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The Role of the Moodle Educational Platform in Developing Twenty-First Century Skills among English Language Students at the Islamic University of Gaza

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Abstract

This study aimed to identify the role of the Moodle educational platform in developing the skills of the twenty-first century among English language students at the Islamic University of Gaza from their point of view. The study used the descriptive approach; Where the study sample consisted of (98) male and female English language students at the Islamic University of Gaza in the second semester of the year 2021/2022, and the study tool was a questionnaire directed to students to identify the role of the Moodle educational platform in developing the skills of the twenty-first century. The results of the study concluded that there is a significant role for the Moodle educational platform in developing twenty-first century skills on all fields as well as on the overall field of the study tool. The learning and innovation skills field ranked first with an arithmetic mean of (3.88), followed by the profession and life skills field with an arithmetic mean of (3.83), while the digital culture skills field ranked last with an arithmetic mean of (3.78). The results also showed that there were no statistically significant differences in the average students' opinions due to gender, the study recommended continuing to support and encourage the use of the Moodle educational platform as a system for managing university education in a way that meets the requirements of the twenty-first century.

Keywords: Moodle Educational Platform, Twenty-First Century Skills.

دور منصة المودل التعليمية في تنمية مهارات القرن الحادي والعشرين لدى طلبة اللغة الانجليزية بالجامعة الإسلامية بغزة

الملخص:

هدفت الدراسة إلى التعرف إلى دور منصة المودل التعليمية في تنمية مهارات القرن الحادي والعشرين لدى طلبة اللغة الانجليزية بالجامعة الإسلامية بغزة من وجهة نظرهم، واستخدمت الدراسة المنهج الوصفي؛ حيث تكونت عينة الدراسة من (98) طالباً وطالبة من طلبة اللغة الإنجليزية بالجامعة الإسلامية بغزة وذلك في الفصل الدراسي الثاني للعام الجامعي 2021/2022م، وتمثلت أداة الدراسة في استبانة موجهة للطلبة للتعرف إلى دور منصة المودل التعليمية في تنمية مهارات القرن الحادي والعشرين، لقد خلصت نتائج الدراسة إلى وجود دور كبير لمنصة المودل التعليمية في تنمية مهارات القرن الحادي والعشرين على جميع المحاور وكذلك على المحور الكلي لأداة الدراسة، وحاز محور مهارات التعلم والابتكار على المرتبة الأولى بمتوسط حسابي قدره (3.88)، يليه محور مهارات المهنة والحياة بمتوسط حسابي قدره (3.83)، بينما حاز في المرتبة الأخير محور مهارات الثقافة الرقمية بمتوسط حسابي قدره (3.78)، كما أظهرت النتائج عدم وجود فروق دالة إحصائية في متوسط آراء الطلبة تُعزى للجنس، وأوصت الدراسة بالاستمرار في دعم وتشجيع استخدام منصة المودل التعليمية كنظام لإدارة التعليم الجامعي وبما يلي متطلبات القرن الحادي والعشرين.

الكلمات المفتاحية: منصة المودل التعليمية- مهارات القرن الحادي والعشرين.

Introduction

The current era is witnessing many tremendous technological developments as a result of the congestion of information wealth that has reflected its shadows on various areas of life. The emergence of digital technology represents an important turning point in the history of disseminating and accessing human knowledge, and the educational aspect has received its share of these changes, and those responsible for the education and teaching processes have become aware of the importance of adapting these changes to achieve the desired educational goals.

The skills of the twenty-first century imposed on the various educational systems to provide students with a group of skills that are fundamentally different from those that prevailed in the past years, and more specifically (Abdul Hakim, 2020). This prompted the partnership for twenty-first century skills to develop special and necessary guidelines for learners. These guidelines included a group of skills related to critical thinking, collaboration, judgment, information literacy, media literacy, dealing with technological applications, social skills, leadership, responsibility, economic literacy, competencies digital, flexibility, adaptability, initiative, self-direction and an understanding of global issues. (Sheikh Al-Eid, 2019).

Both Al-Saeed (2018) and (Lee & Schaller, 2016) mention that attention to the development of twenty-first century skills among learners leads to enhancing their positive participation in making the future. It also contributes to developing their scientific thinking, increasing their knowledge economy, and giving them the opportunity to reflect on present events and link them to the past, and increase their ability to face the life changes surrounding them.

Educational platforms are among the most prominent modern technological applications that help in the teaching and learning processes and contribute to the development of educational methods and work to create an educational learning environment that responds to rapid changes (Flac and others, 2019). Enthusiasts of educational technologies believe that using them in the educational system will improve the quality of education, increase its effectiveness and solve its various problems. It will also take into account individual differences and keep pace with the educational view that considers the learner to be the center of the educational process. (Al-Najjar, 2018).

Tantawi (2018) mentions that the prominent feature of educational platforms is continuous and effective communication and this communication is not limited to direct communication between students, but goes beyond accessing their activities and news automatically, commenting on them, expressing opinions on them and discussing them, as well as allowing electronic dialogue between students in a variety of ways. Directions between text, audio and video in a continuously interactive medium.

Universities, as learning and educational institutions, are characterized by individual characteristics that almost do not exist in other educational institutions, namely, they have a functional role and mechanisms to accommodate large numbers of learners in close years and on an ongoing basis and they obtain science, information and multiple skills that affect their personalities and behavior and change their positions from one stage to another. Others in a way that meets their cognitive, skill and emotional needs, especially in the era of rapid changes on the one hand and the clash of civilizations and cultures on the other (Al-Zaboun and Al-Sheikh, 2015).

Recently, interest in educational platforms has increased, especially in the past few years, during which many changes have taken place, especially the arrival of the Corona pandemic (Covid 19), which led to almost completely reliance on e-learning in Palestinian universities in general and the Islamic University- Gaza in particular, which operates officially employing the Moodle platform to be the direct educational mediator that connects students to the university in a way that meets their educational needs and achieves the desired educational goals (Mohammed and Ahmed, 2021).

Electronic platforms are considered one of the most important innovations in digital learning, as they are open all hours of the day and on holidays; Students can access it at anytime and anywhere and comment on its contents, and on the opinions of other students, and it provides access to a huge amount of information and allows students to access websites related to educational courses at the same time, which enhances their scientific ability and their continuous interaction with what raised from topics and ideas (Khbaa, 2019).

The Statement of the Problem

Twenty-first century skills are among the necessary skills that students should possess in order to increase their ability to face various obstacles and problems, increasing their

ability to practice all kinds of thinking, improving their effective communication and practicing the teaching profession in the future, developing their creativity and innovation aspects, and being able to compete in the labor market to achieve the desired educational goals Shereen (2020). The Moodle educational platform is of wide importance in the learning process through its features, most notably the ability to access the Internet and use the e-mail of each student. It is also considered as an educational environment that allows all students to exchange information and facts about the content of the educational content of the study courses. It also allows seeing written and visual learning activities, in addition to evaluating different learning methods (Afuna & et al, 2014). The Palestinian universities in general and the Islamic University- Gaza in particular have worked to meet the needs of learners that keep pace with the global transformations that have occurred in the educational system by employing the Moodle educational platform as a direct educational medium to deal with students. Among the studies that proved the role of the Moodle platform in improving the learning process is the study of Ammar & others (2020), which indicated the role of the Moodle platform in changing students' attitudes towards achieving better learning outcomes than normal learning, and the study of Suleiman and Suleiman (2020), which indicated the role of the Moodle platform in developing the skills of learning electronic test design, and the study of (Kerimbayev, & others 2020), which indicated the role of the Moodle platform in the progress of students in the achievement of educational activities, and the study of Al-Ghamdi and Haroun (2019), which indicated the role of the Moodle platform in increasing academic achievement, and the study of (Butova, & others, 2019) Which indicated the role of the Moodle platform in increasing the efficiency of training students on electronic learning skills, and the study of Yahya&others. (2017), which indicated the important role of the Moodle platform in improving the cognitive achievement and skill performance of the study sample members.

In light of this, the problem of the study becomes clear in answering the following questions:

Study main question:

The problem of the study is represented in the following main question:

What is the Role of the Moodle Educational platform in Developing Twenty-First Century Skills among English Language Students at the Islamic University of Gaza?

Sub-Questions

1. What are the skills of the twenty-first century that should be developed by English language students at the Islamic University of Gaza when they deal with the Moodle educational platform?
2. What is the role of the Moodle educational platform in developing twenty-first century skills among English language students at the Islamic University of Gaza?
3. Are there statistically significant differences in the average opinions of the study sample members about the role of the Moodle educational platform in developing the skills of the twenty-first century, due to gender (males - females)?

Study Hypothesis

There are no statistically significant differences at the level ($\alpha \leq 0.05$) in the average opinions of the study sample members about the role of the Moodle educational platform in developing twenty-first century skills due to gender (males – females).

Objectives of the Study

1. Identify the twenty-first century skills that should be developed among English language students at the Islamic University- Gaza when they deal with the educational platform Moodle.
2. Identify the role of the Moodle educational platform in developing twenty-first century skills among English language students at the Islamic University of Gaza.
3. Revealing of statistically significant differences in the average opinions of the study sample members about the role of the Moodle educational platform in developing twenty-first century skills due to gender (males – females).

Importance of the Study

The importance of this study can be attributed to the following:

1. It is likely to contribute to providing decision-makers in Palestinian universities with important results that help in using the Moodle educational platform in the learning process because of its important role in meeting the educational needs of learners in the current situation.
2. This study may benefit those who design and produce educational platforms to continue to follow up and encourage them to produce them; Because of their

important role in the development of learning skills, especially the skills of the twenty-first century.

3. The study provides a list of the twenty-first century skills that should be developed by undergraduate English language students, and which interested researchers may benefit from when they conduct similar scientific research.

Limitations of the Study

1. Human Limit: The study was limited to a sample of English language students at the Islamic University of Gaza in Palestine who deal with the Moodle platform through their courses.
2. Time Limit: The study was applied in the second semester of the academic year (2021/2022).
3. Spatial Limits: The Islamic University of Gaza.

Definitions of Terms

Moodle Educational Platform: A digital learning management system that provides an integrated electronic learning environment that allows English language students at the Islamic University- Gaza to complete various educational tasks, and provides them with the freedom to interact and communicate with their teachers and colleagues, engage in educational activities.

Twenty-First Century Skills: A group of academic and life skills that are required and necessary in the twenty-first century, which English language students at the Islamic University need to master when dealing with the Moodle educational platform, which are learning and innovation skills, digital culture skills, and career and life skills. It will be measured using the study tool that was specially developed for this.

The Concept of the Moodle Educational Platform

The Moodle Platform is Defined as: One of the free learning platforms on the Internet that provides an integrated learning environment, which includes tools for authoring courses, following up and directing students, adding learning resources such as web pages, multimedia files, building electronic tests and announcing their results. It also provides tools for communication and interaction between students and teachers in order to achieve educational goals efficiently and effectively. (Ammar & others.,2020)

Features of the Moodle Platform: The Moodle platform consists of several units that distinguished it from other platforms, the most prominent of which are the following: (Ooi, & et al, 2018; Abdul Mahdi & others., 2016; Afuna &et al, 2014; Carvalho, & et al, 2013).

- Security and Confidentiality: The Moodle platform has a data security system, and this system is not limited to learning management on records and personal data of

learners; It also includes content and maintains its ownership, in addition to a secure login feature to protect learners' data, which includes their own university numbers and passwords.

- Audio and Video Media: The Moodle platform supports audio and visual media, so the teacher can place audio lessons, video films, and multiple YouTube links for the student to watch and interact with, and he can see them more than once and download them to his own learning device.

-Homework's and Assignments: The Moodle platform allows the ability to set homework and assignments for students to solve, whether immediately or not, and send it to the teacher so that he can be able to correct. It also allows cooperation between students and the ability to exchange their ideas in an easy and smooth manner, and it also allows the teacher to send Moodle answers to assignments to all students at one time.

-Submit Marks: The Moodle platform supports electronic grade placement; Where teachers have a feature to upload grade files on the Internet, and then send them to students at one time. Students can communicate with the teacher and comment on any problem of monitoring grades, and it also allows the teacher to modify the grade after sending it.

-Provide Discussion Forums: The Moodle platform provides a forum in which the teacher and students discuss topics related to the educational process. It also allows them to exchange opinions, add questions among themselves, comment on and discuss them to meet their educational needs.

The researchers conclude that the Moodle platform is one of the modern technological innovations that enjoys unique advantages that will contribute to the development and improvement of education. Therefore, its employment in the field of learning and education requires its investment in a major and effective manner that takes into account its advanced capabilities, thus contributing to the development of the twenty-first century skills for students of all kinds. Their specializations in general and English language students in particular.

Twenty-First Century Skills

The interest of educators in the skills of the twenty-first century appeared in 2002, when the Partnership Foundation established the skills of the twenty-first century, (Partnership for the 21st Century Skills) to define the skills that the learner should possess in the twenty-first century, by integrating them into learning systems and curricula so that learners can keep pace with modern developments (Suto, 2013). A framework has been developed for learning these skills to meet the requirements of the twenty-first century, called twenty-first century skills, as shown in figure (1)

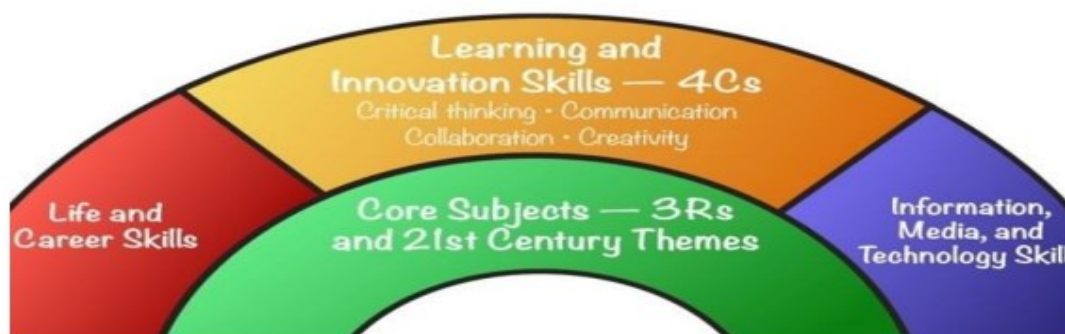


Figure (1) Learning Framework for the Twenty-First Century

(Partnership Century Skills, 2009a: 211)

The Partnership for the Twenty-first Century has categorized twenty-first century skills into the following: (Trilling, & Fadel, 2013)

1. Learning and Innovation Skills: These include critical thinking skills, which include different types of deduction, communication and cooperation skills that allow learners to express their ideas effectively, as well as creativity and innovation skills that allow them to be creative in completing educational tasks, and try to convert ideas into innovative contributions.

2. Digital Culture Skills: These include the skills of accessing information efficiently and effectively, and using scientific information ethically, as well as how to use educational technology as a tool for research, organization and access to multiple digital sources, and developing positive attitudes towards employing technology in the educational process.

3. Professional and Life Skills: These include shoulder skills with different variables, how to accomplish tasks with more than one alternative, the ability to manage and organize time, how to benefit from the experiences of others and their participation in accomplishing educational tasks, and the ability to prioritize and work with others in an atmosphere of positivity.

In light of the previous skills, twenty-first century skills were defined as: (a group of comprehensive skills, attitudes and knowledge that can be interconnected and multidisciplinary and at the same time integrated in different life situations). (Mattison & Weddell, 2018)

The Moodle Education Platform and 21st Century Skills

Educational platforms give learners many important skills that converge directly with the skills of the twenty-first century, such as the skills of dealing with the interface of educational platforms, the skill of building electronic content, interacting with written and audio educational activities, critiquing teaching methods and applying for various educational tests, and communication with faculty members. On the one hand and with colleagues on the other hand, they are all skills that enhance and develop the skills of the twenty-first century, which center around the learner, and give him many scientific

and life skills, the most important of which are critical thinking skills, creativity and innovation skills, communication skills, and skills for using digital technology.

The Moodle platform is one of the most prominent open-source and free educational platforms produced by the Moodle Association, which includes more than 80,000 members of developers representing (7000)^s educational institutions around the world, and the system is Arabised; Where it has an Arabic interface and includes services with advantages, some of which may outperform closed commercial systems, this is why the platform has become used by many educational institutions recently (Al-Yousef and Al-Mushaiqah, 2017).

The Moodle is seen as an educational platform that provides a sophisticated electronic learning environment through the many tools it provides to carry out the required educational tasks, and among these tools is a tool used to build electronic content appropriately (compilation - tab - presentation) and a tool for identifying beneficiaries according to the powers determined by the teacher or educational institution and a communication tool between the site that displays the educational material and the beneficiaries (the learners), time management and organization tools, and other tools that allow the beneficiaries to communicate and interact with each other and communicate with their teachers in order to do joint work in new and interesting ways (Abdul Mahdi and others, 2016).

The researchers conclude that the integration of these skills into the educational system through a single platform that the English Language students deals with will greatly help in achieving many educational goals in learning process that they were unable to achieve for years past, as this platform provides an integrated framework that ensures students' involvement in the learning process and helps them to building confidence, as well as taking responsibility for their own learning; As they are the ones who control the learning process through their access to information and the completion of tasks at any time and from anywhere, in addition to the presence of many alternatives in completing educational tasks, which drives them towards creativity, innovation and leadership in the twenty-first century.

Literature Review

Many previous studies were conducted on the skills of the twenty-first century, including the study of Al-Qawas and Al-Mansoori (2020), which aimed to know the role of the faculties of education in Yemeni universities in providing student teachers with the skills of the twenty-first century. The researchers used the descriptive analytical approach, the study sample consisted of (169) male and female students from the universities of Aden and Ibb al-Yamena, and the study tool was a questionnaire directed to the members of the study sample. The most important results of the study concluded that the role of the College of Education in providing student teachers with the skills of the twenty-first century came to a large extent with an arithmetic average of (3.5). The field of communication and communication skills got the highest average, followed by the field of life and functional skills, both to a large degree, followed by the field of thinking and learning skills, then the field of professional skills, then the field of digital technology skills and all these fields at an average level, and the results also concluded that there are no differences in the degree of acquisition the students' skills of the twenty-first century are attributed to the variables (gender - specialization),

and the study recommended constantly looking into the suitability of education programs with the requirements and needs of the labor market.

Papanastasiou, & others (2019) study aimed to know the effect of virtual and augmented reality in improving students' learning of twenty-first century skills in Norway. The researchers used the descriptive approach; Where the sample of the study consisted of (67) students from different students in various academic levels from kindergarten to university students, the results of the study concluded that although there are many obstacles to the use of virtual reality technologies in education, they have a role in teaching students the skills of the twenty-first century. The study recommended the need to overcome the obstacles that face students' learning of twenty-first century skills, such as anxiety and inattention.

Soliman's study (2019) aimed to integrate technology into education and the role of this in developing the skills of the twenty-first century among faculty members in Egyptian and Saudi universities. The researcher used the descriptive approach; The study sample consisted of (147) faculty members they work in Egyptian and Saudi universities, and the study tool was a questionnaire to measure the role of technology in developing twenty-first century skills. The most prominent results of the study revealed that there is an important large role for integrating technology into education in developing twenty-first century skills. Learning and creativity skills got the highest percentage, followed by digital culture skills, followed by professional and life skills. In addition to, there are no statistically significant differences in the average estimate of the sample members about technology integration and its role in developing twenty-first century skills due to gender. The study recommended good preparation by all parties of the educational process to benefit from the process of integrating technology in education, and to create the appropriate reality for its use.

Mahdi (2018) conducted a study aimed at revealing the effectiveness of a smart learning strategy based on project learning and Google services in providing students with the skills of the twenty-first century. The researcher used the descriptive and experimental approaches; The study sample consisted of (45) male and female students from Al-Aqsa University in Gaza- Palestine, and the study tool was the twenty-first century skills scale. The results of the study concluded that there is an impact of the proposed strategy in providing students with twenty-first century skills in all fields. The study recommended working on expanding the use of modern technologies as a medium for learning, interaction and participation, which contributes to the development of important aspects of students' personality.

Note the diversity of previous studies that dealt with the skills of the twenty-first century is noted through the diversity of its objectives. Despite this diversity, it emphasizes the importance of acquiring and developing twenty-first century skills among the study sample. Especially in light of the changes that have occurred in the past few years, and most of the previous studies stress the importance of educational technologies, the role of the teacher and virtual learning environments, in achieving the requirements of the twenty-first century, and the need to develop educational systems, including educational technologies to meet these requirements, so the study came Complementary and expansionary current to previous studies and in response to its recommendations.

The current study has benefited from previous studies in organizing the theoretical framework, choosing the appropriate study method, building and codifying the tool, choosing appropriate statistical methods, helping in the interpretation and analysis of results, and formulating recommendations and study proposals, while the current study was distinguished from previous studies in the goal it seeks to achieve; It aims to know the role of the Moodle educational platform in developing the skills of the twenty-first century for an important segment of students, who are English language students at the Islamic University of Gaza. The researchers did not find - to their knowledge - a similar study in its aim for the current study.

The Methodology

Study Approach: The study used the descriptive approach, which is one of the approaches that depends on studying reality or the phenomenon as it exists in reality, as an accurate description and expressing it qualitatively or quantitatively in order to clarify the amount and size of the phenomenon (Abbas & others., 2014). The descriptive approach to the objective of the current study, which aims to know the role of the Moodle educational platform in developing the skills of the twenty-first century among English language students at the Islamic University of Gaza.

Study Population: The study population consisted of all English language students at the College of Education at the Islamic University, Gaza, Palestine who are officially registered in the lists for the second semester of the academic year (2021/2022) and their number is (350) male and female students.

Study sample: The study sample represented approximately (30%) from the original community, and the sample was chosen by random method, where the number of its members was (98) male and female English language students at the Islamic University of Gaza.

Table (1) shows the general description of the study sample according to its variables.

Table (1): Distribution of the Study Sample According to the Gender Variable

Variable	Variable Levels	Repetitions	Percentage
Gender	Male	36	36.73%
	Female	62	63.27%

Study Tool: The questionnaire was used as a tool for collecting study data, which is a form related to a specific topic that is being filled out by the study sample members. The process of preparing the study tool went through the following steps:

1.Determine the Goal of the Study Tool: The study tool aims to determine the role of the Moodle educational platform in developing the twenty-first century skills among English language students at the Islamic University of Gaza.

2.Determine the Fields and Items of the Study Tool: The educational literature and a set of previous studies related to the issue of the twenty-first century skills were reviewed, and the most prominent of these studies are such as: Al-Qawas and Al-Mansoori (2020), (Papanastasiou & others 2019), Salliman (2019), Mahdi (2018), (Gaskin, 2017), (Costa, & Carrilho, 2016)and Weber, (2015).

The views of some experts and specialists in educational curricula and some educational specialists, were also surveyed on the fields of twenty-first century skills that should be developed among English language students and the items of each fields,

and in light of this, three fields of twenty-first century skills were formulated to show the study tool in its initial form, consisting of out of (29) items.

3.Determine the Study Tool Instructions: Some instructions have been developed that help and facilitate the process of filling out the study tool, and an example is provided showing how to answer its items.

4.Determine Corrective Measures: The five-point (Likert) scale was used to determine the role of the Moodle educational platform in developing twenty-first century skills; So that the degree (5) was given to the response that is very large, and the degree (4) to the response is great, and the degree (3) to the response is medium, and the degree is (2) to the response is little, and the degree is (1) to the response is very little and in order to interpret the results. The values of the arithmetic mean contained in the following table (2):

Table (2): The Values of the Arithmetic Mean Corresponding to the Study Tool Categories

#	Response Estimate	Arithmetic Mean
1	Very large	4.20 and more
2	Large	3.40 – 4.20
3	Medium	2.60 – 3.40
4	Little	1.80-2.60
5	Very little	1.80 and less

5.Determine the Validity of the Study Tool

The validity of the study tool was verified in two ways, as follows:

A) Referee Validity: The validity of the questionnaire was apparently verified by presenting it in its initial form and consisting of (29) items to a group of arbitrators and specialists in the field of curricula and educational technologies, in addition to a group of technology supervisors who work in the educational field. The arbitration dealt with the accuracy of the items placed and its affiliation with the fields of twenty-first century skills, its scientific and linguistic validity, Their observations were collected about the relevance of the items to their fields, their clarity, the soundness of the wording, and the addition and deletion of what they deem appropriate, whereby three items were deleted: “provide activities that develop the ability for participatory learning”, “urge solving problems in an unfamiliar way”, and “contribute to in developing a sense of responsibility among students” so that the questionnaire in its final form consisted of (26) items distributed over three fields as in the following table (3):

Table (3): Description of the Fields of the Questionnaire and the Number of Items for Each Field

#	Field	Number of Items
1	Learning and innovation skills.	8
2	Digital culture skills.	9
3	Professional and life skills.	9
	Total items	26

B) Internal Consistency Validity: The internal consistency of the questionnaire was verified by applying it to an pilot sample of (30) students of Islamic University-Gaza from outside the study sample. Where the correlation coefficients (Pearson) were calculated between the degree of each item and the total degree of the tool, as well as the correlation coefficients of the degree of the study tool's fields with its total degree. Table (4) and Table (5), respectively, indicate the results that were reached.

Table (4): Correlation Coefficients of The Study Tool Items with Their Total Score

#	Correlation Coefficients	#	Correlation Coefficients	#	Correlation Coefficients	#	Correlation Coefficients
1	**0.772	11	**0.650	21	**0.689	31	**0.811
2	**0.781	12	**0.687	22	**0.518	32	**0.636
3	**0.695	13	**0.667	23	**0.490	33	**0.877
4	**0.761	14	**0.669	24	**0.752	34	**0.824
5	**0.828	15	**0.623	25	**0.641	35	**0.845
6	**0.621	16	**0.821	26	**0.786	36	**0.852
7	**0.777	17	**0.831	27	**0.812	37	**0.884
8	**0.695	18	**0.671	28	**0.644	38	**0.775
9	**0.755	19	**0.744	29	**0.791	39	**0.728
10	**0.658	20	**0.759	30	**0.823	40	**0.845

The value of the theoretical (Pearson) correlation coefficient at the level ($\alpha = 0.01$) and degrees of freedom (29) = (0.456)

Table (5): Correlation Coefficients of the Study Tool's Fields With its Total Score

#	Field Name	Correlation Coefficients
1	Learning and innovation skills.	**0.866
2	Digital culture skills.	**0.823
3	Professional and life skills.	**0.852

It is clear from Table (4) that the correlation coefficients of the study tool items with the total score ranged between (0.518-0.884), and the values of the correlation coefficients for the fields of the study tool and the total tool ranged between (0.823-0.866) as shown in Table (5). All of these the values are statistically significant at the level ($\alpha = 0.01$), which confirms the consistency of the items of the questionnaire and its fields, where the value of the theoretical (Pearson) correlation coefficient is at the level ($\alpha = 0.01$) and degrees of freedom (29) = (0.456).

6.Determine the Stability of the Study Questionnaire: The reliability of the study instrument was verified by calculating the Cronbach Alpha stability coefficient as the appropriate method in such cases; It determines the stability of the subjects' response to the study tool items; Where the stability coefficients were calculated for each of the fields of the study tool, as well as the overall stability coefficient of the tool. Table (6) shows the results that were reached:

Table (6): Values of (Cronbach's Alpha) Stability Coefficients for the Fields of the Study Tool as Well as the Total Coefficient

#	Field Name	Number of Items	Cronbach's Alpha Stability Coefficient
1	Learning and innovation skills.	8	0.817
2	Digital culture skills.	9	0.922
3	Professional and life skills.	9	0.778
Overall stability of the tool		26	0.814

It is evident from Table (6) that the values of the stability coefficients vary for the fields of the study tool; Where it ranged from (0.817) to a value of (0.922), while the total stability coefficient of the study tool was (0.914), and all these values are significant indicating the stability of the study tool.

- Statistical Methods Used:

-Arithmetic means and standard deviations, in order to know the role of the Moodle educational platform in developing the twenty-first century skills from the point of view of the study sample members.

-T-test for two independent samples, in order to detect a statistically significant difference in the average opinions of the study sample members about the role of the Moodle educational platform in developing the twenty-first century skills, which may be attributed to the gender variable (male – female).

Results of Study

Answers to Study Questions

Following are the analyses of the study findings in connection with the study questions and hypotheses.

1.Answer of the First Question

The **first** study question was formulated as follows: **What are the skills of the twenty-first century that should be developed by English language students at the Islamic University of Gaza when they deal with the Moodle educational platform?**

This question was answered in the research procedures when talking about building the study tool, which is to identify the skills of the twenty-first century and its fields, and the items of each field.

2.Answer of the Second Question

The **second** study question was formulated as follows: **What is the role of the Moodle educational platform in developing twenty-first century skills among English language students at the Islamic University of Gaza?**

To answer this question, the arithmetic means and standard deviations of the main fields of twenty-first century skills were arranged in descending order, for the purpose of analyzing and interpreting them. Table (7) shows the most prominent results that have been reached.

Table (7): The Descending Order of the Role of the Educational Platform in Developing Twenty-First Century Skills, According to the Arithmetic Means

#	Field Name	Arithmetic Means	Standard Deviation	The Role of Moodle Platform	Rank
1	Learning and innovation skills.	3.88	1.04	Large	1
2	Digital culture skills.	3.78	1.05	Large	3
3	Professional and life skills.	3.83	1.10	Large	2
Total Marks		3.83	1.12	Large	-

Table (7) shows the descending order of the role of the Moodle educational platform in developing the skills of the twenty-first century, according to the arithmetic means of the views of English language students about the fields of twenty-first century skills. The total arithmetic mean was (3.83), corresponding to the role of (large) in the sense that there is a significant role for the Moodle educational platform in developing the skills of the twenty-first century for English language students at the Islamic University of Gaza. This agrees with the results of most previous studies, such as Al-Qawas and Al-Mansoori studies (2020), which concluded about a major role for faculties of education in developing the skills of the twenty-first century,(Papanastasiou, & others, 2019) .

Which concluded about the effect of virtual reality technologies in teaching twenty-first century skills, Suleiman (2019), which concluded that there is an important role for educational technologies in developing twenty-first century skills, and Mahdi (2018), which concluded about the effectiveness of smart learning in providing students with twenty-first century skills. As for the skills fields of the twenty-first century, the field of learning and innovation ranked first among the fields of skills of the twenty-first century, with an arithmetic average of(3.88), corresponding to the role of (large) for the educational platform Moodle.

This is due to the fact that the students view the Moodle platform as an educational platform that develops learning skills in the first place, and this is in line with the main objective mentioned by the Islamic University of Gaza that employing the Moodle educational platform came in order to provide educational lectures, accomplish tasks and costs for students, especially in light of the increase in the pace of continuous field changes, and this is consistent with the results of Solomon's studies (2019),Where the field of learning and innovation first ranked among the twenty-first century skills fields, while it differed with the study of Al-Qawas and Al-Mansoori (2020), where the field of thinking and learning third ranked among the twenty-first century skills fields. This is followed by the profession and life skills field, which came in second place among the twenty-first century skills fields with an arithmetic average of (3.83). It is matched by the (large) role of the educational platform, and the Moodle develops many profession and life skills for students, especially allowing them to benefit from the experiences of others and manage them to organize time. Exchanging ideas between the students and the teacher on the one hand, and between the students and their colleagues on the other hand. This agrees with the study of Al-Qawas and Al-Mansoori (2020), in which the field of profession and life skills came in second place, corresponding to the role of (large) and it differs with the study of Suleiman (2019), in which the field of profession and life skills came in the last rank among the twenty-

first century skills fields. In the third and last place came the field of digital culture skills, which got the lowest arithmetic average among the twenty-first century skills fields of (3.78), and it corresponds to the (large) role of the educational platform Moodle. Despite the prominent technical aspect of the Moodle educational platform, students view the educational aspect of the platform to a greater degree than they view the digital aspect of it, which is reflected in their views on the field of digital culture skills compared to the fields of learning and innovation, profession and life. This result is consistent with the study of Al-Qawas and Al-Mansoori (2020), in which the field of digital technology came in the last rank of the twenty-first century skills fields, while it differs with the study of Suleiman (2019), in which the field of digital culture came in the second rank of the twenty-first century skills fields.

In order to identify the role of the Moodle educational platform in developing the skills of the twenty-first century in detail, the arithmetic means and standard deviations were calculated for each of the items of the twenty-first century skills fields and the following are the results that were reached.

First: Learning and Innovation Skills:

Table (8): The Descending Order of the Role of the Moodle Educational Platform in Developing the Skills of the Twenty-First Century for the items of the Learning and Innovation Skills Field According to the Arithmetic Means

#	Items	Arithmetic Means	Standard Deviation	The Role of Moodle Platform	Rank
1	Increase my motivation towards learning and getting things done.	3.83	1.18	Large	5
2	Give me feedback according to my scientific ability.	4.00	1.08	Large	2
3	Feel the renewal in the way content and activities are presented.	3.90	1.14	Large	3
4	Helped me develop my scientific ability towards accomplishing educational tasks.	3.82	1.15	Large	6
5	It provides me with a suitable atmosphere that secures communication between me and the teacher.	4.11	1.05	Large	1
6	Contribute to strengthening the principle of flexibility in tasks.	3.89	1.01	Large	4
7	It allows me to be creative in accomplishing educational tasks.	3.76	1.20	Large	7
8	It encourages me to present innovative ideas that contribute to creating cognitive creativity.	3.71	1.31	Large	8
Total Mark		3.88	1.04	Large	-

Table (8) shows the descending order of the role of Moodle educational platform in developing twenty-first century skills for the items of the learning and innovation skills field, according to the arithmetic means. The values of the arithmetic means for the items of this field varied, and the item "provides me a suitable atmosphere that secures communication between me and the teacher" was highest ranked, with an arithmetic mean of (4.11), corresponding to the role of (large) for the Moodle educational

platform, the prominent feature of the Moodle educational platform lies in considering it the main communication tool with the teacher, through expressing opinion and commenting on educational tasks and various activities, and this communication is in more than one direction, sometimes with the teacher and other times with the student, this is followed by the item "Give me feedback according to my scientific ability", which showed an average of (4.00) and is matched by a (large) role for the educational platform Moodle. Feedback is one of the methods of communication with students, as the teacher criticizes and evaluates the students' work through the educational platform Moodle and sends feedback, which may be immediate or after a short period of raising the educational tasks, while the two items "encourage me to present innovative ideas that contribute to creating cognitive creativity" and "It gives me the opportunity to be creative in Accomplish the educational tasks "with the least arithmetic mean of (3.71) (3.76) respectively, In contrast, the (large) role of the Moodle educational platform, and although the Moodle educational platform may encourage creativity and innovation in solving and accomplishing educational tasks, the traditional method of completing and delivering tasks is the most prominent feature. Most students limit their use of the Moodle platform to follow up activities and solve assignments and Homework only. The result of this study agrees with the study of Suleiman (2019) and Mahdi (2018), each of which showed that the development of twenty-first century skills in the field of thinking and learning was at a great level, while it differs with the study of Al-Qawas and Al-Mansoori (2020), where the field of thinking and learning was ranked, the third is among the twenty-first century skills fields, and it corresponds to a (medium) role.

Second: Digital Culture Skill:

Table (9): The Descending Order of the Role of the Educational Platform in Developing the Skills of the Twenty-First Century for the Items of the Digital Culture Skills Field According to the Arithmetic Means

#	Items	Arithmetic Means	Standard Deviation	The role of Moodle Platform	Rank
1	It provides me with up-to-date digital learning resources.	3.82	1.18	Large	3
2	It directs me to search for reliable digital sources.	3.80	1.15	Large	4
3	It encourages me to produce educational software that supports my self-learning.	3.65	1.15	Large	8
4	It develop the technological skills necessary to deal with educational tasks.	3.98	1.15	Large	1
5	It enhances my media culture and links it to scientific issues.	3.63	1.08	Large	9
6	It develops positive attitudes towards the use of technology.	3.78	1.02	Large	6
7	It includes activities that encourage the use of technology in learning.	3.90	1.19	Large	2
8	Employs multiple techniques to broaden my understanding of topics.	3.80	1.17	Large	5
9	Promotes scientific, technological and informational innovations.	3.69	1.24	Large	7
Total Mark		3.78	1.05	Large	

Table (9) shows the descending order of the role of the Moodle educational platform in developing the skills of the twenty-first century for the items of the digital culture skills field, according to the arithmetic means and the values of the arithmetic means for the items of this field varied, the item “Developing the technological skills necessary to deal with educational tasks” highest ranked, with an average of (3.98), corresponding to the (large) role of the Moodle educational platform. Dealing with the Moodle educational platform develops multiple types of technological skills, such as the skills of opening and closing the platform, the skills of sending and creating educational tasks, the skills of importing and exporting various educational files, followed by the item “includes activities that encourage the use of technology in learning”, which an arithmetic mean of (3.90) and is matched by a role (large), which meets with the item before it, as the achievement of The educational activities and tasks that are included in the Moodle platform develop technical skills and encourage their use, While the two items “enhance my media culture and link it to scientific issues” and “encourage me to produce educational software that support my self-learning” scored the lowest arithmetic mean of (3.63) (3.65), respectively. In contrast the (large) role of the Moodle educational platform. Although the educational platform of Moodle has a role in developing digital culture skills, linking this culture to media issues and software production does not receive the attention of students like the rest of the items of this field; As we note that there is a decrease in the arithmetic mean values of these two items compared to the rest of the items. The result of this study agrees with the study of Suleiman (2019) and Mahdi (2018), each of which showed that the development of twenty-first century skills in the digital culture field was at a great level, while it differs with the study of Al-Qawas and Al-Mansoori (2020), Where the field of digital culture ranked last among the twenty-first century skills fields, as well as it differs with the Zamel study (2016), in which all twenty-first century skills fields were at an average level.

Third: Professional and Life Skills:

Table (10): The Descending Order of the Role of the Moodle Educational Platform in Developing the Skills of the Twenty-First Century for the Items of the Profession and Life Skills Field According to the Arithmetic Means

#	Items	Arithmetic Means	Standard Deviation	The Role of Moodle Platform	Rank
1	It enables me to use more than one alternative in solving educational tasks.	3.78	0.96	large	7
2	Help me change my priorities as needed.	3.82	1.15	Large	5
3	Develop the ability to organize and manage time.	3.98	1.00	Large	2
4	It encourages continuous learning and its permanence.	4.00	1.04	Large	1
5	It encourages learning through joint projects.	3.61	1.04	Large	9
6	It encourages me to engage in errands with different individuals.	3.73	1.27	large	8

#	Items	Arithmetic Means	Standard Deviation	The Role of Moodle Platform	Rank
7	Provides activities that develop students' respect for different ideas and values.	3.88	1.11	large	4
8	It urges me to benefit from the experiences of others.	3.80	1.02	large	6
9	It provides me with a comfortable and enjoyable psychological atmosphere for learning.	3.92	1.03	large	3
Total Mark		3.83	1.10	large	-

Table (10) shows the descending order of the role of the Moodle educational platform in developing the skills of the twenty-first century for the items of the profession and life skills field, according to the arithmetic means, and the values of the arithmetic means for the items of this field varied, the item “encourages continuous learning and its permanence” highest ranked with an arithmetic mean of (4.00), which in contrast the (large) role of the Moodle educational platform. If students deal continuously with the Moodle educational platform throughout their university years and through multiple courses in different classes, they gain many new information and skills, they can also face the challenges they face when using the educational platform, and this would achieve the principle of continuing education for them, followed by the item "Developing the ability to organize and manage time", which won an arithmetic mean of (3.98) and in contrast a role (large). One of the most prominent features of learning platforms in general and the Moodle educational platform in particular is to access them at any time and from anywhere; As the learner can access the educational tasks and complete them at the time he wants, which helps him to choose the appropriate time for him and which has an Internet connection, Which develops the skills of managing and organizing time when accomplishing multiple tasks; Rather, its implementation is arranged according to the priority of carrying out these tasks, while the two items “encourage learning through joint projects and” encourage me to engage in tasks with different individuals” scored the least arithmetic mean of (3.61) (3.73), respectively, and they are matched by a (large) role for a platform educational Moodle. This is due to the fact that most of the educational tasks required of students are in the form of individual tasks. The assignments, electronic tests, and writing reports are mostly individual activities carried out by each learner himself. The teacher rarely sets activities that require joint projects to be accomplished by more than one student compared to individual activities. The result of this study agrees with the study of Suleiman (2019) and Mahdi (2018), each of which showed that the development of twenty-first century skills in the field of profession and life was at a great level, while it differs with the study of Al-Qawas and Al-Mansoori (2020), Where the field of professional skills ranked fourth among the twenty-first century skills fields, corresponding to the role of (medium), and it also differs with the Zamel study (2016 AD), in which all twenty-first century skills fields were at an average level.

3. Answer of the Third Question

The **third** study question was formulated as follows: **Are there statistically significant differences in the average opinions of the study sample members about the role of the Moodle educational platform in developing the skills of the twenty-first century, due to gender (males - females)?**

To answer this question, the following null hypothesis was formulated:

There are no statistically significant differences at the level ($\alpha \leq 0.05$) in the average opinions of the study sample members about the role of the Moodle educational platform in developing twenty-first century skills due to gender (males - females).

To test the validity of the hypothesis, a (T)-test was calculated for two independent samples. Table (11) shows the results that were reached:

Table (11): Results of a(T)-test for Two Independent Samples to Reveal the Significance of Differences According to the Gender Variable.

#	Gender	Number	Arithmetic Mean	Standard Deviation	Value (T)	Sig level
1	Male	36	3.79	1.14	0.174	Not Statistically Significant
2	Female	62	3.75	1.02		

T-test value at $\alpha = 0.05$ and degrees of freedom (96) = 1.990

Table (11) shows that the calculated (T) value was (0.174), which is less than the tabular (T) value, which is equal to (1.990), which indicates that the previous null hypothesis was not rejected, meaning that there are no statistically significant differences in the average opinions of English language students at the university On the role of the Moodle platform in developing the skills of the twenty-first century, it is attributed to the gender variable (males – females). This is due to the fact that most of the educational tasks, activities, reports and tests are similar for both genders, which makes their opinions about the Moodle educational platform similar to a large extent. This is consistent with the studies of Al-Qawas and Al-Mansoori (2020) and Suleiman (2019). All of these studies concluded that there are no differences in the average opinions of the members of their samples due to gender (males - females).

Recommendations

In the light of the study findings, the following recommendations are put forward for the different parties involved in the English language teaching and learning process:

1. Continuing to support and encourage the use of the Moodle educational platform as a system for managing university education and employing it in all forms to meet the requirements of the twenty-first century.
2. Implementation of training and educational courses for faculty members on the use of the Moodle platform in the educational process and linking it to participatory learning and project learning.
3. Studying the challenges that may face the use of the educational platform Moodle in university learning and developing the necessary solutions to overcome these challenges.

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