in students' learning styles within a single classroom, it is possible to benefit from the diversity of levels of the web quests strategy in contrast to the different teaching methods, as Dodge divides the web quests strategy into two types or levels, namely: (Short-term Web Quest strategy and Long-term Web Quest (Lamb, 2004), where some students may benefit from the Short-term Web Quest strategy (Al Nabhani, 2011).

The internet is one of the means that contribute to the development of the teaching and learning process by providing services such as Internet sites and electronic libraries that facilitate the educational process, aid in its continuous development and renewal and focus and guide and guide the learner) Al-Mallah, 2010). Thus, the web quests teaching strategy is an effective tool for improving the educational process because it meets the needs of learners, increases their motivation to learn, makes the learning process exciting and enjoyable, and assists them in developing higher mental skills such as critical thinking, creativity, and problem-solving. In addition to its contribution to improving their social and technological skills, and providing non-traditional learning environments that are flexible, fun, and exciting, the study came to search for the actuality of faculty members at Mutah University using the strategy of modern knowledge means via the web in the educational process.

#### Study problem

With the closure of universities and schools in most countries around the world as a result of the Corona epidemic widespread, many universities, whether governmental or private, have accelerated many strategies to deliver knowledge and information to their students through education using technology and so-called e-learning in various ways and means, as the epidemic has recovered. In comparison to face-to-face education, e-learning has not been abandoned in its various methods and strategies, as well as the provision of educational materials through it, because the era of electronics, information networks, and the Internet has a significant role for the lecturer in preparing a qualified educated student trained in the skills of using it, self-learning, research and investigation, and how to deal with available information, selecting and organizing it. This contributes to the holistic development of his personality, as well as the development of his self-confidence, and makes him active in society, and capable of dealing with societal problems.

web quests strategy, as one of the most important methods and strategies of e-learning, assisted faculty members in following up with their students, completing the educational process with them, and increasing their knowledge of the educational material. The lecturer prepares them so that the learner can obtain information through his Internet interaction. The lecturer must complete the following steps in this strategy: introduction, tasks and processes, sources, evaluation, and conclusion. It relies on Internet searches on its various websites related to the tasks assigned to the learner and specified by the lecturer to get the information with the least amount of effort and time (Ambosaidi & Al-Balooshi, 2009).

The role of the lecturer differed from traditional education in the light of e-learning, and evaluating and knowing the reality of using e-learning tools, methods, and strategies is one of the most important factors that help its success, especially by lecturers, as there have been recent attempts to apply e-learning in the field of education in the educational process, but there were no attempts to evaluate and know the reality of those experiences through the strategy of modern knowledge means across the web from the point of view of the faculty members, and the obstacles they face.

As a result, the study's problem is to determine the actuality of faculty members at Mutah University's use of the strategy of modern knowledge means via the internet in the educational process by answering the following questions.

#### **Study questions**

<sup>-</sup> What is the actuality of using the strategy of modern knowledge means via the internet in the educational process by faculty members at Mutah University?

- What are the obstacles that face faculty members at Mutah University, Jordan in using the strategy of modern knowledge means from their point of view?
- Does the actuality of using the strategy of modern knowledge means via the internet in the educational process by faculty members at Mutah University differ according to (gender, experience, and college)?

# Study objectives

The study aims to achieve the following objectives:

- ✓ Revealing the actuality of using the strategy of modern knowledge means via the internet in the educational process by the faculty members at Mutah University.
- ✓ Identifying the obstacles facing faculty members at Mutah University, Jordan in using the modern knowledge strategy from their point of view.

## **Study significance**

This study is characterized by the fact that it investigates an important topic that is employed in the educational process, by studying the actuality of using the strategy of modern knowledge means via the internet in the educational process by faculty members at Mutah University. It is hoped that this study will be able to achieve its desired goals and that it will be able to:

- Highlighting the importance of education through the strategy of modern knowledge means through the internet in the educational process because of its great importance in facilitating the educational process as it is one of the modern strategies in teaching.
- Understanding the actuality of using the strategy of modern knowledge means via the internet by faculty members at Mutah University and the obstacles they face from their point of view.
- The importance of this study also lies in the fact that it is one of the few studies conducted in Jordan according to the researcher's knowledge in the field of research on the actuality of using the strategy of modern knowledge means via the internet in the educational process by faculty members at Mutah University, which may enrich the educational literature related to by e-learning
- Understanding the actuality of using modern knowledge means strategy according to (gender, experience, and college) for faculty members at Mutah University..

# **Study limitations**

**Spatial limits**: This study was applied at Mutah University, located in the southern region of the Hashemite Kingdom of Jordan.

Time limits: This field study was conducted during the academic year 2021-2022.

**Human limits**: members of the teaching staff at Mutah University, located in the southern region of the Hashemite Kingdom of Jordan.

**Objective limits**: The study dealt with the actuality of using the strategy of modern knowledge means via the internet in the educational process by faculty members at Mutah University.

# **Study Terminology:**

**Modern knowledge through the internet:** a strategy based on many targeted and investigative-oriented educational activities. This strategy is based on searches on many different sites that are directly related to the tasks assigned by the teacher to learners and available on the Internet, With the aim of correct and direct access to the required information with minimal effort and time.

**Faculty members:** they are the faculty members who lecture students through the strategy of modern knowledge in e-learning at Mutah University in the south of the Hashemite Kingdom of Jordan.

# **Theoretical framework:**

Our current era is characterized by many developments and challenges, as it is the era of technology and the information revolution, and this era with its characteristics requires the preparation of individuals who possess basic skills to adapt to its data and the latest developments in these areas and the rapid developments in its fields. This was reflected in the choice of teaching methods as a means of transferring experiences to students, so it has become inevitable to rely on modern technologies as a means to keep pace with educational needs and achieve educational benefits in an interesting way, with less time and effort.

Based on that, it was necessary to find a modern pedagogical method that envisages the use of technologybased strategies and tools in the educational process. It also increases their positive participation with students and others, which is known as Web Quest, which has been shown to increase students' enthusiasm and performance as a result of the interaction they provide through the ability to control texts and graphics, in addition to motivating them, arousing their interest, improving their behavior and creating trends. Positive Towards modern knowledge (Alfar, 2011).

# Modern knowledge

It is defined as an inquiry-based activity in which learners use web-based tools and resources to make learning more real and meaningful (Dodge, 1995), and Zheng et al. (2008) emphasize this as an inquiry-based approach to the web. On the one hand, the spider web has piqued the interest of educators and those interested in its study, as well as its widespread integration with curricula and higher education; on the other hand, it is a logical and easy way to navigate and expand knowledge on the Internet to deepen students' understanding and expand their thinking about the topics that can be searched (Schweizer & Kossow, 2007). According to Dodge (2002), it is a flexible strategy that can be used in all subjects, specializations, and levels of study.

While Al-Tewari (2012: 13) defines them as planned, purposeful educational activities that rely on the use of technology in teaching and help learners to build knowledge in and of themselves, activities may include searches on the Internet in addition to magazines and CDs in order to access information with the least amount of effort and time.

According to Hamadna and Al-Qutaish (2015), it is an educational activity based on the Internet that revolves around solving a real problem based on the student's interests, in which students use thinking skills to reach solutions that help them solve the problem based on multiple electronic sources, and the teacher's role is planned, organized, directed, and designed for the learning environment Online menu.

# Importance of modern knowledge

Modern knowledge allows active and effective learning for the reasons that have been sought, as it revolves around the learner who spends time searching for information and that is claimed for its stability and stability, through the learner going through several steps to obtain information, where he passes through stages of which he acquires skills, some of which gain information and He searches and learns research skills, reads, analyses, and summarizes. We also have a wonderful goal, which is to use the Internet in a positive way that is reflected in his practices and daily access to his mobile device, according to Qitet (2012). It allows the use of various skills, the most important of which are higher-order thinking skills in building and collecting knowledge, and gives learners the ability and ability to search for specific points in a thoughtful and deep manner, through website sources that the teacher has selected and prepared in advance, which helps to save effort and time and not distract learners.and focus their efforts in the direction required for the activity they are performing. The web quests strategy through the web is also dependent on the use of modern teaching methods based on the use of technology, so that the student becomes the focus of the educational learning process, as well as the focus of educational activity, resulting in more active, effective, and accurate learning than traditional education based on information preservation and retrieval.

# Educational strategies based on modern knowledge

Modern knowledge is not limited to making the educational classroom environment centered solely on the student, but also to creating learning activities through elements of motivation and the type of questions that stem from the reality of the students' environment, so they build their knowledge from real sources found on the Internet, as the student chooses information It builds and builds on it. Furthermore, it connects the learner to reality by transcending

Working within a team and acquiring assessment skills, taking responsibility, and decision-making expands the boundaries between educational materials and their benefits beyond academic and social benefits alone. As a result, we conclude that the modern knowledge strategy is related to several other strategies mentioned by Samara (2013), including its reliance on inquiry and constructivist theory.

- Its reliance on group learning.
- Reliance on critical and analytical thinking abilities.
- Realization of the multiple intelligences theory.
- Make use of multimedia.
- Reliance on the perpetual calendar
- Incorporating the Internet into the classroom.

# **Obstacles to applying Web Quest strategy**

El-Far (2011) mentions some of the obstacles that face the Quest web application in the classroom, including:

- Its application is not suitable for students of the lower primary stage, due to their poor possession of Internet search skills and their poor reading ability.

- The Web Quest strategy is not suitable for all subjects in subjects.

Some teachers take time designing a web quest.

Internet connection interruption or weakness, or power outage.

The lack of sufficient computers in the school for teachers to implement a number of Web Quests in several classes simultaneously.

# Literature review

**Al-Zahrani study (2021).** This study sought to determine the impact of web quests strategy on the development of computer skills in first-year secondary students in Al-Makhwah Governorate. The educational content was delivered to them via the web quests strategy, while the control group included (25) students who were delivered educational content via the traditional method. There were statistically significant differences at the level (0.05) between the mean scores of the two groups in the achievement test and observation card post-measurement in favor of the experimental group. The effect size for the knowledge test (0.044) and the observation card (0.044) (0.41). Based on the previous findings, the study recommended focusing on activating the use of web quests strategy and developing building skills to develop secondary school students' knowledge and skill aspects.

**The Al-mawlai and Al-Kaf study (2020)** tried to seek to validate the efficacy of the web quests strategy in developing critical thinking skills in literary texts, as well as the persistence of the impact of their learning among eleventh-grade students. To accomplish this, the two researchers created an educational website for literature and writers on Anisa's behalf, as well as a guide for teaching literary texts using the teaching strategy based on knowledge journeys across the web, and skill news based on the two researchers' list of critical thinking skills. The study included (25) female students who were divided into two groups: the first experimental group included (25) female students who studied literary texts using the web quests teaching strategy. The second control group (26) was studied in the usual manner, then the post-test was administered to both groups, and after two weeks, the delayed test was administered to the experimental group to measure survival after learning. The results showed that there were statistically significant differences between the experimental group's mean scores, but no statistically significant differences between the experimental group's mean scores in the post and deferred tests to measure the learning effect survival.

**Al-Gamels' study (2016)**, aimed to identify the effectiveness of web quests strategy in conceptual comprehension and the development of reflective thinking skills through the subject of jurisprudence among Al-Azhar secondary school students. In two experimental and control groups, the researcher used the quasi-experimental method. To achieve the objectives of the study, a performance test was prepared to measure conceptual comprehension, and another test to measure reflective thinking, and their validity and reliability were verified by appropriate methods. The study found the effectiveness of web quests strategy in developing reflective thinking.

**Khalifa's study (2016)**, aimed to identify the employment of web quests strategy to teach home economics at the level of reflective thinking and knowledge curiosity among first-year secondary school students. The research tools consisted of a measure of reflective thinking and a measure of knowledge curiosity. The results of the study found an improvement in the level of reflective thinking and knowledge curiosity in the experimental study group compared to the control group because of employing the web quests strategy.

**The study of Sung, Hwang, and Chang (2015)** aimed to measure the effectiveness of teaching through the strategy of web quests strategy in the collection and improvement of their critical thinking and attitudes, and the study sample consisted of (48) fifth-grade students in Taiwan, and the researcher used The quasiexperimental approach, a test of critical thinking, and a measure of motivation were used, and the results showed that the experimental group students' achievement and critical thinking improved.

**Muhammad's (2015)** research sought to determine the efficacy of web quests strategy in developing programming skills in third-year middle school students. The quasi-experimental method was employed. The study sample included (40) male and female students in their third year of middle school at the Omar Ibn Al-Khattab School for Basic Education in the village of Al-Ammar Al-Kubra - Touch-Columbia. The students were evenly divided into two groups (control and experimental).

**The Auditor and Roleda (2014)** study sought to determine the impact of web-based web quests strategy on students' critical thinking, knowledge content acquisition, task performance, and perceptions of basic physics. It included (20) male and female students in the secondary stage, and they responded positively to the use of web quests strategy, and there was a positive impact on cooperation, creativity, motivation, and knowledge enhancement, but not on time management, and there was a relationship between low and moderate levels of critical thinking and task performance, and students.

**The study of Leung and Unal (Leung Unal, 2013)** aimed to identify the pros and cons of education in Florida, United States of America, using the web quests strategy across the web and the link between literacy and technology. The researchers used the descriptive survey method, and the study sample consisted of (596)

male and female teachers. They were given a note card, an interview, and a questionnaire, and the results revealed that learning using knowledge trips via the web increases motivation and creates a comfortable environment for learning, assists students in developing a good culture of using computers and technology, develops critical thinking skills, and helps individualize learning.

## Methodology

#### **Study Methodology**

The study adopted the descriptive survey method, due to its relevance to the nature of the study.

**Study Population:** The study community consisted of all 645 faculty members at Mutah University for the academic year 2021/2022. The numbers were counted by referring to the Human Resources Unit at the university.

**Study sample:** The study sample consisted of (104) members of the teaching staff at Mutah University and was represented by (16.12%) of the study population, and table (1) shows the distribution of the study sample members according to their demographic variables.

<b>Table 1.</b> Distribution of the study sample according to demographic variables
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Variable	Category	Number	Percentage
Gender	Male	70	67.3%
	Female	34	32.7%
College	Scientific	51	49.0%
	Humanity	53	51.0%
	Less than 5 years	18	17.3%
Years of Teaching Experience	From 5 – 10 years	38	36.5%
	11 years and over	48	46.2%
Total		104	100.0

# **Study tool**

To achieve the goal of the study, a questionnaire was developed after referring to the relevant theoretical literature. Of three parts:

Part one: Personal data: which are represented in the variables (gender, college, and years of teaching experience).

The second part: measures the reality of using the strategy of faculty members for web quests strategy, where the five-point Likert scale for the degree of use (very large, large, medium, few, very few) was used, and it consisted of (18) paragraphs, and the marks were given (5, 4, 3, 2, 1) respectively.

The third part: measures the obstacles to using the strategy of web quests strategy, and the five-point Likert scale was used (very large, large, medium, few, very few), and it consisted of (13) items, and the scores were given (5, 4, 3, 2, 1) straight. In order to classify the arithmetic averages to judge the reality of using the strategy of web quests strategy and the obstacles facing faculty members during its use, the statistical model was adopted in judging the arithmetic averages of the estimates of the study sample members as follows: (1-2.33) high, (2.34-3.67) medium, (3.68-5) low, through the following equation:

$$\frac{N-1}{3} = \frac{5-1}{3} = 1.33$$

## Validity of the study tool

To verify the validity of the content of the study tool, it was presented to (9) specialized arbitrators in Jordanian universities in the disciplines of curricula, teaching methods, educational technology, measurement, and evaluation, with experience and competence to determine their ability to achieve the desired goal, and to ensure the clarity and integrity of the wording The paragraphs of the questionnaire and their validity to measure what they were designed to measure, and to make any modification, including deletion, addition or reformulation of the paragraphs, and their relevance to the topic; The arbitrators' comments were taken and the required and appropriate modifications were made. The wording of some paragraphs was modified, and the questionnaire in its final form settled on (31) paragraphs.

## Stability of the study tool

The stability of the tool was verified after it was applied to the pilot study sample consisting of (35) faculty members from within the study community and outside its sample, by the method of internal consistency using the Cronbach alpha equation. Table (2) shows the stability coefficients of the study tool:

Table 2. Stability coefficients of the study tool using Cronbach's alpha equation

Theme	Cronbach Alpha
The actuality of utilizing the web quest strategy	0.82
Obstacles to using the web quest strategy	0.85

## **Study Variables**

## First: the independent variables

Gender: (male and female).

College: (scientific and humanities).

Years of teaching experience: (less than 5 years, 5-10 years, and 11 years and over).

## Second, the dependent variables

The actuality of using web quests strategy.

Obstacles to using the web quests strategy.

Statistical treatment: To answer the questions of the study, the means and standard deviations were extracted, and the tripartite analysis of variance was used.

#### Results

**First:** The results related to the first question (the actuality of using the web quests strategy in the educational process by faculty members at Mutah University):

To answer the main question for the first theme, which consisted of (18) paragraphs about the reality of using the web quests strategy in the educational process by the faculty members at Mutah University, the percentage of frequencies, means, and standard deviations of the answers of the sample members, which aims to identify the reality of Using the web quests strategy in the educational process by faculty members at Mutah University. Table (3) illustrates this.

**Table 3.**Means and standard deviations of the respondent's responses to the phrases constituting the theme of the reality of using the strategy of web quests strategy in the educational process by faculty members at Mutab University

	Mutan University				
No.	Paragraph	Means	SD	Order	level of use
7	I feel that using web quests increases my motivation for teaching.	3.88	0.92	1	High
6	Assign the students to collect information using the web.	3.81	0.88	2	High
10	I believe that the web quests strategy is one of the most important good alternatives for developing education, as it contributes to the dissemination of science and knowledge	3.79	0.99	3	High
5	Send assignments by e-mail and assign students to submit assignments by e-mail.	3.79	0.99	3	High
4	I make sure when designing web quests to give the student enough time to implement them.	3.71	1.05	4	High
8	I choose the design model that suits the web quests.	3.67	1.16	5	medium
1	I choose the topic of web quests carefully.	3.58	1.20	6	medium
3	I assign students science assignments by reading books, articles, and pamphlets through web quests strategy techniques.	3.56	1.03	7	medium
12	Involve students using web quests strategy techniques as they enhance their different skills.	3.54	1.03	8	medium
9	Identify each student's role in the web quests strategy.	3.54	1.03	8	medium
18	My use of the Web Knowledge Trips strategy makes me satisfied with illustrating educational materials for students.	3.54	1.17	8	medium
15	I have the ability to make a calendar as simple as a list of URLs.	3.50	1.14	9	medium
2	Determine the student's level of prior knowledge and level of understanding of web quests strategy.	3.50	1.07	9	medium
14	I have the ability to prepare lessons using knowledge journeys across the web.	3.44	1.24	10	medium
11	Use the web quests strategy on a regular basis.	3.38	1.18	11	medium
17	I can prepare lessons and lectures using the web quests	3.37	1.18	12	medium

	strategy that takes into account students with advanced levels of computer use. I use advanced mental processes such as analysis, synthesis,				
16	and evaluation in designing lessons using web quests strategy across the web.	3.33	1.18	13	medium
13	Use the web quests strategy continuously in the educational process.	3.31	1.16	14	medium
Total	-		3.57	0.92	medium

It is evident from Table (3) that the estimates of faculty members at Mutah University for the reality of using the strategy of web quests strategy in the educational process came to a medium degree, with a mean of (3.57), and a standard deviation (0.92), and the theme items were obtained (the reality of using the web quests strategy in the educational process). across the web) at degrees ranging between high and medium, and the arithmetic mean of all items ranged between (3.88-3.31), and paragraph (7), which states (I feel that the use of web quests strategy increases my motivation towards teaching) ranked first with an average of (3.88) and deviation standard (0.92), while paragraph (13) which states (Use the web quests strategy continuously in the educational process.) came in the last place, with a mean of (3.31) and a standard deviation of (1.16).

The researcher explains this result that the faculty members at Mutah University are aware of the reality of using the strategy of web quests strategy in the educational process. The results indicate that the faculty members at Mutah University determine the student's previous level of knowledge and understanding of the web quests strategy, and they determine the role of each student in the web quests.

**Second:** The results related to the second question (obstacles facing faculty members at Mu'tah University in using the web quests strategy from their point of view):

To answer the main question of the second theme, which consisted of (13) paragraphs about the obstacles facing the faculty members at Mutah University in using the web quests strategy from their point of view, the percentage of frequencies, arithmetic averages, and standard deviations of the answers of the sample members, which aims to identify the obstacles that The faculty members at Mutah University face the use of the web quests strategy from their point of view. Table (4) illustrates this.

**Table 4** Means and standard deviations of the respondent's responses to the phrases constituting the theme of obstacles facing faculty members at Mutah University in using the web quests strategy from their point of

	view.				
No.	Paragraph	Means	SD	Order	level of use
4	Weak training and qualification of lecturers and students on the strategy of web quests strategy.	3.64	0.84	1	medium
2	Difficulty in implementing some educational materials and aids through the web quests strategy.	3.62	0.79	2	medium
5	The weakness of lecturers and students in using web quests strategy.	3.62	0.88	2	medium
11	The density of the scientific material in the courses hinders the use of the web quests strategy.	3.58	0.72	3	medium
10	The weakness of the Internet when using the web quests strategy.	3.50	0.87	4	medium
8	Weak interaction between lecturers and students directly.	3.50	1.03	4	medium
3	The lack of computers for students to use the web quests strategy.	3.50	0.85	4	medium
1	The lecturer stuck to traditional teaching methods.	3.48	0.89	5	medium
6	Lack of clarity on web quests strategy for lecturers and students.	3.48	0.96	6	medium
12	Decreased students' motivation towards web quests strategy.	3.48	0.75	6	medium
9	The low effectiveness of educational devices and technologies available in universities and colleges.	3.46	0.95	7	medium
13	The low suitability of the educational material to web quests strategy.	3.37	0.81	8	medium
7	Believe that using the strategy web quests strategy is a waste of time.	3.17	1.02	9	medium
Total		3.49	0.55		medium

Table (4) shows that the faculty members at Mutah University estimated the difficulties they face when using the web quests strategy to a medium degree, with a mean of (3.49) and a standard deviation of (0.55). The use of the web quests strategy) to medium degrees, and the arithmetic mean of all paragraphs ranged between (3.64-3.17), and paragraph (4), which stated (weak training and qualification for lecturers and students on the web quests strategy), came in first, with an arithmetic average of (3.64) and a standard deviation (0.84), while paragraph (7), which stated (the belief that using the web quests strategy is a waste of time) (1.02).

**Third:** the results of the third question: (Does the reality of faculty members at Mutah University using the strategy of web quests strategy in the educational process differ based on (gender and total experience)?

To answer this question, a three-way variance analysis was used for the reality of faculty members at Mutah University using the web quests strategy in the educational process due to the variables (gender, experience, college), as shown in table (5).

**Table 5.** Means and standard deviations of the reality of using the strategy of web quests strategy in the educational process by faculty members at Mutah University due to the variables (gender, experience,

concec).					
Variable	Category	Number	Means	SD	
Gender	Male	70	3.61	0.81	
	Female	34	3.49	1.12	
Experience	Less than 5 years	18	4.05	0.62	
	From 5 - 10 years	38	3.29	0.94	
	11 years and over	48	3.61	0.93	
College	Scientific	51	3.80	0.89	
	Humanity	53	3.35	0.91	

The results presented in Table (5) indicate that there is an apparent difference in the arithmetic averages and standard deviations in the reality of using the strategy of web quests strategy in the educational process by faculty members at Mutah University according to the variables (gender, experience, college), and to show the significance of statistical differences between the averages, a three-way analysis of variance was used as shown in Table (6).

**Table 6.** Trile variance analysis of the effect of the variables (gender, experience, college) on the reality of using the web quests strategy in the educational process.

Variance source	Total squares	Degrees of freedom	Mean squares	Q value	Statistical significance
Gender	0.306	1	0.306	0.411	0.523
Years of Experience	8.447	2	4.224	5.687	0.005*
Specialization	6.365	1	6.365	8.570	0.004*
The error	73.526	99	0.743		
Total	1411.531	104			
Corrected total	87.267	103			
* Statistically significant at the level $(a < 0.05)$					

Statistically significant at the level ( $\alpha \le 0.05$ )

It is noted in Table (6) the following results:

#### A- Results related to the gender variable:

The results presented in Table (6) indicate that there are no statistically significant differences at the level ( $\alpha \le 0.05$ ) due to the effect of the variable (gender) on the reality of using the strategy of web quests strategy in the educational process by faculty members at Mutah University.

The researcher attributed the fact that the faculty members, whether male or female, have the same response using web quests strategy.

## B. Results related to the variable years of teaching experience:

The results presented in Table (6) indicate that there are statistically significant differences at the level ( $\alpha \le 0.05$ ) due to the effect of a variable (years of teaching experience) on the reality of the faculty members' use of the web quests strategy in the educational process, and to know the benefit of these differences Schaffer's test was performed for dimensional comparisons, as shown in table (7).

**Table 7.** The results of the dimensional comparisons of Schaffa's test between the Means on the reality of the faculty members' use of the web quests strategy in the educational process due to the variable (years of

experience).					
Degree (A)	Degree (B)	Mean differences	Significance		
less than 5 years	less than 5 years	0.7659*	0.010		
	From 5 - 10 years	0.4425	0.183		
From 5 - 10 years	11 years and over	-0.3234	0.230		

The results indicate that there are differences between the category (less than 5 years) and the experience category (5-10 years), and in favor of the experience category (less than 5 years). That is, the faculty with teaching experience (less than 5 years) uses the strategy of web quests strategy in the educational process more than other categories (5-10 years, 11 years, and more).

#### **C: Results related to the educational qualification variable:**

The results in Table (6) show that there are statistically significant differences at the level ( $\geq \alpha 0.05$ ) due to the effect of a variable (the educational qualification) on the reality of the faculty members' use of web quests

strategy in the educational process, and after referring to the arithmetic averages and standard deviations, it was found that The difference is in favor of the faculty members in the scientific faculties.

## Discussion

Discussing the results related to the first question:

The researcher attributes this result to the awareness of the faculty members at Mutah University of the importance of knowledge trips via the web in refining students' knowledge and skills and increasing their motivation toward teaching because it allows active and effective learning through the stages it passes through which it acquires knowledge and information, and also because of what they have gone through. Some practices through the use of e-learning during the Corona pandemic, helped them to use electronic devices, educational platforms, and the web through the Internet in the educational process, as it was the only way to complete the educational process, which made faculty members and students skills in their use that helped to realize and practice the strategy of trips knowledge in the educational process.

The current study agrees with the Al-Zahrani study (2021), the Al-Shahrani study (2020), the reliability and Al-Kaf study (2020), the Al-Zahrani study (2018), the Calvin and Koc, 2017 study, the camel study (2016), and the Khalifa study (2016). And the study of Sung, Hwang, and Chang (2015), the study of Muhammad (2015), the study of Auditor and Roleda (2014), and the study of Leung and Unal (2013). On the effectiveness of using the web quests strategy in the educational process.

Discussing the results related to the second question:

According to the researcher, the faculty members at Mutah University face a number of obstacles when using the knowledge trip strategy, as this result reflects the negative impact of poor training and qualification for lecturers and students on the knowledge trip strategy, as well as the nature of the material in terms of content and quantity. Impeding the use of this strategy, but one of the most significant obstacles to using the strategy of web quests strategy is also logistical issues, whether for faculty members or students themselves, due to the lack of permanent Internet access and smart devices for everyone.

Discussing the results related to the variable years of teaching experience

The researcher attributes the result to the fact that the faculty members, whose experience is less than 5 years, are close in age to the students and their ease of understanding the students' tendencies and tendencies helped them to use the strategy of web quests strategy, and also their practice of technology and technical matters more than the rest of the faculty members who are more experienced and relatively older made their practice of the web quests strategy significantly.

Discussing the results related to the educational qualification variable

The researcher attributed the result to the scientific colleges' use of technological practices more than the human colleges, and this helped that their responses to using the web quests strategy were more than the human colleges.

# Conclusion

From this study, we seek to identify the utilization of the strategy of modern knowledge means by the internet in the educational process by the faculty members at Mutah University. The results of the current study found the use of a modern strategy by the internet in the educational process came at a medium level among the faculty members of the University. Furthermore, the result according to experiential years of teaching shows significant differences in favor of the experience category (less than 5 years) and there aren't significant differences due to the gender variable. The faculty members of the University are also facing some obstacles to using the strategy of knowledge means.

# **Recommendations:**

Based on the study's findings, the researchers recommend the following:

- 1. Holding courses and workshops for both lecturers and students to develop the reality of using e-learning tools, particularly knowledge trips, and train them on how to use them.
- 2. Modifying course curricula to be compatible with their application through knowledge journeys.
- 3. Removal of all impediments through knowledge trips, such as providing Internet labs in universities and colleges in proportion to the number of students and academic courses.
- 4. Conduct additional educational research on the knowledge trip strategy in terms of dimensions and applications in educational and other institutions.

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