

## **Society 5.0 and the Challenges of Remote Tutoring and Learning and Trending toward it (My School Platform)**

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### Abstract

The research aims to identify the attitudes of female students and teachers of the secondary school level in Jeddah towards remote tutoring and e-learning through the electronic platform of (My School platform). The study population consisted of all female students and teachers in the secondary school level in Jeddah, and the scale was applied to (394) students and (156) teachers randomly, using the descriptive analytical approach. To conduct the research experiment; The two directional scales - which constitute the tool of research measurement- were applied to an exploratory sample of students and teachers not included in the research sample to calculate the stability of the research measurement tool, where the result of Cronbach's alpha was for the mean of the axes of the orientation scale of the students (0.892) and for the mean of the axes of the orientation scale of the teachers (0.851). This indicates that both scales have a high degree of stability that can be relied upon in field application. In addition, research data was collected by conducting semi-structured interviews with a sample of (8) students and (5) teachers who activated the platform. After conducting the research experiment, it became clear to what extent secondary school students and teachers trend to adopt the electronic platform (My School platform). In light of this, the researcher recommends the importance of raising the awareness of the educational community about the use of e-learning and the importance of adopt its degrees and controlling its courses to improve the outcomes of this type of learning and increase interest in it and moving towards it, taking into account the need to pay attention to changing the educational environment into an electronic environment and supporting the electronic learning platform (My School platform) with the features of artificial intelligence, in order to keep pace with the requirements of society 5.0 and the fourth industrial revolution, also training and qualifying must be developed, especially in the field of information and communication technology, for all components of the education process: the teacher, the learner, the administration, and the parents, also providing self-learning skills to students. Finally, the research recommends conducting more similar studies on samples of different study levels (elementary - intermediate) to know the trend of female students towards e-learning.

**Keywords:** distance learning, electronic platforms, female students.

## الملخص

يهدف البحث إلى التعرف على اتجاهات طالبات ومعلمات المرحلة الثانوية بجدة نحو التدريس عن بعد والتعليم الإلكتروني من خلال المنصة الإلكترونية (منصة مدرستي). تكون مجتمع الدراسة من جميع الطالبات والمعلمات في المرحلة الثانوية بمحافظة جدة ، وطبق المقياس على (394) طالبة و (156) معلماً عشوائياً باستخدام المنهج الوصفي التحليلي. لإجراء تجربة البحث. تم تطبيق المقياسين الاتجاهيين - اللذان يشكلان أداة قياس البحث - على عينة استكشافية من الطلاب والمعلمين غير المدرجين في عينة البحث لحساب ثبات أداة قياس البحث ، حيث كانت نتيجة ألفا كرونباخ لمتوسط محاور المقياس التوجيهي للطلاب (0.892) ولمتوسط محاور المقياس التوجيهي للمعلمين (0.851). يشير هذا إلى أن كلا المقياسين يتمتعان بدرجة عالية من الاستقرار يمكن الاعتماد عليها في التطبيق الميداني. بالإضافة إلى ذلك ، تم جمع البيانات البحثية من خلال إجراء مقابلات شبه منظمة مع عينة من (8) طلاب و (5) مدرسين قاموا بتفعيل المنصة. بعد إجراء التجربة البحثية ، اتضح إلى أي مدى يتجه طلاب المدارس الثانوية والمعلمون إلى تبني المنصة الإلكترونية (منصة مدرستي).

في ضوء ذلك توصي الباحثة بأهمية توعية المجتمع التربوي حول استخدام التعلم الإلكتروني وأهمية اعتماد درجاته والتحكم في مقرراته لتحسين مخرجات هذا النوع من التعلم وزيادة الاهتمام به. والمضي قدماً نحو ذلك ، مع مراعاة ضرورة الاهتمام بتغيير البيئة التعليمية إلى بيئة إلكترونية ودعم منصة التعلم الإلكتروني (منصة مدرستي) بخصائص الذكاء الاصطناعي ، وذلك لمواكبة متطلبات المجتمع. 5.0 والثورة الصناعية الرابعة ، وكذلك يجب تطوير التدريب والتأهيل ، خاصة في مجال تكنولوجيا المعلومات والاتصالات ، لجميع مكونات العملية التعليمية: المعلم والمتعلم والإدارة وأولياء الأمور ، وكذلك توفير الذات. مهارات التعلم للطلاب. وأخيراً يوصي البحث بإجراء المزيد من الدراسات المتشابهة على عينات من مستويات دراسية مختلفة (ابتدائي - متوسط) لمعرفة اتجاه الطالبات نحو التعلم الإلكتروني.

**الكلمات المفتاحية : التعلم عن بعد ، المنصات الإلكترونية ، الطالبات.**

## General framework

### Introduction:

The development in the communication and information means has led to a technical revolution in various fields, the most prominent of which is the field of education, and with the emergence and spread of the Internet, there have been serious attempts to invest this in develop education and support it. The Internet has been developed over the past thirty years and has progressed to several stages, starting from (web 1.0) to (web 5.0). It is clear that the field of education has adapted with this development and been affected by it. Where experts point out that (web 1.0) was a read-only network, and the lack of active interaction of user has led to the emergence of (web 2.0) as it gave them the ability to contribute content and interact with other web users. Among its most prominent applications are: Blogging, Social Media & Video Streaming. After that, the web developed into what is known as the semantic web (web 3.0), which led to the improvement of web technologies for creating, sharing and communicating content where its programs can recognize the significance or meanings of data and information available on the network automatically (Abd Muti and Khurinj, 2016); It combines human and artificial intelligence to provide more relevant information. With changing the focusing from learning content to knowing how to access content information when it is needed, (Web 4.0) has been emerged, which is mainly based on linking the meaning and the concept of information, in a way that is characterized by sophisticated intelligence that enables the interaction between human and machine easily and in a way to anticipating his needs before requesting, and among the most prominent and obvious characteristics of using the fourth generation of the web is the increase in the use of smart phone devices, mobile technologies, and their applications. The increasing predictability of a user's need by monitoring their behavior on the Internet led to the emergence of (Web 5.0), which includes applications capable of interpreting information on more complex levels so that it interacts with humans emotionally and logically, and despite the difficulty of simulating emotions, there are actually techniques that can measure their effects and can translate a person's emotions, cognitive ideas, and facial expressions into digital results. This technology is used in developing games, and in military, medical, and educational research.

The educational field has adapted to the stages of Web development and followed a similar attitude starting with (Tutoring 1.0), which focused on memorization, then (Tutoring 2.0), which included more interaction between the teacher, the student and the content in an interchangeable way, and it was the beginning of online learning, this was followed by (Tutoring 3.0), which was based on the belief that content should be readily available, and contributed significantly to the spread of e-learning. With the increasing need to acquire knowledge, skills and innovation, (Tutoring 4.0) has emerged, which was formed by train students to produce innovation and creativity. Learning tools have been developed in (Tutoring 5.0) to interact with students using emotions and facial recognition while ensuring that students acquire the cognitive skills needed by contemporary institutions.

These technological developments have provided an impetus for developing tutoring and learning methods and the technologies used for that. This development has contributed to changing tutoring policies in most countries around the world. The rapid spread of modern means of communication such as computers and the Internet helped create new technological methods such as remote communication (Hassanein, 2011).

### **The problem of the research**

The worldwide outbreak of Corona virus has led many countries to try to develop an appropriate mechanism for tutoring in order to adapt to the current situation of the pandemic without affecting the educational level of students, and the Kingdom of Saudi Arabia was one of these countries which adopted a firm decision regarding the closure of educational institutions on its lands as a precaution, seeking toward counteract the spread of this virus, there was a need to allocate a remote learning platform, so that students could continue their studies, and through supportive work to support the platform technically, the researcher was able to receive and analyze reports. Accordingly; It was noticed that the opinions and preferences of secondary school teachers and students differed about (My School platform). In light of this, this research comes in an attempt to explore the attitudes of secondary school teachers and students towards e-learning via (My School platform),

and thus predict other patterns that may arise. Therefore, the research problem is represented in identifying the attitudes of secondary school teachers and students in Jeddah towards remote e-learning through (My School platform), and the current research problem is in answering the following main question:

**What are the attitudes of secondary school students and teachers in Jeddah towards remote learning and tutoring through the electronic platform (my school)?**

### **The questions of the research:**

- What are the attitudes of secondary school students in Jeddah towards remote learning through the electronic platform (my school)?
- What are the attitudes of secondary school teachers in Jeddah towards remote tutoring through the electronic platform (my school)?

### **The goals of the research:**

1. Measuring the attitudes of secondary school teachers in Jeddah towards remote tutoring through the electronic platform (my school)
2. Measuring the attitudes of secondary school students in Jeddah towards remote learning through the electronic platform (my school)

### **The importance of the research:**

It is hoped that this research will lead to:

1. Assisting those in charge of developing (My School platform) in developing appropriate plans and programs based on the diagnosis of reality.
2. Assisting in predict the future tendencies of female teachers and students towards e-learning with the possibility of developing these tendencies and forming positive trends towards it.
3. Helping to build a base for conducting more research on (My School platform) in order to develop the online platform.
4. Developing proposals and recommendations to decision makers to face the challenges of remote tutoring and to develop e-learning.

### **The limits of the research:**

- Objective limits: Attitudes of secondary school teachers and students towards e-learning (My School platform).
- Temporal limits: the second semester, the academic year 1440/1441 AH.
- Spatial limits: applying the search to Jeddah governmental secondary schools which activated (My School platform)
- Human limits:
  1. The secondary school students who activated (My School platform).
  2. The secondary school teachers who activated (My School platform).

### **The terms of the research:**

**Society 5.0:** This concept refers to a "highly intelligent society", which is a new society in the fifth stage, where it has been created through transformations resulted from scientific and technological innovation, as it is a human-centered society, where products and services are provided to meet various potential needs and to fill economic and social gaps, so that everyone lives a comfortable and vibrant life.

**Attitudes:** It is a relatively fixed organization consisting of feelings, beliefs, and behavioral tendencies towards goals of social importance, groups, events, or slogans.

**E-learning:** An educational system to provide tutorial or training programs for students or trainees anytime and anywhere using interactive information and communication technology such as (Internet, TV channels, e-mail, computers, and teleconferences ...) in a synchronized or asynchronous manner.

**Remote tutoring:** There are elements of the educational process such as the subject, the curriculum, the teacher, students, seats, means of communication, papers and pens, but the communication is not direct because it is done via the Internet.

**My School platform:** It is a unified platform for all levels of study, which provides innovative educational tools for teachers and students, through the interactive classes provided by the platform, which allows students to interact with each other, and between them and teachers, which gives the teacher the ability to evaluate students' scientific skills, and also allows the teacher to hold exams and assigning students to study activities.

## Theoretical framework and previous studies

### ❖ First: Society 5.0

The world is facing a great wave of changes in all aspects of life, such as economics, technology, politics, and many others. Change is only a gateway to opportunities, and imagination is the major key to form the future. Society 5.0 is not a prediction of the future, but rather a concept that highlights future opportunities according to an ambitious vision that Japan presented to the world. In 2016, the Japanese government announced the Fifth Basic Plan for Science and Technology, which aimed to achieve what it calls “Society 5.0” or “Highly Intelligent Society”. The G20 summit held in Osaka in Japan, which was chaired by the Kingdom of Saudi Arabia on December 1, 2019, completed its work by emphasizing the seek to promote global economic growth, it also indicated in its statement to work toward achieve an inclusive, sustainable, safe, trustworthy and innovative society through digitization and promote applying the emerging technology, and sharing the idea of a future society that focuses on human, which is being promoted by Japan in the name of Society 5.0. It is worth noting that the Kingdom of Saudi Arabia has gained global confidence after announcing its Vision for 2030, which is in line with the priorities of the G20, including achieving macroeconomic stability, sustainable development, enhancing human capital, and increasing the flow of trade and investment.

### Second: What is the society 5.0?

The concept of Society 5.0 refers to a "highly intelligent society", which is a new society in the fifth stage that has been created through transformations led by scientific and technological innovation as it is a human-centered society, where products and services are provided to meet various potential needs and fill economic and social gaps, so that everyone leads a comfortable and vibrant life (Fukuda, 2019). By viewing the history of previous societies, we find that they progressed from Society 1.0, which was based on hunting and adapt with nature in order to survive, to Society 2.0, which was formed on the basis of agriculture, increased organization and community building, followed by Society 3.0, which was based on promoting the industry.

Over time, the growth in the innovations increased dramatically worldwide, so there was an increasing need for information sharing that led to the developing toward Society 4.0, which was followed by the emergence of Society 5.0, which is an information society based on Society 4.0, in addition to being striving to create a prosperous human-centered society (see Figure 1), (2017, Harayama).

Salgues (2018) indicates that Society 5.0 is characterized by the following characteristics: (1) The full use of Information and Communications Technologies. (2) It is community-centered. (3) It depends on the people participation; (4) It has shared values: sustainability and inclusiveness.

(5) It based on development and economic growth. Society 5.0 aims to solve various social challenges through integrate the innovations of the Fourth Industrial Revolution (such as the Internet of Things, Big Data, Artificial Intelligence (AI), and Robotics) with all industrial, social, economic and tutorial aspects of life. To achieve this, governments should seek toward:

1. Developing the positive attitude of leaders and societies towards technology.
2. Promoting a culture of digital innovation for millennials.
3. Raising the awareness of the public about the necessity of enhancing human and knowledge resources.

(Darmaji, Mustiningsih & Arifin, 2019).

### **Third: Tutoring in society 5.0**

If today's students are the employees of smart market sectors in the future, then there are some questions about how could the tutoring speak the language of Internet users? How could tutorial design develop topics relevant to the cyber world? How could educators provide personalized content suitable for the digital generation?

The world has witnessed many changes in the tutoring field over the past years due to the development that all sectors have witnessed, the most prominent of which is the technology sector. To answer previous questions, it is necessary to emphasize the importance of adapting the education sector to keep pace with modern developments, and in society 5.0, tutoring will find a stable basis for building the structure through the integration between smart design of educational data and personal learning modules, and linking big data and the Internet of things with artificial intelligence (Opincariu, 2019).

Governments seek to prepare the next generation in order to build the future economy, and this means the need to prepare them to keep pace with the high capacity industrial and automated advances, which requires a workforce that is mastering the technology, and in the fourth industrial revolution and society 5.0, educational institutions need to develop tutorial design strategies in order to develop skills and capabilities that qualify for future jobs, and analyzing the characteristics of education in order to provide high-quality, appropriate and well-targeted tutorial services. The rapid advancement of technology puts an enormous amount of pressure on education and it will be necessary to adapt traditional educational models to keep pace with technological societies.

#### **Forth: Artificial intelligence applications in tutoring**

There are many modern technologies that have contributed to transforming traditional tutoring into smart tutoring, and artificial intelligence is considering among the most prominent of these technologies that have effectively affected the tutorial development. The applications of artificial intelligence in tutoring have enabled the creation of innovative technologies and the provision of advantages that cannot be provided in the traditional environment of tutoring. Among these applications are the following:

#### **Fifth: Intelligent content**

Currently, there is a set of companies and digital platforms interest in creating “smart contents” by converting traditional educational books into smart books, where they use artificial intelligence techniques to help publish textbook content using a smart guide that includes summaries of each chapter of the book, providing the ability to conduct electronic exams through it, and other companies create integrated smart content platforms with integrating content with level and evaluation exercises. Some of these platforms allow teachers to design digital curricula and integrate them with audio and image media, in addition to the possibility of self-evaluation (Abul-Al, 2019).

#### **Sixth: Intelligent tutoring systems**

Intelligent tutoring systems (ITS) are computer systems designed to support and improve the learning and teaching process in the field of knowledge. They provide immediate lessons without the need for the intervention of a human teacher. ITS aims to facilitate learning in a meaningful and effective way using a combination of variety computing and artificial intelligence technologies. (Katie Hafner) defined the smart education system as a system that includes educational programs which contain an artificial intelligence component, as the system tracks students' work and guides them whenever required by collecting information about the performance of each student separately, it can highlight the strengths and weaknesses of each learner, and provide the necessary support for him in a timely manner (Lutfi, 2019).

## Second: Trends

### First: Trends concept

(Allport, 1954) defined the trend as one of the states of nervous mental preparedness that is regulated by experience and has the act of the trending on the response of individuals to different matters and situations, as Hogg and Etal (1998) defined the trend as a relatively stable organizing consisting of feelings, beliefs and behavioral tendencies towards goals of social importance, groups, events, or symbols. Rabi` (1998) defined the trend as a relatively constant acquired willingness that determines the individual's responses towards persons, principles, or ideas, and Thomas who is referred in (Dewidar, 2006, p. 160) indicated that the attitude of the person is the outcome of his behavior and the type of concepts imposed on him by society and the manner in which he perceives various situations in light of his experience and thinking.

### Second: The importance of trends

Behaz and Awlad Haimmouda (2011), on the authority of Abdel Fattah Dewidar, mentioned that social psychologists agreed that trends are of special importance because they form an important part of our life, and because they play a major role in directing social behavior in many situations of social life, and at the same time, it provides us with honest predictions about his behavior in those situations as well as being an important outcome of the socialization process. Trends are responses of acceptance or rejection towards a specific social position or controversial topic.

### Third: Trends components

Akasha (2010) indicated that there are three major components of trends which are:

#### The emotional component:

This component is related to the feelings of love and hatred that the individual feels towards the subject of the trend, so if he loves a topic, he trends toward it, and if he hates a topic, he moves away from it, meaning that the emotional component of the trend is the degree of a person's acceptance of a topic or his aversion to this topic.

#### The mental component (cognitive):

This component represents the information base that the individual has about the subject of the trend, so if the trend is essentially a preference for one subject to another, then this preference process must be based on cognitive and mental aspects such as understanding, distinction and inference, that is, there is a mental aspect and a view of forming trends, Here, we find that people's attitudes differ according to their mental and cognitive levels.

### **Performance component (qualitative), behavioral performance:**

Trends are the directors of the behavior of the individual, they either push him to act positively or negatively towards a topic, meaning that the trend is a performance-oriented component that directs the individual's behavior towards a topic, this direction may be negative or positive.

### **Third: Remote Tutoring**

#### **First: The concept of remote tutoring:**

Remote tutoring is no longer just a process of transferring information and knowledge from the teacher to the learner by technological means only, but rather an education based on a future vision aimed at activating new patterns of learning. The definition of Tinferj (1977) is considered one of the most famous, simplest and most frequently used definitions in remote tutoring journals, and it refers to a term that includes all methods of study and all educational stages that do not include direct and continuous supervision by teachers who attend with their students in the traditional classrooms. But the education process is subject to planning, organization and direction by educational institutions, and the United States Distance Learning Association (USDLA) has defined it as a process of acquiring knowledge and skills by tools to transfer education and information which includes all types of technology or different forms of remote learning. UNESCO considers it as an educational process in which all or most of the teaching is carried out by a person far away from the learner in terms of location and time, with an emphasis that most of the communication between teachers and learners takes place through a specific tool, whether it is electronic or printed.

#### **Second: The goals of remote e-learning (Al-Rashed, 2003):**

1. A rich multi-resource educational environment that serves the educational process in all its axes.
2. Reframe the roles in the way in which the teaching and learning process is concerned, in line with the developments in educational thought.
3. Creating incentives and encouraging communication between the educational process system and communication between home and school, the school and the surrounding environment.
4. Modeling and presenting education in a standardized form through lessons presented in an exemplary form and distinct educational practices that can be repeated, such as: model question banks, model lessons plan, and optimal utilization of audio and video technologies and related multimedia.

5. The transfer of educational experiences by creating communication channels between teachers, trainers, supervisors and all those interested in educational affairs to discuss and exchange views and experiences.
6. Preparing a generation of teachers and students capable of dealing with technology and modern skills.
7. Helping to spread technologies in society and making it a technologically advanced society that keeps pace with developed countries in this regard.

#### **Fifth: Challenges of remote e-learning:**

The educational process is currently facing a real challenge in light of the Corona Covid-19 pandemic, which has pushed educational organizations around the world to face this challenge and try to maintain the progress of the tutoring process by providing a form of education and learning, which is "remote electronic learning". The period of health isolation and social distancing in the previous period revealed the challenges that holding back the progress in this method of learning even in developed countries, which its schools still rely mainly on traditional learning, and among the most prominent of these challenges are the following:

- 1- **Infrastructure and physical equipment:** The weakness or inaccessibility of the Internet and the disparity of families' ability to provide the necessary equipment such as computers constitutes a digital gap and an obstacle to complete the school year of the remote learning system.
- 2- **Tutoring evaluation:** The rapid transition from traditional learning to remote learning has led to an imbalance in building appropriate strategies for the transition to the new learning style, and has led to the failure in building accurate assessment tools to determine the accurate level of students.
- 3- **Technical skills of the teachers:** Qaraan (2020) noted that the education system has witnessed a new form and reality in light of the Corona pandemic, where it has witnessed challenges and dilemmas threatening the education system, the most prominent of which is the teacher's empowerment despite his weak readiness to use technology, educational programs and techniques in his educational practices, in addition to his weak capabilities in skills of electronic presentation in simultaneous education.

#### ❖ **Second: Previous studies**

The study of Barum (2005) aimed at codifying a measure of attitudes towards e-learning among students at King Abdulaziz University and identifying the extent to which students acquire positive attitudes towards this education. A set of results has been reached, the most important of which is the attitudes of King Abd Al-Aziz University students towards remote tutoring is moderate, the absence of statistically significant differences between male and female students in the trend towards distance education, and students of applied colleges are more inclined toward e-learning than students of theoretical colleges.

Also, the study of Durmusa and Kaya (2011) aimed at analyzing the trends of first, second and third grades students of the Department of Educational Computers and Educational Technology at the Turkish University of Ahi Evran towards e-learning (ARDE), in terms of gender, stage and level of knowledge related to e-learning, the attitudes of teacher preparation students towards distance education ranged between neutral and positive, and the differences between the attitudes of third grade students with first grade students towards e-learning were high in favor of the third grade, while there were no significant differences between the two grades with regard to the level of prior knowledge of e-learning.

Al-Ghamdi mentioned (2012) in his study, which aimed to evaluate the effectiveness of the remote tutoring system in Saudi public universities and the students' attitudes towards it, and to identify the obstacles that limit its effectiveness and the students' attitudes towards it. The results of the study revealed deficiencies in the registration and admission methods, the e-courses system, and the tests. The study also revealed high trends among students towards remote learning.

And in a study (Karaduman & Mencet, 2013) which dealt with the attitudes of faculty members, who teach the same course in both traditional education and remote learning in Turkish University of Akdeniz, towards distance learning, it concluded that the faculty members' attitudes towards remote education are positive, and they found that it could be applied in traditional education, taking into account motivate students for this method of learning.

The Abu Khotwa study (2014) aimed to design and form a proposed program for remote training, with the assistance of virtual classes, and to measure its impact on the development of electronic evaluation skills using the (Moodle system), and direct towards remote training among faculty members at the Gulf University. The results showed that the impact of the proposed training program is very high in developing the knowledge and performance aspect of electronic evaluation skills, which indicates the effectiveness of the proposed program in developing electronic evaluation skills, and the trend towards remote training of faculty members.

Al-Saeidy's study (2016) aimed to reveal the trends of faculty members towards e-learning, and the results concluded that the trend towards employing e-learning was high.

The study of Al-Anzi and others (2016), aimed to identify the attitudes of the University of Jordan students towards using (Moodle) software in their learning, and the results indicated that there are positive trends among the study individuals towards using (Moodle) software in their learning. They also referred to the contribution of (Moodle) software in facilitating their learning process, and increasing their classroom participation.

The study of Al-Baitar (2016) also aimed to identify the effectiveness of using remote education in developing the academic achievement and the trend of general diploma students towards remote education in the educational technology course. The results of the study reached the effectiveness of the use of distance education in the development of academic achievement and the trend towards remote education in the educational technology course for general diploma students, the one-year system, the Industrial Education Division.

As for the study of Sezer (2016), it assessed the attitude of (414) students in the first, second and third year at the Faculty of Medicine at Hacettepe University in Turkey towards e-learning, and this study revealed that the students' attitudes towards e-learning were neutral. Students expressed that applying remote learning is very useful in terms of saving time, while some indicated that remote education had limits in communication.

Li and Lee (2016) referred in their studies which aimed at exploring competencies of postgraduate students in the field of computer and identifying their attitudes towards online learning in asynchronous online courses for remote learning at the Graduate School of Education (GSOE) in Taiwan. In addition to examining the relationship between computer literacy and the trend towards online learning for these students, the results revealed a significant positive relationship between computer literacy and the trend towards online learning, while there were no statistically significant differences in the trend towards remote learning according to gender or age group.

As for the study of Al-Jasser (2018), it aimed to identify the impact of using Edmodo on academic achievement in the English language course of fourth-grade female students, and to identify their attitudes towards e-learning. The results of the study showed that there was no significant and important educational impact for using Edmodo in teaching English on developing the achievement test among students of the fourth grade of primary school, and there are no statistically significant differences between the experimental group and the control group in the trend towards learning English through the platform.

#### **The comments on previous studies:**

1. Most of the previous studies have confirmed the existence of positive trends among students and teachers towards remote tutoring, as in the study of Al-Ghamdi (2012), Karaduman & Mencet, (2013), Abu Khotwa (2014), Al-Saidi (2016), and Al-Bitar (2016), Li & Lee, 2016.
2. The study of Durmusa and Kaya (2011 & Kaya) indicated that students have a neutral-positive tendency towards distance education, while Barum (2005) and Sezer (2016) found in their studies a neutral trend of students towards remote tutoring, and this result is compatible with the result of the current study.
3. Most of the previous studies agreed with the current study in the basic research tool (the measure of the trend towards remote tutoring) and the study approach, where most of the previous studies adopted the descriptive analytical approach while few of them used the experimental or survey approach when collecting and analyzing data and information.
4. Some of the previous studies differed from the current study in the research sample, as most of them focused on bachelor students and faculty members.
5. There was an interest in studying the relationship between the trend towards remote e-learning and several variables, most notably: gender, academic stage, academic success, level of knowledge of the concept of remote tutoring, training programs, and years of experience in university work.

## Research tools and procedures

The current research aims to find out the direction of both students and teachers towards remote e-learning via the (My School platform) for female students and teachers in Jeddah city, as this chapter deals with the approach that was followed, the research sample and its variables, the statistical methods used, in addition to the procedural steps of the research.

### First: the approach of the research:

This research uses the descriptive analytical approach, as well as the quantitative and qualitative approaches when answering the study questions, where two measures were applied to measure the attitudes of the students, the first one is to measure the students' attitude and the second to measure the teachers' attitude towards remote e-learning through (My School platform) in addition to using semi-structured interviews with both students and teachers.

### Second: The variables of the research:

- **Independent variable:**

Remote e-tutoring through (My School platform).

- **Dependent variables:**

- a) The Means of the teachers' scores on the scale of attitudes toward e-learning through (My School Platform).
- b) The Means of the students' scores on the scale of attitudes toward e-learning through (My School Platform).

### Third: The tools of the research:

#### First: The questionnaire:

The research tools were used through the following:

#### A. The goals of research tools:

The two research tools aimed to prepare a list of the attitudes of female students and teachers towards remote e-learning via the My School platform, and structured interviews were used with both students and teachers.

#### B. Preparing the research tools:

A preliminary list of the concerned persons' attitudes towards remote tutoring and e-learning was formulated through the My School platform, and a number of paragraphs were initially formulated in the (scale of students' attitude toward remote learning) and (scale of teachers' attitude toward remote learning) to (17), and each paragraph includes five degrees, according to the five-point Likert scale and both scales were divided into three dimensions: trend towards remote learning, classroom activity and communication with others, and learning resources.

#### **Forth: The validity of research tools:**

The validity of the two research tools was verified by verifying the validity of the content by presenting the paragraphs of the two scales in their initial form to (5) specialized arbitrators. The structural validity was also verified by calculated the internal consistency coefficients of the two questionnaires through calculating the Pearson correlation coefficient. The results indicated that all Pearson correlation coefficients between the axes paragraphs and the total score of each axis are statistically significant at the level of significance (0.01) and (0.05).

#### **Fifth: The stability of research tools:**

##### **1- Measuring the stability of the research tool to measure the students' attitude towards remote learning:**

To measure the stability of the study tool (the questionnaire), the researcher used (Cronbach's alpha (a)) tool to ensure the stability of the study tool on an exploratory sample consisting of (30) students who were excluded from the total sample, and table (7) explains the coefficients of study's stability, and after calculating the validity and stability of the questionnaire, 4 paragraphs were excluded, the total of the paragraphs became (20) paragraphs, because of the value of the significance coefficient is less than the minimum acceptable stability of the paragraphs.

**Table (1): The stability of study axes**

Axis	# of paragraphs	Cronbach's alpha (a)
First: Trend toward remote learning	11	0.821
Second: classroom activity and communication with others	5	0.747
Third: learning resources	4	0.915
<b>The overall stability of the scale</b>	<b>20</b>	<b>0.892</b>

The overall stability coefficient for the study axes is high, which is (0.892) for the total of 20 paragraphs of the questionnaire, while the stability of the axes ranged between (0.747), as a minimum, and (0.915), as a maximum, and this indicates that the questionnaire has a high degree of stability and can be relied upon it in the field applying of the study according to the Nanli scale, which adopted (0.700) as a minimum value of stability.

## 2- Measuring the stability of the search tool to measure the orientation of the parameters towards remote learning:

To measure the stability of the study tool (the questionnaire), the researcher used (Cronbach's alpha(a)) to ensure the stability of the study tool on a pilot sample consisting of (30) parameters that were excluded from the total sample, and the table (8) clarifies the study's stability coefficients, and after calculating the validity and stability of the questionnaire, (3) paragraphs were excluded, and the total number paragraphs became (17), because of the value of the significance coefficient is less than the minimum acceptable stability of the paragraphs.

**Table (2): Stability of the axes of the scale of the teachers' trend towards remote learning**

Axis	# of paragraphs	Cronbach's alpha (a)
First: Trend toward remote learning	8	0.876
Second: classroom activity and communication with others	5	0.903
Third: learning resources	4	0.777
<b>The overall stability of the scale</b>	<b>17</b>	<b>0.851</b>

The general stability coefficient for the study axes is high, and the overall was (0.851) for (17) paragraphs of the questionnaire, while the stability of the axes ranged between (0.777), as a minimum, and (0.903) as a maximum, and this indicates that the questionnaire has a high degree of stability that can be relied upon in the field applying, and after calculating the validity and the stability of the questionnaire, (3) paragraphs were excluded, and the total number paragraphs became (17), because of the value of the significance coefficient is less than the minimum acceptable stability of the paragraphs.

### Second: Semi-structured interviews:

To collect data in this research, individual interviews were conducted with (8) students and (5) teachers who had activated the e-learning program (My School platform) from secondary level, and several questions were asked in these interviews that focused on various aspects related to remote tutoring through (My School platform), and to ensure the coverage of all aspects, a guide for these interviews was prepared as shown in the following table:

**Table (3): Examples for the questions during interviews with students**

#	Question
1	Did you study remotely before? What is your opinion about remote study?
2	What are the positives and negatives of remote studying through the platform from your point of view?
3	Do you think that the remote study through the platform showed your true level of study?
4	Do you want to continue the remote study through the platform? Why?

**Table (4): Examples for the questions during interviews with teachers**

#	Question
1	Did you teach remotely before? What is your opinion about remote teaching?
2	What are the positives and negatives of remote studying from your point of view?
3	Do you think that the remote study through the platform showed the true level of students?
4	Are the evaluation tools available in remote learning through the platform appropriate and sufficient for evaluation?
5	Do you want to continue the remote teaching through the platform? Why?

The duration of the interviews ranged between (15-20) minutes, where all aspects of the research were covered, and these interviews were conducted by phone in addition to the social media software (Telegram) where the interviews were recorded through it,

because direct contact with students or teachers was not possible due to the conditions of spread of Coronavirus (COVID-19), and at the beginning of each interview, it was confirmed that the other party had the right not to answer a specific question or end the interview without providing any excuse, and to assure that the registration would be confidential and not available to anyone but the researcher and would only be used for the purposes of research.

### **The results of the study:**

- **Presenting the results related to the first main question of the study:**

#### **What are the attitudes of secondary school students in Jeddah towards remote learning through the electronic platform (my school)?**

To answer this question, the two tools (the questionnaire) and (the semi-structured interview card) were used, and they were a rich and varied source that helped produce accurate results, and the two tools participated in answering the first question. It began by presenting the answers of the questionnaire tool sample for high school students in Jeddah, then presenting the results of the analyzing the interview card data.

### Questionnaire:

The first tool is the questionnaire, and the frequencies and percentages of the responses of the study sample individuals were used on each of the questionnaire paragraphs related to the students' trend toward remote learning through the electronic platform (my school), then the arithmetic means and standard deviations for these responses were calculated, in order to measure the degree of this trend on the three axis of the questionnaire.

**Table (5) A summary of the descriptive data of the arithmetic mean of response degree of the sample respondents (students) towards remote learning**

Axis	Standard deviation	Mean	Response degree	Class
Trend toward remote learning	0.8020	2.910	Medium	3
classroom activity and communication with others	0.913	2.934	Medium	2
learning resources	0.992	3.244	Medium	1
<b>The mean of response degree and standard deviation of sample individuals</b>	0.902	3.029	Medium	-

### Semi-structured interview Card:

The results were analyzed by the method used in the qualitative research approach according to the strategic of Thematic Analysis, as shown by (Braun & Clarke, 2006), where they indicate that this method of analyzing qualitative data is one of the most used qualitative methods in Educational and social studies. Data were analyzed after downloading the interviews according to the following steps:

1. Reading data in depth, coding relevant words and phrases.
2. Re-reading these symbols in terms of the axes to conclude central issues.
3. Naming each idea, as it represents the appropriate theme for all the previously mentioned sub-ideas.
4. Reviewing the themes that have been identified, and searching for ideas to integrate more themes with each other.
5. Conducting final review of the names of the themes to choose more meaningful names for each theme; noting that each theme includes the main ideas of the interviews.
6. Discussing each theme separately in order to clarify the nature of the ideas contained within it and in the natural context of the meaning.

Three main themes were reached, which were presented in the form of main ideas: Including the colloquial language of the interviews, taking into account giving pseudonyms for each interview according to the following:

### **Technical obstacles**

It refers to the most important technical obstacles that students faced during remote learning, which affected the progress of the educational process. The qualitative data revealed difficulties to access to the platform using mobile device. S4 expressed that by saying “It is difficult to use it by a mobile phone, while it is easy by a laptop”, She added in another place, “where assignments cannot be sent via mobile phones for girls who own a mobile and do not own a laptop”. S7 said: “When I run the platform using mobile, it does not work well”. Students mentioned to the errors during evaluating the assignments sent using mobile, S4 said: “when we conduct tests via mobile, we choose the correct answers but it appears wrong”. Many students expressed their dissatisfaction with the absence of reminder messages about assignments or tests, and this is what S1 indicated to; “Sometimes it appears that we have an assignment or test without receive any message about that”. S5 has confirmed that: “Sometimes I do not find any data or I do not find any available test even though my friends sometimes enter into the platform and find that and I enter into it at the same time and I do not find my assignments”. Both S6 and S7 added, respectively: “The assignment or exam may end without me knowing”, “It is hard to enter the platform several times to see if there are short-term assignments that the teachers asked for”.

### **Communicating with teacher**

The data revealed that a group of students found it difficult to communicate with teachers through the platform compared to traditional method of education, as it was possible to ask the teacher questions directly during the class, and some students indicated that their real level does not appear compared to their level inside traditional class and this is what I literally expressed in S3: “There was no effective communication between us and our teachers, and following them through the Ain Channel is mandatory, we all understood them. Praise be to God we followed them through the Ain Channel, but there was no effective communication, I mean if there was a point that we did not understand We cannot talk to them, which is the opposite when we are with our teachers”.

Student S8 pointed out that the platform did not allow her to appear at her true level due to the lack of communication with the teacher: She answered the question in this regard: “I do not think, because in the traditional class the situation is not that, where there is interaction with the teacher, so she asks and answers and interacts with her more. This allows me to appear in true level”.

S4 added in this regard: “I never showed my true level, because it was a new experience and even the teachers had difficulty entering it, and they did not give us points and rewards, meaning I did not notice much interaction”.

## Learning resources

Learning resources are the sources that enable the student to obtain the information he needs and that satisfies his interests, whether this need is educational, informational, entertaining, or cultural. Based on the results of the data, the student S7 praised the ease of accessing the learning resources on the platform: “The way to access the lesson is easy. I go to learning materials and choose what is appropriate, it is easy”. In addition to the above, S3 mentioned about the possibility of viewing more than one way to explain the lesson: “There is a possibility to watch more than one explanation of one lesson, meaning that we are not limited to one explanation, but rather we can see several explanations any time. S2 said: “There is a clear saving of effort and time, and there is a possibility to attend the lecture more than once and at any time”.

**The study concluded, through analyzing the data obtained from the semi-structured interview card, results in line with the results of the questionnaire through the following points:**

1. Some technical issues limit the fully benefit from My School platform.
  2. Asynchronous education lacks effective communication between student and teacher compared to synchronized or traditional direct education.
  3. Ease of access to learning resources and the availability to access to them any time.
- **Presenting the results related to the second main question of the study:**  
**What are the attitudes of secondary school teachers in Jeddah towards remote tutoring through the electronic platform (my school)?**

To answer this question, the two tools (the questionnaire) and (the semi-standardized interview card) were used, where these two tools were used to answer the first question. It began by presenting the sample answers for the questionnaire tool for secondary school teachers in Jeddah, then presenting the results of the interview card data analysis.

## Questionnaire:

The first tool is the questionnaire, and the frequencies and percentages of the responses of the study sample respondents were used for each of the questionnaire paragraphs related to the direction of the students towards remote learning through the electronic platform (My School platform), then the arithmetic means and standard deviations of these responses were calculated, in order to measure the degree of this trend on the three axis of the resolution.

**Table (6) A summary of the descriptive data of the arithmetic mean of response degrees of the sample respondents (teachers) towards remote learning**

Axis	Standard deviation	Mean	Response degree	Class
Trend toward remote learning	1.190	3.248	Medium	2
classroom activity and communication with others	0.876	2.918	Medium	3
learning resources	0.738	3.736	High	1
<b>The mean of response degree and standard deviation of sample individuals</b>	0.935	3.301	Medium	-

#### **Semi-structured interview Card:**

The results were analyzed according to the method used in the qualitative research method, with the same steps used in analyzing the aforementioned students' interview card.

Three main themes were reached, which were presented in the form of main ideas: Including the colloquial language of the interviews, taking into account giving pseudonyms for each interview according to the following:

#### **Technical issues**

It refers to the most important technical obstacles that face teachers during remote tutoring, which may affect the quality of education provided, and the qualitative data revealed the extent of the impact of the lack of computers and the weak or sometimes interruption of Internet on the quality of educational process. As T1 mentioned: "If the Internet is shut off for one reason or another, or a problem occurs in my device, the teaching process will stop because I am the teacher, and this is a hindrance and constitutes the biggest negative of remote tutoring". T3 indicates that the students' lack of internet affects their motivation to learn, as she verbally mentioned: "The decrease in motivation to learn due to the lack of a device for the student or the unavailability of the net". Technical failures and problems do not stop at the apparent limits of the issue, but rather go beyond them to the psychological aspect, which appears in the form of anxiety and tension due to fear from the possibility of failure to deliver assignments on time, as stated in the answer of T2: "Technical problems create a kind of tension, and this is what I noticed many times while using remote tutoring to send assignments".

There is another aspect that may contribute to the increase in the volume of the difficulties and obstacles that teachers may face during remote tutoring, which is the weakness of the teachers' technical skills, as T3 mentioned that one of the disadvantages of distance learning is: “Female teachers do not use digital technology in a way that enables them to deal with this technology, there must be training for the teachers so that they can use it professionally”.

### **Communicating with students**

Communicating is meeting and compatibility, and it may mean frequency, which is the opposite of discontinuity, as it is considered a method by which people reach a state of understanding, and it is through the exchange of information, ideas and feelings, and by which one person will be the sender and the other is the receiver, and the importance of effective communication between the student and the teacher stems through the proper transmission of the educational message in order to achieve the desired educational goals. The data showed that several participants found it difficult in one way or another to communicate with the students, Where T3 indicated: “I do not want to continue teaching remotely through the platform because of the difficult communication with the students”, T5 added: “Due to the difficulty of using and inability the students to enter the platform due to the financial conditions and the lack of availability of the fast Internet, there was a difficulty in communicating with the students to the extent that I communicate with them in another way which is (WhatsApp) because they did not respond through the platform nor through e-mail”. Some teachers noted the absence of eye contact through remote tutoring, as T1 stated: “There is difficulty in communicating with students through the devices' screens, as there is no eye contact.” T5 said: “I consider the platform as a temporary solution to exceptional circumstances such as an epidemic, schools suspensions or severe rain, it is wonderful because it helps in the continuation of the educational process, but it is a lifelong thing, and I do not want to continue it, and as a teacher I lost the visual contact, the discussion and dialogue with the students”. This weakness in communication has made it difficult to determine the true level of the student due to the inability to verify the student's self-reliance in solving assignments or tests, and this is what I mentioned verbatim T3: “There is a need to conduct tests for students and assign them to the assignments. It is natural for all students to cheat and open books, and it will not be possible to distinguish between an excellent student and a weak student”. T1 added of the platform: “The real level of the student will not appear, so it is possible for her to seek the help of the book or her classmates”.

On the other hand, T1 praised that the platform helped avoid the problems of manage the classroom: “Remote tutoring is very nice, as there is no problem with managing the classroom, such as the conversations between students in the classroom, so this is comfortable for the teacher in terms of remote tutoring”. She added that the platform strengthened the issue of individual differences, she said: “There is an important feature for remote tutoring which is considering the individual differences, I can spend a long time with a weak student, that is, I give her the necessary time, for example, to raise her level by appropriate applications without affecting the finest student, and at the same time I can present to the finest student the appropriate exercise without disturbing the weak level student”.

### **Evaluating tools**

Evaluation is one of the important components of the curriculum system, and evaluation in the field of educational technology has received great attention, especially with the emergence of many technological innovations in education in the recent period, and educational programs have been built in light of these innovations, especially e-learning programs, which its evaluation has become an urgent necessity, in order to demonstrate the extent to which educational goals have been achieved. The data revealed that there are several observations regarding assessment tools on my study platform, the most prominent of which is the limited assessment tools, as T3 said: “It was not sufficient and did not measure the real level of the student and I did not feel that it was sufficient. T2 also clarified that the tools' limitations were due to their inadequacy with the nature of all materials, she mentioned: "Some texts need clarification and memorization. There is no real tool on the platform that measures the skill of memorizing and remembering, and also the skill that the platform cannot measure, for example, the correct writing skill of elementary school students. Also in the English language subject there are skills that the platform cannot measure like the skill of speaking. Technical and programming problems affect the accuracy of the results of automatic correction of the assessment tools, as T3 said: “Assessment tools are available on the platform, but they evaluate the students' answers as wrong, even though their answers are correct so that the students' grades will be lost”.

**As a result of analyze data obtained from the semi-structured interview card, consistent with the results of the questionnaire, the study concluded the following points:**

1. Some technical issues limit the full use of My School platform.
2. The platform contributes to raise the level of technical skills for some female teachers.
3. Asynchronous tutoring reduces the quality of students' learning, and affects the effectiveness of communication between student and teacher.
4. The limited assessment tools in My School platform, and their lack of suitability for some education subjects.

### Recommendations:

- Raising the awareness of the educational community about using remote e-learning, and working to improve confidence with this type of education.
- Adopting remote tutoring as a formal educational option, legislating its degrees and controlling its course, will improve the outcomes of this type of learning and increase interest with it and the trend towards it.
- The need to interest in changing the educational environment to an electronic environment through its material and moral components, and to encourage male and female teachers to use e-learning in teaching.
- Increase the interest in training and rehabilitation, especially in the field of information and communication technology, for all components of the educational process: the teacher, the learner, the administration and the parents, through practical applications and field practice in the qualification processes, transfer the knowledge, skills and values.
- Enriching the training program for male and female teachers in Saudi universities with courses related to e-learning.
- Training male and female students on self-learning skills, and using computers and the Internet in the learning process.
- Adopting new credible and objective evaluation forms, creating formative and dimensional evaluation tools, and adopting technical standards that achieve transparency, fairness and equal opportunities.
- Supporting the electronic learning platform (My School platform) with the features of artificial intelligence in order to keep pace with the requirements of society 5.0 and the fourth industrial revolution by enabling the system to measure and analyze learning results, and to enable the teacher to follow the progress of each student and intervene if necessary, in addition to including individual learning paths and social interaction with other students through predictive analytics based on artificial intelligence.
- • Conducting similar studies on samples from the different educational levels (elementary - intermediate) to find out the students' trend towards remote e-learning.

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