

# Evaluation Patterns and Assessment Tools of E-Learning for High School Students in Palestine: Solutions and Suggestions

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# Evaluation Patterns and Assessment Tools of E-Learning for High School Students in Palestine: Solutions and Suggestions

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**Abstract:** Evaluation for E-learning was and is still a problem for many educators and lecturers in universities and even schools in Palestine especially nowadays after COVID-19. Based on this fact, the current study aimed at diagnosing the validity of the E- learning assessment tools applied by the ministry of education in secondary schools and also developing new E- learning evaluation tools for assessing students' learning at the secondary schools in Palestine from teachers, supervisors and university lecturers' points of view. The research followed a descriptive analytic research method in order not only describing the problem under investigation, but also providing numerical data that identify the extent to which the sample agree on the items exposed. To achieve the aim of the study, the researcher distributed a questionnaire for surveying the points' of view of (40) teachers, supervisors regarding the E-learning evaluation tools applied lately in high schools in Palestine throughout the pandemic and then a semi structured interview conducted with (5) supervisors and university lecturers for giving solutions and suggestions concerning the best E- learning assessment tools that can be used for evaluating the E-learning process from their points of view. SPSS package was used to validate tools and analyze data. The results showed that only 59.6% believed that "The ministry mechanism for E-learning was clear". Moreover, only 15.9 % agreed that this mechanism was efficient. In fact, the results showed that this mechanism encountered many obstacles during its implementation. It was found that only 21.7 % agreed that "E-learning evaluation mechanism was completely free from any obstacles during the implementation process." Based on the results, the researcher recommended the ministry of education to approve standardizing electronic exams and deciding about firm procedures to be used with those who are non-committed, make a deal with tele-communication companies to restrict the search ability via google throughout exams times, and connect students' emails with Rawafed G-suit in order not to allow students to join the exams with unreal emails. Also, teachers were recommended to prepare questions that measure the high level of thinking.

**Keywords:** Evaluation; assessment; E-learning.

## 1. Introduction

E-learning, online learning, remote learning or distance learning all are terms used to describe the pedagogical situation in which teachers and students are not in the same place. It is a situation that lack face to face direct interaction between those main elements in the educational process. Kiryakova (2009) in Opara (2020) explained that distance learning is the form of learning that allows for teachers and students to communicate despite being physically separated. She noted that distance learning provides a means for teachers and students to communicate by different means and at different times.

Throughout the spread of COVID-19 pandemic, there has become a very urgent necessity to adopt this type of learning in order to find a vital solution for school closure. Kiryakova (2009) discusses that the appearance of distance education is connected with the changing conditions in economic, social and technological aspect.

Better literacy and more comprehensive education are needed. Distance education gives an opportunity to everyone to learn throughout their entire life. The means of communication – mail, mass media, and internet are necessary for its existence. Distance education depends on the development of information and communication technologies. It can be as efficient as traditional education when there are appropriate methods and technologies about its realization. Throughout COVID-19, it is believed that online means now are more developed and can really help in surviving education in this globe. But after going through the process of E-learning, stakeholders in ministry of education, universities lecturer, supervisors and teachers face a challenge of how to make sure that education is taking place and how to assess this learning. This motivates them to look for valid patterns of evaluation that could assist the extent to which students are learning and mastering what they are processing. In this paper, the researcher discusses evaluation patterns and assessment tools of e-learning for high school students in Palestine: solutions and suggestions from teachers, supervisors and university lecturers' points of view.

### 1.1. Research problem:

After starting the academic year 2020-2021, the Ministry of Education drew three different scenarios to face the emergence situation of Corona. The first was to start face to face learning in case we could overcome the spread of this disease in the country. The second was to divide students into two group and each study in three days a week only. In this scenario, teachers had to explain the lesson twice, thrice and more according to the number of classes they taught. The third scenario was to study online in case that educational process regularity did not take place in the ground of schools.

Going online was a big challenge. Teachers had to find a way to assess students' education. Educators in the Ministry of Education along with supervisors and teachers began to think about strategies by which they could decide about students' learning, their levels and how much they master throughout this new phase of learning. Stake Holders at the ministry of education come out of an evaluation system to be applied mostly online during the academic year 2020-2021. Unfortunately, there were some shortcuts that arouse while applying especially when the Ministry of Education insisted to conduct the midterm exam and final exam face to face at school but circumstances obstruct some plans to take place. Based on these trials, this research aimed to answer the following main question:

**Have the current evaluation patterns and assessment tools of E-learning succeeded in evaluating high school students learning in Palestine?**

### 1.2. Research Questions:

Out of the research main question above, the researcher derived the following research questions:

- To what extent the existence evaluation patterns and assessment tools of E-learning for high school students in Palestine are valid from teachers and supervisors' points of view?
- What can be the suggested evaluation patterns and assessment tools of E-learning for high school students in Palestine from teachers, supervisors and university lecturers' points of view?

### 1.3. Research Objectives:

This research aims to achieve the following:

- Identify to what extent the existence evaluation patterns and assessment tools of E-learning for high school students in Palestine are valid from teachers' and supervisors' points of view.
- Find out the suggested evaluation patterns and assessment tools of E-learning for high school students in Palestine from teachers, supervisors and university lecturers' points of view.

## 2. Literature Review

### 2.1. E-Learning and Its Resources:

Technology-based e-learning encompasses the use of the internet and other important technologies to produce materials for learning, teach learners, and also regulate courses in an organization (Fry, 2001).

If we return back to the history of E-learning, E-Learning Concepts, Trends, Applications (2014) explained that the term "e-learning" and the stages the term passed through:

The term E-learning has only been in existence since 1999. When the word was first utilized at a computer-based training (CBT) systems seminar. It is also shown that early forms of e-learning existed as far back as the 19th century. "Online learning" and "virtual learning" are other terms that used in the same era to indicate E-learning.

The first e-learning systems were really only set up to deliver information to students but as we entered the 70s e-learning started to become more interactive.

With the introduction of the computer and internet in the late 20th century, e-learning tools and delivery methods expanded. The first MAC in the 1980's enabled individuals to have computers in their homes, making it easier for them to learn about particular subjects and develop certain skill sets. Then, in the following decade, virtual

learning environments began to truly thrive, with people gaining access to a wealth of online information and e-learning opportunities.

By the early 90s several schools had been set up that delivered courses online only, making the most of the internet and bringing education to people who wouldn't previously have been able to attend a college due to geographical or time constraints.

In the 2000's, businesses began using e-learning to train their employees. New and experienced workers alike now had the opportunity to improve upon their industry knowledge base and expand their skill sets. At home individuals were granted access to programs that offered them the ability to earn online degrees and enrich their lives through expanded knowledge.

As a matter of fact, it has recently been understood that there is no one common definition of E-learning. Different scholars define the term from their perception. Dublin (2003), in trying to find a common meaning of the term E-Learning, went on to ask the following questions: Is E-learning an online coursework for students from a distance? Does it mean using a virtual learning environment to support the provision of campus-based education? Does it refer to an online tool to enrich, extend and enhance collaboration? Or is it a totally online learning or part of blended learning?

Matt Comerchero in Pamela (2006) defines E-learning as: a means of education that incorporates self-motivation, communication, efficiency, and technology.

According to Arkorful, V., & Abaidoo, N. (2015), it is difficult to identify a common definition for E-learning. Some of the authors refer to E-learning as providing complete online courses only whereas comprise web-supplemented and web-dependent services for the provision of educational and support processes.

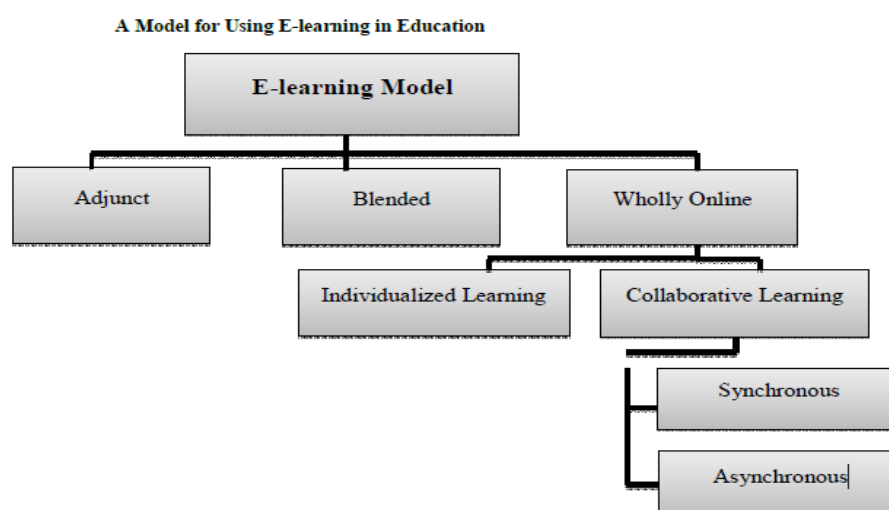
Based on the previous fast overview of the history of E-learning, it becomes clear that the phrases of E-learning can be summarized in three terms: adjunct, blended and wholly online as was discussed by Algahtani (2011).

The "adjunct E-Learning is the situation which E-Learning is employed as an assistant in the traditional classroom providing relative independence to the learners or students (Algahtani, 2011).

In the blended E-Learning, Algahtani (2011) and Zeitoun (2008) explained that, in this way of using E-Learning, the delivery of course materials and explanations is shared between traditional learning method and E-Learning method in the classroom setting.

As for wholly online, it is devoid of the traditional learning participation or classroom participation. In this form of usage, the E-Learning is total so that there is maximum independence of the learners or students (Algahtani, 2011; Zeitoun, 2008). In Britain the Open University was keen to take advantage of E-Learning. Their system of education has always been primarily focused on learning at a distance. In the past, course materials were delivered by post and correspondence with tutors was via mail (E-Learning Concepts, Trends, Applications, 2014).

Zeitoun (2008) has gone further to explain that the online model is divided into two types of learning: individualized and collaborative. The later also divided into two types: synchronous and asynchronous. The following modal taken from Arkorful, V., & Abaidoo, N. (2015) summarizes the concept of E-learning and its use in education:



## 2.2. What Is Evaluation?

According to Mary Thorpe in "Handbook of Education Technology" in Crompton, P. (1992), "Evaluation is the collection of, analysis and interpretation of information about any aspect of a program of education or training as part of a recognized process of judging its effectiveness, its efficiency and any other outcomes it may have."

### 2.3. The Differences between Evaluation and Assessment:

Scholars mostly use evaluation and assessment interchangeably. Nevertheless, these two terms points two different levels of evaluation. Evaluation is concerned at the macro or holistic level of the learning event, taking into account the context of learning and all the factors that go with it, whereas assessment can be seen as the measurement of student learning and is one of the elements that go into an evaluation, the micro-level (Crompton, P, 1992). When evaluating the pedagogical system in a country, ministry or institution, the evaluator usually goes in examining everything: educational setting, aims and objectives of the course, teaching approach, learning strategies, assessment methods and the implementation strategy (Crompton, P, 1992). Accordingly, it is noticed that assessment is an integral part of the whole process of evaluation and includes giving numerical assessment of the situation under investigation.

### 2.4. Evaluating Online Learning:

Evaluating E-learning is crucial and needed these days, especially in the context of witching education to be totally online. Stake holders in the ministry of education are in need to justify technology-based learning on the grounds of effectiveness, efficiency, relevance, applicability and appropriateness to the intended employers and users of the technology, the teachers and students, even the department or institution. (Crompton, P,1992).

In order to apply efficient tools, we should think about objectives, cost, the context in which these tools will be applied, the number of students those teachers teach and the economic status for both the teacher and students.

E-learning commonly offers audiovisual content or interactive testing on the go that can be more attractive for younger learners than traditional books. E-learning also lets people communicate through email, forum or chat, allowing even introverts to take part in related conversations.

There is an increased number of different E-learning systems known as Learning Management Systems (LMSs) and methods. Many universities now use them in order to supply students with course materials, tasks, quizzes, forums and also midterm and final exams. These exams are designed to measure students' levels. But it is noticed that students cheat and the marks they get may not provide an accurate level about their levels. In this research we are evaluating the ministry of education procedures used to evaluate the extent to which students mastered what they studied online during the academic year 2020-2021 in Palestine. Moreover, solution and suggestions are sought from university lecturers, supervisors and teachers in high schools in order to develop this E-learning evaluation system.

### 2.5. Evaluation Patterns and Evaluation Tools followed by the Ministry of Education:

During the academic year 2020-2021, schools in Gaza went into two critical periods of COVID-19 which forced schools to close its doors and students to continue their studies from home. This enforced the Ministry of Education to find out a method for evaluating students' learning online. The evaluation system applied consists of a midterm exam, qualitative evaluation and the final exam. Each part is given a portion of a whole degree of 100 for all subjects expect for English and Arabic that are given 150 degrees for each. As for, the midterm exam and the final one, they were planned to be done face to face in school. But when the condition did not fit, students had to apply for the midterm online while the final was given at school. The part related to the qualitative evaluation is a pattern of evaluation that consists of four assessments: three assignments and a report or research related to the topic they study. The following table shows the distribution of marks used:

#### • The Distribution of Marks for all school subjects except Arabic and English:

No.	Procedure	Marks
1	Midterm Exam	20
2	Assignment 1	15
3	Assignment 2	15
4	Assignment 3	15
5	A repot\research	5
6	Final Exam	30

#### • The Distribution of Marks for Arabic and English:

No.	Procedure	Marks
1	Midterm Exam	45
2	Assignment 1	23
3	Assignment 2	22
4	Assignment 3	22
5	A repot\research	8
6	Final Exam	30

### 3. Research Methodology

This research is a descriptive analytical study. It reveals teachers, supervisors and university lecturers' points of view regarding the evaluation patterns and assessment tools used to evaluate E-learning in general and students' education in particular. Brown and Rodgers (2002: 117) defined the descriptive analytic research as the research that describes group characteristics or behaviors in numerical terms. It is that kind of research in which the researcher uses a descriptive statistic. Descriptive statistics are those statistics that are used to analyze descriptive research data, usually in terms of central tendency and dispersion.

#### 3.1. Participants:

This study surveyed the points of view of (55) supervisors and teachers who teach different topics in schools about the validity of the current E-learning evaluation process used in high schools in Palestine. Those teachers and supervisors were from Gaza and West Bank as well. They were also asked to suggest other procedures that can be applied in high schools next year. For this step, five university lecturers who are professional in working with technology were also interviewed to suggest what assessment tools that can guarantee getting an accurate data about students' learning. The following tables shows a full description of the study sample:

- **Personal details related to the study sample**

Gender	Male	Female
	14 (25.5%)	41 (75.4%)
Age	24-34	35-45
	--	38 (69.1%)
		17 (30.9%)
Setting	Gaza	West Bank
	50 (92.6%)	4 (7.4%)
Experience	1-10 y	11-20 y
	7 (12.7%)	28 (50.9%)
		20 (36.4%)
Subject they teach	Subject	Percentage
	English	28 (50.9%)
	Geography	9 (16.4%)
	Islamic Religion	4 (7.3%)
	Arabic	3 (5.5%)
	Math	3 (5.5%)
	History	2 (3.6%)
	Culture	2 (3.6%)
	Chemistry	2 (3.6%)
	Technology	1 (1.8%)
	Biology	1 (1.8%)

#### 3.2. Instruments:

To achieve the aim of this study, the researcher used a questionnaire to diagnose the validity of the evaluation process used in high schools in Palestine. The questionnaire was distributed electronically via social media sites and the internal mails of the ministry of education. It contains two parts: personal details and (15) items related to evaluation patterns and assessment tools used by the Ministry of Education in Palestine. See Appendix (A). Also, the researcher conducted a semi structured interview to collect teachers, supervisors and university lecturers' suggestions on evaluation tools. Their opinions were important in building an E-learning evaluation system that could be a solution for the current evaluation issues. Those tools were prepared based on previous literature and the researcher experience in the field of E-learning.

#### 3.3. Piloting:

Piloting is one of the most important steps that the researcher should take into consideration when conducting her study. It means applying the study tools on a similar study sample in order to make sure that the used instruments that are suitable for the study. In fact, piloting gives the research the opportunity to discover the problems that he may face when applying on the true study sample. In this context, Calitz (2009:256) says that "a pilot study is a mini-version of a full-scale study, or a trial run done in preparation of the complete study". He also cited that piloting has many advantages: as it warns the researcher against the potential short comes in the research. Moreover, "pilot study can also identify practical problems of the research procedure and it indicates whether proposed methods or instruments are inappropriate or too complicated" Calitz (2009:259).



### 3.4. Face Validity:

Based on the previous description, the researcher handed over the questionnaire to three specialists to referee it and ensure that the questionnaire measures what it really designed for. This step gave the researcher the opportunity to modify the questionnaire according to their modification and amendments.

### 3.5. Reliability:

The research used Cronbach's Alpha formula to reveal the extent to which the questionnaire is reliable. The following table shows the results gained from applying the formula:

Reliability Statistics		
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.65	.63	15

### 3.6. Data Analysis Method:

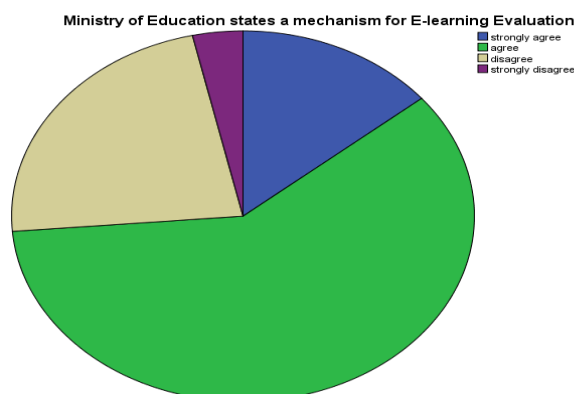
The researcher analyzed the data by SPSS (statistical package for social science program) version 14 using the following statistical treatments: mean, and standard deviation, percentage and Cronbach's Alpha for measuring reliability.

## 4. Research Results and Discussions:

This part of the research concerns about showing and discussing the result found when analyzing the responses of the study sample who responded to the questionnaire and the semi structured interview. In the following, each question is going to be answered and discussed in the same time.

### 4.1. The answer of question NO.1: To what extent the existence evaluation patterns and assessment tools of E-learning for high school students in Palestine are valid from teachers and supervisors' points of view?

When analyzing the data, it is found that 73% of the study sample agreed on the item "Ministry of Education states a mechanism for E-learning evaluation". This means that the majority of the study teachers do not deny the ministry trial in the area of preparing for online evaluation system. The following chart shows the result gained for this item:

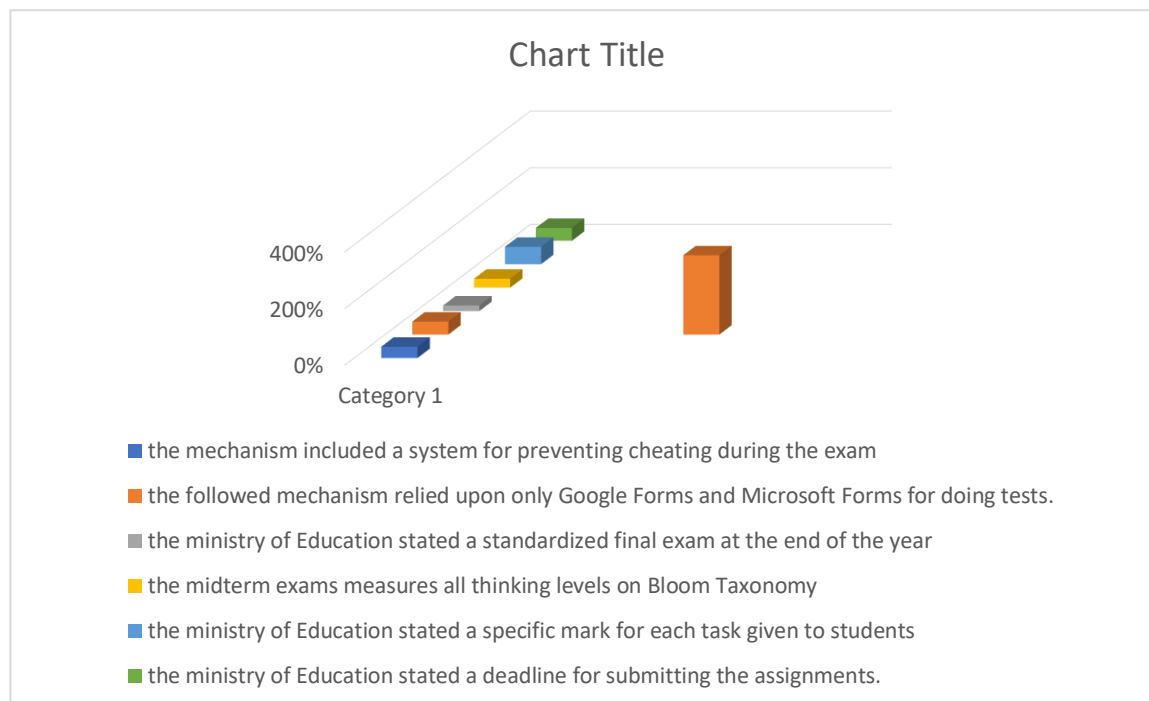


On the other hand, the result shows that only 59.6% believe that "The ministry mechanism for E-learning was clear". Moreover, only 15.9 % agree that this mechanism is efficient. In fact, the results show that this mechanism encounters many obstacles during its implementation. It is found that 21.7 % agree that "E-learning evaluation mechanism was completely free from any obstacles during the implementation process" whereas 26.3% refused to determine their opinions about the mechanism.

While 89.5% agreed that the mechanism included solving assignments and homework on the virtual classroom and 70.2% agreed that the mechanism included doing research and writing reports, 48.3% agree that students seriously take the stated E-learning evaluation mechanism and 29.8 % refused to determine their opinions.

When looking deeply to the types of problem faced while implementing the Ministry of Education E-learning evaluation system, it is found that 40% agree that the mechanism included a system for preventing cheating during the exam and about 19.3% refused to determine their opinion. It is believed that those who did not say their points of view are likely to be afraid of being clear about issues related to the Ministry of Education. Also, 45.7% sees that the followed mechanism relied upon only Google Forms and Microsoft Forms for doing tests. Moreover, 20% agree that the Ministry of Education stated a standardized final exam at the end of the year. In addition, only 31.6% agree that the midterm exams measure all thinking levels on Bloom Taxonomy. On contrary, 61.4% agreed that the

ministry of Education stated a specific mark for each task given to students, but only 45.4 % agreed that the Ministry of Education stated a deadline for submitting the assignments. The following chart summarizes these results:



Looking back to the results, it is found that although the Ministry of Education stated a mechanism for evaluation. There are many short comes that need to be taken into consideration. These short comes are related to standardizing the exam given to students online, approving on methods for preventing cheating, writing tests using the exam specification table where items are all determined according to the behavioral objectives taught during the term. Furthermore, stating a clear-cut deadline for submitting assignments and deciding firmly about those who haphazardly do not submit on line. It is believed that tacking these problems would enforce students to take their study seriously. The following question answers questions related to the suggestions that university lecturers, supervisors and teachers suggest overcoming such problems.

#### 4.2. The answer of question NO.2: What can be the suggested evaluation patterns and assessment tools of E-learning for high school students in Palestine from teachers, supervisors and university lecturers' points of view?

When conducting the semi structured interview, university lectures, supervisors and teachers were asked to suggest evaluation patterns and assessment tools that could help in finding an effective and efficient evaluation system. The following are some of these suggestions.

##### • University lecturers' suggestions:

When asking university lectures about their suggestions regarding developing the evaluation system adopted by the ministry of education and what solutions could be found for the aroused problem, many opinions and suggestions were revealed. They are summarized as follows:

To prevent cheating is something impossible if we do not bring up generations from the beginning on honesty. But there are many ways that could reduce its effect, but these methods cost much time, effort and money. Some of these methods are:

1. Asking students to prepare a material and to video tape himself while explaining it.
2. Discussing students one by one via meet or zoom.
3. Using some techniques offered by Google Docs as:
4. Using short, timed quizzes.

All the former factors are important, but they are not impossible to be achieved if the work was scheduled, especially for teachers who have a large number of students.

Other suggestion related to reading the article of Stephanie Smith. It is suggesting fourteen simple strategies to reduce cheating on online examinations. These strategies are:

1. Create questions that require higher order thinking.
2. Creatively remind students of the academic integrity polices by posting a video describing the test outlines and giving clear instruction for doing it.
3. Use various question types.



4. Require students to sign an academic integrity contract.
5. Restrict testing window: have all students start around the same time and limit how long each student has to take the exam. In case students are of different time zones, teachers should prepare two different forms to be answered according to time suitable for students. Also, open book exams should be given a fixed time needed by students to answer but not too much in order not to allow those who do not know the answers to cheat.
6. Set up the exam to show one question at a time.
7. Prohibit backtracking.
8. Change test questions sequence.
9. Offer different versions of the same test.
10. Allow one attempt only for the test.
11. Plan for "technical issues": train students on such tests in order to be familiar with them.
12. Delay score availability.
13. Avoid using test banks that come with the course textbook.
14. Protect test question answers: students can only see questions they get mistakes in but not all the tests. This way, students will be unable to print out all the tests.

In this context, it is important to mention that one of the lecturers' opinions pointed out that what followed last year was computerizing the ordinary evaluation tools but there is a need for developing electronic evaluation tools that come up with the nature of E-learning. She also adds that the aims of these electronic tools are to transfer from just grasping the information to function them.

#### • Supervisors' and teachers' suggestions:

The following procedures are suggested by supervisors and teachers. These procedures can be summarized in the following points:

1. Applying a mechanism that enable students to access the question but not return it back when leaving it.
2. Timing each question and restricting it directly when time passes.
3. Varying evaluation tools with synchronized and asynchronized discussions, worksheets, projects, and electronic tests. To keep all students' responses in the student's portfolio.
4. Using gamification.
5. Specifying assessment criteria from the beginning: Excellent, v. good, good, weak.
6. Allowing parents to share in the assessment process in order to motivate students to E-learning.
7. Using self-evaluation and colleague evaluation patterns along with a realistic evaluation applied by a teacher to measure not only students' knowledge but also the scientific and practical skills and practices besides the activities that measures the multiple intelligence: visual, audial, lingua, social, self-confidence and self-abilities.
8. Testing students via zoom and meet.
9. Connect students' emails with Rawafed G-suit in order not to allow students to join the exams with unreal emails.
10. Approving midterm and final exams that are timed and standardized.
11. Making a deal with tele-communication companies to restrict the search ability via google throughout exams times.
12. Preparing questions bank that enable teachers to choose questions from them for their tests.
13. Using Moodle.
14. Stopping the push-up mechanism and never make students pass easily.
15. Approving ELS platforms that can help in designing tests.

## 5. Conclusion

"Evaluation patterns and assessment tools of E-learning for High school students in Palestine: solutions and suggestions" is the title of this current study that is concerned about diagnosing the evaluation system followed by the ministry of education last year from teachers and supervisors' points of view. Furthermore, it interviewed university lecturers, supervisors and teachers to suggest on evaluation procedures, programs and tools that could help in preventing cheating besides helping in deciding the students' learning levels. The results show that only 59.6% believe that "The ministry mechanism for E-learning was clear". Moreover, only 15.9 % agree that this mechanism is efficient. In fact, the results show that this mechanism encounters many obstacles during its implementation. It has found that 21.7 % agree that "E-learning Evaluation mechanism was completely free from any obstacles during the implementation process". Based on the results, the researcher recommends the Ministry of Education to approve standardizing electronic exams and deciding about firm procedures to be used with those who are non-committed, make a deal with tele-communication companies to restrict the search ability via google throughout exams times, and connect students' emails with Rawafed G-suit in order not to allow students to join

the exams with unreal emails. Also, teachers are recommended to prepare questions that measure a high level of thinking.

### 5.1. Recommendations:

Referring to the results of this research "Evaluation patterns and assessment tools of E-learning for high school students in Palestine: solutions and suggestions", the researcher recommends the following categories of society:

#### Recommendations for The Ministry of Education:

- Approve standardizing electronic exams and deciding about firm procedures to be used with those who are non-committed.
- Make a deal with tele-communication companies to restrict the search ability via google throughout exams times.
- Connect students' emails with Rawafed G-suit in order not to allow students to join the exams with unreal emails.
- Approve bank questions systems that is used in universities. This system enables teachers to classify questions in groups: true or false, multiple choice, essays and so on. Then, the system chooses from these questions fairly for each student.
- Restrict questions to a specific time after which the exam shut automatically.
- Restrict the exam in a way that allow students to return back to questions just for revising and reading but not changing the answers.
- Questions and choices should be scrambled.
- A question appears at a time. That is to say students could not see or think with the other questions before finishing the one they started.
- Approve an oral part in students' evaluation where students should open the camera while stating students' office toward the wall.
- Stop the push-up mechanism and never make students pass easily.

#### Recommendations for teachers:

- Asking students to cancel the search engines extensions on their computers and laptops during the test.
- Stating questions that measure the higher levels of students' thinking.
- Using different types of questions and identifying the line numbers and time within the exam should be answered.
- Connect students' identity numbers and emails to google forms.
- Preparing more than two forms and using them in different time zones according to a timed schedule prepared and generalized to students previously.
- Varying evaluation tools with synchronized and asynchronized discussions, worksheets, projects, electronic tests. To keep all students' responses in the student's portfolio.
- Using self-evaluation and colleague evaluation patterns along with a realistic evaluation applied by a teacher to measure not only students' knowledge but also the scientific and practical skills and practices besides the activities that measures the multiple intelligence: visual, audial, lingua, social, self-confidence and self-abilities.
- Allowing parents to share in the assessment process in order to motivate students to E-learning.

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## أنماط التقييم وأدوات تقييم التعلم الإلكتروني لطلبة المرحلة الثانوية في فلسطين: الحلول والاقتراحات

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### الملخص:

تقييم التعليم الإلكتروني كان ولا يزال مشكلة تأرق العديد من التربويين والمحاضرين في الجامعات وحتى معلمي المدارس في فلسطين خصوصاً في هذه الأيام في ظل الجائحة. بالاستناد إلى هذه الحقيقة، هدفت الدراسة الحالية إلى تشخيص صدق أدوات تقييم التعليم الإلكتروني المطبقة من قبل وزارة التربية والتعليم في المدارس الثانوية بالإضافة إلى تطوير أدوات جديدة لتقييم التعليم الإلكتروني للطلبة في المدارس الثانوية من وجهة نظر المعلمين والمدرسين والمحاضرين في الجامعات. اتبعت الباحثة المنهج الوصفي التحليلي وذلك لوصف الظاهرة من جهة وإعطاء بيانات رقمية تعكس مدى موافقة أفراد العينة على البنود المعروضة. لتحقيق هدف الدراسة، وزعت الباحثة استبيان لاستطلاع آراء (40) معلم ومشرّف فيما يتعلق بنجاعة أدوات تقييم التعليم الإلكتروني التي تم تطبيقها في المدارس الثانوية في فلسطين في فترة الجائحة بالإضافة إلى إجراء مقابلة لخمسة مشرفين ومحاضرين في الجامعات وذلك لوضع حلول ومقترحات فيما يتعلق بأفضل أدوات تقييم التعليم الإلكتروني التي يمكن استخدامها لتقييم عملية التعليم الإلكتروني من وجهة نظرهم. وقد تم استخدام المعالجات الإحصائية لبرنامج (SPSS) وذلك لتحقيق من صدق الاستبيان وتحليل النتائج. أظهرت النتائج أن (59.6%) فقط من أفراد العينة يعتقدون أن "آلية الوزارة المتبعة في تقييم التعليم الإلكتروني كانت واضحة". علاوة على ذلك، يرى (15.9%) فقط من أفراد العينة أن هذه الآلية كانت فعالة. وقد أظهرت النتائج أيضاً أن هذه الآلية قد واجهت العديد من الصعوبات أثناء عملية التنفيذ، حيث يرى (21.7%) فقط من أفراد العينة أن آلية الوزارة خلت من العقبات أثناء عملية التنفيذ. بناءً على نتائج الدراسة، أوصت الباحثة وزارة التربية والتعليم بإعتماد امتحانات إلكترونية موحدة وإقرار إجراءات صارمة للتعامل مع غير الملتزمين بها. بالإضافة إلى الاتفاق مع شركات الاتصالات لتقييد خاصية البحث عن طريق محرك البحث جوجل في فترة الامتحانات وأيضاً ربط البريد الإلكتروني للطلبة بموقع روافد وذلك لمنع الطلبة من الدخول باستخدام بريد الكتروني وهي. من جهة أخرى، أوصت الباحثة المعلمين بإعداد أسئلة تقيس مهارات التفكير العليا.

الكلمات المفتاحية: تقويم؛ تقييم؛ تعليم إلكتروني.

**APPENDIX (A)**

THE FOLLOWING IS THE QUESTIONNAIRE DISTRIBUTED IN ARABIC BECAUSE THE MAJORITY DO NOT KNOW ENGLISH

الرقم	البند	موافق بشدة	موافق	محايد	غير موافق	غير موافق بشدة
1	قامت الوزارة بوضع آلية للتقويم عن بعد خلال العام الماضي					
2	تميزت آلية الوزارة للتقويم عن بعد بالوضوح					
3	كانت الآلية المتبعة فعالة في تحديد مستويات الطلبة					
4	تضمنت الآلية المتبعة نظاما للحد من الغش بين الطلبة أثناء تقديم الامتحان					
5	اعتمدت الآلية المتبعة على تقديم الامتحانات عبر نماذج جوجل أو مايكروسوفت فقط					
6	خلت آلية التقويم المتبعة من المشاكل عند التنفيذ					
7	حددت وزارة التربية والتعليم آلية واحدة للتقويم وأجبرت جميع معلمها على اتباعها					
8	اشتملت آلية التقويم على تقديم الأبحاث والتقارير					
9	اشتملت آلية التقويم على حل التعيينات والواجبات المرفقة على الصف الافتراضي					
10	أخذ الطلبة آلية التقويم المتبعة بجدية					
11	قامت وزارة التربية والتعليم بوضع اختبارات الكترونية موحدة لامتحانات نهاية العام الدراسي					
12	تم بناء الاختبارات النصفية وفقا لجدول المواصفات					
13	تقيس الاختبارات النصفية جميع مستويات التفكير على تصنيف بلوم					
14	حددت وزارة التربية والتعليم الدرجات المطلوب وضعها لكل مهمة					
15	حددت وزارة التربية والتعليم السقف الزمني الذي يسمح من خلاله للطلبة الإجابة على المهام المختلفة					

**Appendix (B)**

THE FOLLOWING IS THE TRANSLATED QUESTIONNAIRE

No.	Items	Strongly Agree	Agree	Neutral	Disagree	Strongly Agree
1	Ministry of Education states a mechanism for E-learning Evaluation					
2	The ministry mechanism for E-learning was clear					
3	The mechanism was efficient in saying about the student's levels.					
4	The mechanism included a system for preventing cheating during the exam					
5	The followed mechanism relied upon only Google Forms and Microsoft Forms for doing tests.					
6	eLearning Evaluation mechanism was completely free from any obstacles during the implementation process.					
7	The Ministry of Education stated just one system for evaluation and enforced all teachers to follow.					
8	The mechanism included doing researches and writing reports.					
9	The mechanism included solving assignments and HomeWorks on the virtual classroom					
10	students seriously take the stated E-learning evaluation mechanism					
11	The ministry of Education stated a standardized final exam at the end of the year.					
12	The midterm exam was constructed following the specification table.					
13	The midterm exams measures all thinking levels on Bloom Taxonomy					
14	The ministry of Education stated a specific mark for each task given to students					
15	The ministry of Education stated a deadline for submitting the assignments					