

The virtual school as a mechanism to promote distance education in light of the Corona pandemic

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Abstract:

the virtual school is considered one of the most important virtual educational institutions that have been approved by countries in light of the Corona pandemic to ensure the progress of the educational process, and this is through preparing an interactive electronic platform between the teacher and students, through which he receives the various lessons and curricula that are presented in attendance, but they differ in being Its educational operations are based on modern means and technologies and electronic platforms.

Based on the foregoing, this article came to discuss the issue of virtual schools, which is in line with the current events and the health crisis that afflicted the countries of the world, which is the Corona or Covid 19 pandemic, considering that it is one of the mechanisms that contribute to the promotion of distance education, where we dealt with the types of virtual schools. With a mention of its most important characteristics, advantages, advantages and disadvantages, the most important global experiences in the field of applying virtual schools and the difficulties facing their application.

Keywords: virtual school, distance education, electronic platforms,
corona pandemi

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1. INTRODUCTION:

Education is one of the most important and sensitive sectors of special interest and renewal across all societies.

Perhaps the most important manifestations of the renewal witnessed by the education sector, we find the adoption of technology and digital technology as an aid mechanism in overcoming many challenges and problems. Technology and focus on integrating technological and digital media in all aspects of the educational process by educational institutions, in line with the digital transformation witnessed by the global education system, This is in line with the digital transformation witnessed by the global education system, which was the beginning of the emergence of a new field of education, which is distance education "virtual environments and e-learning" in which interaction takes place between both the teacher and the learner with the adoption of the same programs and curricula in the presence education, but here by default, The emergence of this type of education is the real beginning of the emergence of the concept of the virtual school, which is one of the forms of educational renewal and one of the most important mechanisms that have been adopted by the countries of the world in facing the traditional problems that their system has known, but it has emerged more during the crisis and the Corona pandemic, which arranged It resulted in a complete closure and paralysis in educational institutions and a halt in the course of the educational process. and an important means in facilitating the dissemination of learning and in over coming this health crisis and its traditional problems. Education through virtual schools was a parallel path to traditional urban education. Many countries were able to prove its efficacy despite the difficulties encountered in its application.

From this point of view, we tried, through this article, to learn about the role of virtual schools in promoting distance education in light of the Corona crisis, so the problem of the study was as follows : What is meant by a virtual school ? What is the importance of applying these schools in the education sector ? What are the most important requirements for its application and success, whether material, human or technological ? How have virtual schools contributed to changing the job roles of teachers in light of the pandemic ? And what are the most important global experiences in the field of applying this type of schools ? And what are the most important difficulties that face its application ? .

2. the conceptual implications of the study :

2.1 Virtual School :

It is "that which does not have a specific place on the ground, and where students study from their homes interactively, as if they are on seats in the classroom, and this means that the student is in direct contact with the class teacher, through the closed circuit or the Internet." (Al-Shuaibi, April 2021, p. 40).

Procedural definition :

Procedurally, we can define the virtual school as one of the most important ways and means in which the educational process takes place remotely, meaning that student receive lessons from their homes, but within an interactive range with teachers, through multiple means of communication and in an electronic format.

2.2-Online education :

It is known as an innovative way to deliver accessible learning environments, which are well-designed, interactive and learner-centered, to any individual, any where or anytime, by utilizing the features and resources available in many digital technologies

together with other types of educational materials suitable for open and flexible learning environments. (Al Roqi Al Otaibi, 2019, p. 234).

Procedural definition :

It is one of the educational systems in which students are far from the university and professors, where education is through multiple means of communication, where lectures are presented in an electronic format.

2.3 Corona (Covid 19) :

Covid-19 disease is an infectious disease caused by the newly discovered Corona virus, and there was no knowledge of the existence of this virus, and this emerging disease appeared before the outbreak of the outbreak in Wuhan in December 2019

(http://www.unrwa.org/sites/default/files/health_awareness_on_coronavirus_civi)

Procedural definition :

It is a dangerous virus that causes diseases at the respiratory system level in humans, as it comes in the form of influenza, which may some times lead to death in humans, especially the elderly, those with chronic diseases, and those with fragile and weak immunity.

3. The concept of a virtual education teacher :

It is the teacher who interacts with the learner electronically, and assumes the burden of educational supervision according to the progress of the learning process, and often this teacher is not linked to a specific time or place to work, but his dealing with the educational institution are the number of courses he supervises and is responsible for and the number of students registered with him. (Hussein Hassaniya, 2019, p. 120).

4. Characteristics and advantages of virtual schools :

Nasr and Ahmed (2017) identified some of the characteristics of virtual schools, including :

1. Application sharing This sharing allows two or more learners to work and interact with the application at the same time.
2. Side rooms : where the teacher is able to divide the learners in the classroom into side groups through which opinions and interactions between learners and science are exchanged.
3. Learners management and follow-up : through which learners are analyzed and evaluated or their use of materials within the learning environment is analyzed.
4. Supporting learners through forms of communication between teachers and learners : Providing supportive materials such as information about the course, and supporting questions answered.

Learner's Tools: This is represented in providing a web page for each learner, through which he can download courses, view diaries and electronic calendars.

6. Consistency and customizability of look and feel : it provides an easy interface, which helps learners to quickly understand and use.

7. File transfer and circulation : If files are transferred directly between the teacher and the learner, and deal with them in any form of interaction.

8. Direct communication between the teacher and the learner : to ensure the privacy of each learner through the feature of private messages between them

9.. Directing written questions to the learners and their answers. (Hamzi, 2021, p. 50, 51).

5. the importance of virtual schools :

There have been numerous studies that emphasized the importance of the virtual school. Azzouz and Ahmed's study emphasized that the virtual school and e-learning constitute a stage of transformation in the educational model and that the entrances can be used to improve the quality of education and achieve equal educational opportunities. In addition, Al-Ahmari's study. On the other hand, it was mentioned in Barbouret Reeves 2009 p.412) that virtual schools expand the scope of learning and provide high-quality educational opportunities that give students freedom and flexibility in choice. on the other hand, it was mentioned in Barbouret Reeves 2009 p.412) that virtual schools expand the scope of learning and provide high-quality educational opportunities that give students freedom and flexibility in choice. .

The importance of virtual schools has been great. It demonstrated during the recent health crisis that swept the whole world due to the Corona virus known as Covid 19, and therefore virtual schools have become a necessity and not a luxury as the education pattern came as a response without prior planning for it, although there were some attempts to include it before. Those interested in developing education and employing it in a simple way in educational institutions, but in the era of Corona, virtual schools came as a necessary measure in light of transforming problems into opportunities, as distance education may be the only way to save the school year in all countries of the world (Al-Saadoun, Al-Bazai, 2021, p. 151.150).

6. the basic requirements for the application of virtual schools :

1- A trained teacher in computer skills in dealing with the learner in virtual schools.

2- A computer specialist who is trained to make educational programs.

3- A student with competencies that enable him to use the computer in learning and to benefit from virtual learning environments.

4 – The objectives of the lesson and its outputs are well explained to the learner teacher.

5-Explanation of the lesson in a way of teaching commensurate with the students of the virtual school.

6-Self-assessment.

7-An educational administration capable of leading and developing learning environments.

8-Advanced technological capabilities that are available at the lowest cost.

9-A scientific environment that encourages self-learning and continuous and provides ways to achieve this without obstacles. (Ibrahim Abdel, 2016, pg. 3).

Through the above, we can say that the success of the application of the virtual school requires the availability of a set of conditions and requirements, perhaps the most important of which is the availability of technological sufficiency and dealing with technologies for both sides of the educational process, with the presence of advanced technology that can be used in building an interactive virtual environment, providing the Internet as an important foundation in addition to there is social and family awareness of the importance of this type of school with its contribution to supporting the project and helping the teacher while carrying out his educational process in his virtual environment.

7. Types of virtual schools :

In terms of the method, learning can be divided through the virtual school in a synchronous or asynchronous manner. Synchronous communication requires punctuality, where the two sides of education are present simultaneously from different places, while asynchronous communication refers to the possibility of communication between the two sides of education at different times and from different places that does not require presence. In real time.

As for Russell & Holkener, Russell & Holkener, and Juszczak & Kim, Juszczak & Kim see that it is divided into three types, and this division may be the closest to the study :

1. School of cyberspace : which does not require the presence of the student physically, and is a group independent of the geographical location.

2. Hybrid Schools : Students are allowed to complete large portions of their work from home or other centers, but are required to regularly attend traditional school for activities such as sports and arts to encourage physical fitness and socialization.

3. Training schools : Students spend most of their time in a traditional school, but in individual subjects that are taught by default when there is no trained teacher available in the school or to support the education of the gifted or to supplement the students' remedial plans. (Al-Saadoun, Al-Bazai, 2021, p. 150).

Despite the different types of virtual schools, in essence all of them sought to ensure the continuity of the educational process and to ensure that the learner obtains information and overcomes the problems that direct it. All this in light of the conditions provided to ensure its success.

8. Pros and cons of virtual school :

8.1 The advantages of the virtual school :

The advantages of the virtual school are represented in several points, including :

- Achieving the principle of continuing education for individuals.
- Helping teachers to deliver the scientific material to the learners.

Helping to integrate technology into education.

- Increase the motivation of learners to ensure an increase in their educational attainment.
- It leads to interaction and communication between learners and teachers.
- Providing all means of interaction between the learner and the learner.
- Helps divide the learners into small groups in interactive rooms with audio and video. (, Hamzi 2021, p. 51)

8.2 The disadvantages of the virtual school :

Musa (2011) reported that the disadvantages of virtual schools in the following points :

- Learner stake advantage of the Internet in side chats.
- It requires great effort by teachers in their attempts to possess the necessary virtual skills and abilities.
- The occurrence of technical malfunctions may disrupt the workflow and impede the educational process.
- It may lead to the learners being pre-occupied with the computer and not fully concentrating on the scientific content.
- Irregular times for questions and answers between teachers and students.
- The learners' lack of adaptation to duties or tasks, and the difficulty of the learner communicating with the teacher after the end of the lesson.
- The lack of electronic links to roam with in the libraries through the virtual schools.
- Dehumanization of the teacher and learner's lack of face-to-face interaction.
- Some see it becoming a competitor to traditional education, leading to a mass exodus towards virtual universities.
- Marginalizing the role of the teacher and underestimating its importance. (Hamzi, 2021, p. 51)

From this point of view, it can be said that virtual schools are a double-edged sword in the sense that they have pros and cons at the same time, as despite the distance between students and teachers, they can crystallize his ideas, directions, opinions and interaction, even if it is virtual, but what is wrong with him is that students in light of the absence of supervision, they may use technological means for other purposes that may lead to the deterioration and regression of his scientific level.

9 . the roles and functions of the teacher in light of the requirements of the virtual school :

The roles and responsibilities of the teacher in virtual or online schools vary depending on the grade level they are studying and the e-learning model they follow. Through their adoption of a set of educational strategies based on traditional or contemporary educational models and theories

The success of the teacher in employing information and communication technology to achieve the goals of virtual learning depends on the degree to which he possesses competencies that enable him to employ information and communication technology with high efficiency, in addition to striving to continuously develop it in order to carry out his task to the fullest. It is implemented in addition to providing an appropriate learning environment. (Hassan Husseinia, 2019, pp. 127, 128)

The role of the teacher was clearly manifested during the Corona crisis, and education systems in most countries turned into virtual educational systems remotely, with the aim of solving the current crisis that witnessed educational institutions without preparing teachers and students and pre-designing curricula and programs. The only one for knowledge, and his role is not limited to indoctrination, but rather in line with the development of technology and the change in methods of continuing education in the twenty-first century. We will learn about these roles as follows :

✓ The teacher as an innovator :

That is, the teacher is not required to give the students a lot of information, but rather it is necessary for the students to have the ability to think creatively and creatively, in order to obtain the information and use it in solving future problems, and this

may only happen through the creative teacher with the innovative mind that encourages and inspires the student with the necessity of Renegeas and come up with new ideas and solutions to the obstacles to the success of the educational process. (Al-Saadoun, Al-Bazai, 2021, p. 153)

✓ **The teacher as a designer :**

The field experience of the teacher's role in design should extend within the virtual school throughout the semester. The relationship between expert teachers and novice teachers online should begin with a meet-and-greet before or at the beginning of the field experience, and this meeting should include a proactive reverse process, in which both The teacher and the online collaborator with each other write a list of what they need for this virtual experience and of course this will help in ensuring all participants. (Hassan Hosnia, 2019, p. 128, 129)

✓ **The teacher as a researcher :** The teacher's practices as a researcher can be summarized as follows :

- Ensure the rooting and transfer of scientific honesty in transferring and documenting the knowledge of the student.
- Raising the value of spreading knowledge to the student.
- Attending seminars, conferences and courses and reading articles related to everything new in the specialty.
- Doing research and assigning the student to conduct it.
- Use databases and the Internet and not be limited to one source of knowledge.
- Belief in the effectiveness of scientific research results and use them in addressing educational problems.
- Ensure the application of the rules of scientific research.
- Confirming the values of constructive criticism of educational issues. (Al-Saadoun. Al-Bazai, 2021, p. 153)

✓ **The teacher as a presenter :**

His job as a presenter requires knowledge of some of the most important competencies :
Providing electronic educational content in proportion to the capabilities of the learners, linking the course pages to facilitate dealing with it, using effective teaching methods, specifying multimedia from audio, image, text and graphics to which the information will be translated. (Hussein Hassaniya, 2019, p.129).

he teacher as a guide:

The teacher can have some guiding roles in virtual schools, which are as follows: Teaching in the virtual school in such a way that students feel the same free expression of ideas, the level of sense of community and the exchange of opinions, in addition to the formation of social and health conscious behaviors, as is the case in traditional schools, even if without a direct view of the

students. Effectiveness in communicating with students and parents through modern applications. Mutual relations on respect with students without tyranny and openness of the teacher to participate in compromise. (Al-Saadoun, Al-Bazai, 2021, p. 154).

✓ **The teacher as an assessor :**

His job as an evaluator requires knowledge of some of the most important competencies :

Setting standards for evaluating the various performances (knowledge, skill, and emotional), selecting electronic tests for students, and setting adequate procedures to prevent cheating.

For example, a professor who is a designer and course lecturer will evaluate all the notes for 11 out of 15 weeks, and the evaluation will be used in the final grades of the participants as part of the course accreditation. This evaluation is a reliable procedure even if other professors join in the evaluation, some may not agree aspects of their evaluation with the original evaluation. (Hussein Hassaniya, 2019, p. 129)

✓ **The teacher as a technology user :**

The teacher's employment of technology in the educational process is as follows :

- 1- Adequate knowledge of the basic concepts of using technology in the teaching process.
- 2- Using technology in an organized manner and arrange according to the priority of its use in educational situations.
- 3- Stimulating the minds of the learners before using the technological devices and forming a positive attitude towards the use of technology for them.
- 4- Using technology to communicate with students and parents.
- 5- Keeping abreast of technological developments and knowing their latest publications that can be employed in the educational process.

✓ **The teacher as a class manager :**

The teacher in the traditional education used to play his role by controlling the class and taking control of every thing that happens in the classroom, either in his role in the e-learning system such as the virtual school, making him the director of the educational process as a whole, where he chooses the methods of displaying the content, the method of evaluation, educational activities and others, and thus in turn this makes the educational process an effective process, and it takes them all the time for fruitful work, and this is what the results of the study of Al-Maliki 2014 indicated with the organizational effectiveness of the teacher when empowering him as a manager. (Al-Saadoun, Al-Baza, 2021, p. 154).

9 – International experiences in the field of applying virtual schools :

1- Alabama High School :

This school is a service provider for Alabama public schools, and this school enables state school administrators to register their schools and their students there.

Among the benefits of this school are the following :

- Students in small rural school with limited teaching resources will be able to take core courses and important choices.

Empowering many students in the state who cannot obtain an advanced diploma due to the lack of teachers.

- It is also useful for students who want to complete a course or calculate a lost grade. Alternative schools and summer schools use school courses regularly.

Students get individual care from electronic tutors on a daily basis, and this does not always happen in traditional classrooms, and is important for many students. (Al-Ahmari, 2019, pp. 318-319).

2-Florida Virtual School :

Florida Virtual School began its activities in August 1997 as a project linking two regional public schools, Orange county public school and Alachua county school, which were launched on the Internet in 1996, with a batch of 14 educators who served in the functions of administration, education and development.

The project's mission was to complete a high school online by 2001 and ensure student services there to enable students to successfully transition into post-secondary institutions and into the workplace.

The mission of the Florida Virtual School is to provide students with high-quality technology-based educational assumptions to acquire the knowledge and skills necessary to succeed in the 21st century AD. (Al-Ajili, 2009, p. 9)

3-Constitutional Electronic School via the Internet :

3-1- The tasks of this ECS school are :

- Benefiting from the current technology, and removing the obstacles of time and physical space.

Expand educational opportunities for all students, and develop rich, collaborative and vibrant learning environments.

Nurturing organizational thinking skills, facilitating the development of life-long learners in the information age.

3-2- Educational features and study method in this school :

Detailed study plans to achieve the needs and desires of each individual, and qualified teachers.

Project-based learning.

Kansas State Assessment Tests.

Standardized tests such as the Terra Nova tests.

-There is a toll-free phone number that provides constant administrative and technical support.

- Encouraging students' parents to participate in their children's education through direct contact with teachers through e-mail or telephone and online grades.

The participation of students and parents in managing the ECS site through membership or affiliation as representatives of the site management team. The school is contacted through the student's login to the site. The site also provides students with a daily educational video with flash technology, one of the topics of the various courses. (Al-Ajili, 2009 p. 10, 11)

4-Salem and Caesar School on the Internet :

SK Online School is an alternative program to a primarily online curriculum for students who live in a public school district to provide online education 24 hours a day, seven days a week to any school-age student who needs pre-curriculum or remedial teaching, or who has scheduling conflicts at his regular school, has limited study skills in English or is homeschooled.

The target learners are :

Any school-age student who may have one of the following needs :

- Advanced lessons on the curriculum or remedial lessons.
- Homeschooled.
- His rate is low.
- He has scheduling conflicts in his regular school setting.
- He needs private tutoring. (Al-Ahmari, 2019, pp. 320-321)

5-Future International Secondary School :

Established by Dr. Karben Bishop, Future High School in 1984 in Southern California as an alternative to a traditional high school, the School of the Future program is based on the concept of one-to-one teaching in a caring learning environment.

Students receive live one-to-one online tutoring using video conferencing technology. The secure online course management system allows student, parent or teacher participation by enabling them to access assignments, grades, and progress reports for all the Stakeholder. Because one-to-one instruction, assignments reflect the learning style. And the personal needs of each student, and with the keen and encouraging efforts of the faculty, Al-Mustaqbal International Secondary School has remained based on the same educational style or curriculum, and the open enrollment system allows students to start semester work at any time of the year. (Al-Ahmari, 2019, pp. 321-322).

10-Some of the difficulties facing the use of virtual classrooms can be identified as follows :

Lack of funding and infrastructure for virtual classrooms : This is represented in the lack of budget and equipment, and all the requirements of these schools, but it can be overcome by allocating part of the education budget for its implementation, and the involvement of community institutions, the private sector and individuals through their contributions and support for the project .

1- Lack of trained manpower : It is represented in the lack of technicians, experts and specialists needed to implement the virtual classroom project. This can be overcome by holding intensive training courses for the necessary manpower and sending them on training missions to developed countries

2- Social illiteracy in society and lack of awareness of e-learning : This requires an intense effort to train and qualify faculty members, teachers and learners in particular, in preparation for this experiment.

3- The link between this type of schools and education with other technological factors : such as the efficiency of communication networks, availability of hardware and software, and the extent of the ability to design and produce educational content in a distinguished manner. Design and production skills.

4- Lack of understanding of the new role of the teacher in light of e-learning, which requires clarification of the new roles of the teacher and the publication of awareness campaigns on the effectiveness of the teacher and his positive role in the use of modern technology.

5- Information security : This requires a security policy in order to protect the databases of virtual education sites from various intrusions.

Al-Tuwaijri adds some difficulties, including :

- Electricity outages for long hours at unknown times and poor internet speed in most areas.
- Reliance on computers and the Internet, and this requires the availability of an infrastructure, which may not be available in developing countries. (Al-Manqoush, Mansour 2018, p. 185, 186).

Conclusion:

Based on the foregoing, we can say that the virtual school was one of the most effective way adopted by the countries of the world in ensuring the continuity of the educational process and as an attempt to save the school year in light of the health crisis and the Corona or Covid 19 pandemic, which resulted in the suspension and complete closure of studies in educational institutions in the countries of the world.

Virtual schools are expressed with electronic platforms and virtual environments through which interaction between the teacher and the learner takes place electronically, in light of a number of requirements, perhaps the most important of which is the availability of the Internet, computers and technological media for both sides of the educational process, and the qualification of each of them to deal with digital education, and the provision of all mechanisms for the virtual teacher. Which helps the learner to absorb the lesson in the new virtual environment, with the need to provide a family environment and a social culture that supports this type of education.

We also point out that despite the importance of these schools and the success of their applications in addressing crises by the developed countries of the world, many developing countries or those on the path of growth, including Algeria, have been unable to embody this project. This is due to a set of difficulties facing many sectors that are not only education and education, perhaps the most important of which is the lack of infrastructure and equipment for the success of this type of school, and the lack of support from state institutions, civil society institutions and the private sector, in addition to the lack of qualified and trained human resources in terms of technology and technology, given that this resource is an essential element for the success of the application of these schools, Add to this the absence of social awareness and the family environment that supports and incubates this type of education, and the problem related to electricity cuts and poor internet flow....etc. All of this makes it difficult to implement this type of school.

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