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THE POSSIBILITY OF USING DIGITAL CURRICULA IN TEACHING HISTORY MODULES

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ABSTRACT

Electronic means, including websites, films, electronic newspapers, and telephone communications, such as computers, mobile phones, and other devices, have achieved a scope for developing e-learning or relying on them as scientific sources to achieve knowledge acquisition or writing scientific studies research in e-learning.

In her current research, the researcher tried to focus on digitizing history curricula and prepared a questionnaire for that and presented it to several experts. After their dialogue, the possibility of digitizing the history curricula and teaching this subject was reached by several electronic teaching methods that fit the history subject's nature. The researcher recommended encouraging the use of models for teaching digital curricula at all levels of education, including the one prepared in the current research, and exchanging experiences with countries with experiences in developing skills so that these experiences can be used in developing digital curricula. And electronic teaching methods. She suggested conducting a comparative study on the effect of digital curricula on multiple samples such as normal students, Outstanding and talented students.

Chapter One: Definition of Research

Research problem:

The educational curricula are currently facing many challenges, including digital development in the curriculum and the huge expansion of knowledge in all fields. The technological revolution is based on advanced scientific knowledge and contemporary global environmental, demographic, health and political problems, all of which require experts and curriculum designers to pay attention to these challenges—and confronting them when designing and developing

educational curricula to prepare the individual who can keep pace with electronic development in the curricula. Besides, it is developing learners' abilities and skills in thinking, analysis and problem-solving. It also employs knowledge sources in technology and provides knowledge, skills and ways of thinking necessary for life [1].

Most academic subjects, including social sciences, especially history in our schools, are taught mainly on traditional methods that focus on preserving and memorizing information. To overcome the problems of teaching history, there was an urgent need to use modern teaching methods and programs compatible with the times' nature. The digital curriculum is considered a fundamental change in traditional educational systems. This type created a new philosophy, goals, and behavior in managing the educational process like the roles assigned to each of its parties, especially in light of open spaces, scientific progress, cognitive development, and the multiplicity and abundance of communication means [2].

Research Importance:

Digital curricula have importance in preparing the students mentally and physically, and the concept is related to the educational policy drawn up by the state conditions and needs of society. And that requires special preparation for human powers and the needs of individuals themselves. However, based on the importance that the curricula represent in peoples' lives, it should pay attention to the most relevant curricula related to human awareness and thinking and the expression of his feelings. Since history is one of the means that work to achieve awareness and the ability to think among humans, history curricula have a significance and the ability to represent education goals [1].

As a result of increased information, the continuous change, and the rapid growth of knowledge, which resulted from the information revolution in the current time. According to Salem (2004) [3], the world is experiencing a great scientific and technological revolution, which impacted various aspects of life. Therefore, education became required to search for new educational methods and models to face global challenges, including increased education demand, decreasing the number of educational institutions, increasing the amount of information in all different knowledge fields, as well as increasing the demand for using the technical developments in the educational field. E-learning model appeared to help the learner's learning within the appropriate place and time through interactive content based on Multiple media (text, sound, images, motion), which is presented through electronic media such as computers, the Internet and others. Thus, e-learning is a new type of educational system, imposed by the scientific and technological changes that the world is faced today. On the other hand, traditional methods and methods are no longer able to keep pace with them. Therefore, there was an urgent need to adopt another type of education: elearning and the advent of the Corona pandemic, which forced all educational institutions to practice e-learning with its various and multiple programs.

There was no complete agreement on defining a comprehensive concept covering all aspects of the term "e-learning." Most of the attempts and efforts

that were interested in defining it looked at e-learning from a different angle according to the nature of interest, specialization and purpose, which led to the emergence of many e-learning definitions. This made some interested people say that the number of these definitions is the same as the number of those who defined it, and through tracking these definitions, it is found that they either consider e-learning as a teaching method or as an integrated system that has its inputs, processes and outputs.

Among the definitions that consider e-learning as a teaching method is the definition of Al-Arifi [4] for e-learning that: "Providing educational content with the explanations, exercises, interaction and follow-up partly or comprehensively in the classroom or remotely through advanced programs stored in the computer or over a network. Internet". Al-Musa and Al-Mubarak [2] defined e-learning as "a teaching method using modern communication mechanisms from a computer, networks and multiple media, including sound and image, graphics, searching mechanisms, electronic libraries, as well as Internet, whether remotely or in the classroom. The importance is intended to use the technology in different kinds to deliver information to the learner in the shortest time and with less effort and more useful.

As well, other definitions consider e-learning as a system is the definition of Al-Shehri [5] for e-learning as "a system for presenting curricula (courses) via the Internet, a local network, or satellites, or via CDs, or interactive television to reach the learners." Ghuloom [6] defined e-learning as "an educational system that uses information technologies and computer networks to support and expand the educational process through a set of means, including computer equipment, the Internet and electronic programs prepared either by specialists in the ministry or companies."

Research objective:

The current research aims to put together a list of what can be used to digitize the history curriculum.

Research limits:

The current research is determined by the following:

- 1. History modules only.
- 2. Digitalizing curricula.
- 3. E-learning.

Defining terms:

The digital curriculum: a supportive educational method through which the student can recall his lessons and communicate with the teacher of the modules via the Internet as a guide and teacher to properly complete the educational process [7].

Chapter Two: theoretical aspects Digital curriculum concept

Digital technology in the field of education is intended to use educational tools in teaching and learning situations such as teaching using computers and audiovisual tools, and digital technology from the point of view of teachers aims to increase the effectiveness of educational programs, methods and modules to reach the goals and objectives in the curricula previously defined. Digital or electronic learning is considered a kind of digital curriculum application. These programs provide different immediate feedback. As well as allowing learning at a rate commensurate with the learning rate of each learner. [8].

The digital curriculum is a structured and planned curriculum built scientifically, and it is tried and modified according to the data received until it reaches a picture that guarantees its success and effectiveness. The results received from its application represent the basis for its introduction. The teacher's role in the digital curriculum is a leader, a supervisor and responsible for directing students' activities, encouraging them to interact, generating creative ideas and motivating them to take the initiative to contribute to the success of the educational and pedagogical process, not just a course of transferring information and knowledge to students [9].

However, it is considered a supportive educational tool for students and communicating with the teacher of modules to complete the educational process properly as well as, students are more active and effective in the digital curriculum that takes into account individual differences and focuses on practical participation and providing them with technical and technical skills, making them aware of its importance. And improving the learning process in line with modern developments and aesthetically employing them. Creativity at the individual and collective level and improve their achievement and achieve the goals of the digital curriculum, including [10]:

1. To promote and develop the skills of the student and the employment of knowledge in new situations.

2. Enables students to develop their skills in using computers and contemporary technology.

3. Encourages and accelerates education and self-learning and provides abundant, accompanying confrontational activities.

4. Increasing students' motivation towards digital education and interacting with educational learning situations.

5. Acquisition of students skills or competencies necessary for the use of information technologies.

6. Acquisition of teaching staff and technical skills to use modern teaching techniques.

Nawaf [11] identified the most important elements of the digital curriculum in the course, including:

▶ **Introduction**: which contains a brief overview of the material's contents, how to deal with it, and the most important scientific aspects.

Objectives: Each module has educational and behavioral goals that address different issues, and the school administration can add another objective.

Contents: It is an indexing of the main topics in the course through which it is possible to move to the lesson directly.

The general calendar: it is an organizer of appointments (such as dates for subject exams or revision, etc.)

 \succ The private calendar is for the student, and he can access it through any modules or the home page.

Curriculum Forum: Each curriculum has a special forum that students exchange with their teachers' topics related to the subject they study.

Curriculum links: Each curriculum has links that help to understand its topics, so each user can add links and preview links that have been added from other users.

Digital Curriculum Dialogue: Each curriculum is devoted to an arena for live discussion between students in a specific subject and their teachers, and another specialist may be involved to enrich the discussion on a specific topic.

 \succ **Bank of Questions**: provides the student with a list of questions and their preferred answers related to the modules. The student can also add questions with or without answers, which can be sent to teachers to help solve them.

 \blacktriangleright **Multimedia**: developing digital curricula with rich information contents for each subject, with animation, sound and images, which contribute to providing a high level of easily obtainable information and that reduces individual differences among students [12].

One of the digital curriculum characteristics is focusing on the behavioral aspect in formulating goals, and programming overcomes the nature of the content. It is also based on the previous requirements, which allow students to confirm their positive participation and interaction based on perseverance and response and depend on the students' self-motivation. The evaluation process unconventionally takes place, starting from the pre-calendar and reaching the final calendar, and it has several stages of planning, implementation and development [13].

One of the most important advantages of the digital curriculum is its flexibility in providing students with the necessary and appropriate time, and it helps them exert self-effort in the study for the sake of the quality of their academic achievement and keeping the learning effect for a longer period and deepening the concept of learning to enable easy access to the teaching even outside the official working hours. Spreading self-training and learning cultures in the community enables the improvement and development of learners 'and trainees' abilities at the lowest cost and with the least effort. Transferring academic information is rapid to students by relying on communication technology and bypassing space and time restrictions in the educational process. And the development of student thinking and the enrichment of the learning process, providing the opportunity for learners to interact electronically with each other on the one hand and between them and the teaching on the other hand [14].

The digital curriculum is not absence obstacles, including cost, and its need for specialists in designing, implementing, and developing this curriculum. It also needs special skills and abilities to use educational technology for both teachers and students. It does not give students sufficient opportunity to express their own goals, nor does it meet the needs and problems of the society that it aspires to and the difficulty of providing equipment and technological technologies in all schools. This system focuses on the cognitive side more than the skill side and the emotional side. On the other hand, this system's use weakens the role of

the educational institution as a social system that plays an important role in social upbringing, and it does not help the student carry out non-academic activities such as social or sports activities and others [15].

Among the evaluation methods that are used in the digital curriculum:

- ✓ Discussion boards
- \checkmark The activities of applied learning.
- \checkmark Research papers.
- ✓ Self-measuring (websites, magazines, articles).
- ✓ Constructive and final (computer) tests.
- ✓ Projects (practical training).
- ✓ Electronic achievement files.
- ✓ Group learning
- ✓ Final electronic exams. [14]

E-learning styles:

Al-Lali and Al-Jundi [16] divides e-learning into two types, namely: e-learning dependent on the Internet and e-learning that is not dependent on the Internet as follows:

1- Electronic learning that is not dependent on the Internet includes all electronic media used in education, including software and satellite channels.

2- E-learning based on the Internet, divided into two types:

A- Synchronous E-learning:

It is an educational system that requires the teacher and learners' presence at the same time in front of computers to conduct discussion and conversation between students themselves and between them and the teacher through chatting or receiving lessons through virtual classroom. One of the advantages of this learning type is that the student gets immediate feedback, cost reduction, and dispensing of going to school and the need for modern devices and a good communication network. It is the most sophisticated and complex type of elearning, where the teacher and the student meet on the Internet at the same time (simultaneously).

Among the tools used in this type of simultaneous education are the following:

- 1- The White Board.
- 2- Video conferencing.
- 3- Audio conferencing.
- 4- Chatting Rooms. [16].

B- Asynchronous E-learning

It is indirect education that does not require learners' presence at the same time, such as getting experiences through available websites on the network or CDs or e-learning tools such as email or mailing lists. The advantages of this type of learning are that the learner gets to study according to the times convenient for him and the effort he wishes to provide. Likewise, the student can repeat the course more than once and refer to it electronically whenever he needs to. However, this system's disadvantage is that the learner does not receive

immediate feedback from the teacher, leading to introversion because the student is isolated.

Among the tools used in this type of simultaneous education are the following:

- 1- Email.
- 2- Forums.
- 3- Interactive video.
- 4- The network.

Whatever the names differ, the types of e-learning are limited to the two types mentioned above [17].

Among the aspects close to the digital curriculum is the archive of historical images. (Kalev Leetaru) undertook this project (Internet Archive Book Images) and took it upon itself to digitize more than (2.6) million old historical pictures dating back between the years (1500-1922). Previously, most of the books and references that were numbered, then converted into a pdf file, as the focus was on historical monuments only and the focus was not on knowledge, information and texts, which helped the teachers use these images in the classrooms with their students [18].

Chapter Three: Research Procedures

The researcher prepared a list that includes e-learning tools and materials and what can be used to digitize history curricula, and took the opinion of a group of experts and referees, and negotiated with them in more than one country until she reached the following:

E-learning tools can be classified into two types, namely, synchronous e-learning tools and asynchronous e-learning tools, and the following is an inventory of each of them:

A- Simultaneous e-learning tools.

It means those tools that allow the user to communicate directly (in real-time) with other users on the network, and among the most important of these tools are the following:

1) Chat: It is the ability to talk over the Internet with other users simultaneously, through a program that constitutes a virtual station that brings users from all over the world together on the Internet to speak in writing, voice and image.

2) Audio Conferences: It is an electronic technology that depends on the Internet and uses an ordinary telephone and a mechanism for conversation in telephone lines that connect the speaker (the lecturer) to several recipients (students) in separate places.

3) Video Conferences: These are conferences in which communication is carried out between individuals separated by a distance through a high-power television network via the Internet. Everyone at a specific terminal can see the speaker, and he can ask inquiries and conduct dialogues with the speaker. (Ie, providing the interaction process). This technology enables the transmission of audio-visual conferences (image and sound) in achieving distance education objectives and facilitates communication processes between educational institutions.

4) The White Board: It is a blackboard similar to the traditional chalkboard, and it is one of the main tools that must be available in the virtual classes, through which the explanation and drawings that are transferred to another person can be implemented.

5) Satellite Programs: It is the employment of satellite programs associated with computer systems connected directly to a communications network, which facilitates the possibility of utilizing audio and visual channels in the teaching and education processes and makes them more interactive and lively. Parts of the country or the region concerned with education because its source is one, provided that all reception centers are equipped with special receivers and transmitters compatible with the system used.

B- Asynchronous e-learning tools:

They mean those tools that allow the user to communicate with other users indirectly, that is, they do not require the presence of the user and other users on the network together during communication, and among the most important of these tools are the following:

1) Email: It is a program for exchanging messages and documents using the computer over the Internet, and many researchers point out that email is one of the most used Internet services due to its ease.

2) World wide web: It is an information system that displays various information on interconnected pages and allows users to access various Internet services.

3) Mailing-list: It is a list of postal addresses added by a person or organization to which messages are transferred from a single postal address.

4) Discussion Groups: It is one of the tools for communication via the Internet between a group of individuals with a common interest in a particular specialty through which they participate in writing about a specific topic or send an inquiry to the participating group or the supervisor of this group without being present at the same time.

5) File Exchange: This tool is concerned with transferring files from one computer to another connected with it via the Internet or from the information fabric network to a personal computer.

6) Interactive video: It is the technology that allows interaction between the learner and the presented material that includes moving images accompanied by sound to make learning more interactive, and this technology is considered a means of communication from one direction because the learner cannot interact with the teacher and includes video technology The interactive technology on both videotape technology and DVD technology is managed especially through a computer or a video recorder.

7) CD: They are disks in which curricula or educational materials are prepared and loaded onto students' computers and refer to them when needed. There are also many forms of educational material on CDs to be used as an educational video film accompanied by sound or to display several Thousands of pages of a book or reference or a mixture of written material with still images and video (animations).

Among the models for employing e-learning in teaching:

E-learning is used in teaching according to three models according to how much e-learning is employed in teaching:

1- Adjunct: It is an electronic education complementary to the traditional classroom-based education, where the network serves this education with the programs and assistance offers it needs. Some e-learning tools are partially used to support, facilitate, and raise the efficiency of traditional classroom education. Examples of applications of the assistive model include the following:

A- Before teaching a particular topic, the teacher directs students to look at a particular lesson on the Internet or a CD-ROM.

B- The teacher assigns students to search for specific information on the Internet.

C- They are directing students after the lesson to enter a website and solve the questions raised on this site related to the lesson.

The blended model: in which e-learning is applied in combination with classroom education (traditional) in the teaching and learning processes so that some e-learning tools are used for part of the education in the real classroom, and many specialists are enthusiastic about this model and see its suitability when applying E-learning, as it combines the advantages of e-learning and the advantages of classroom education, and therefore the details of this type will be more detailed, as follows:

The use of blended education has become one of the main requirements of this era to change education's priorities and requirements from one learner to another. Therefore, organizations and institutions must use blended learning methods in learning strategies to obtain the appropriate content and appropriate form and time for individuals, and blended learning organizes multiple, designed presentation media To complement each other and enhance behavior learning and application.

Blended education programs may include multiple forms of learning tools, such as collaborative or virtual direct programs, electronic courses based on speed on the learner himself, electronic performance support systems attached to the work-based environment, learning management systems, and blended learning synthesizes different activities that depend on Educational events, including traditional (face-to-face) classes, simultaneous e-learning, and self-paced learning (speed-dependent on the learners themselves).

At the simplest levels, the blended learning experience combines direct online and indirect learning, and direct e-learning on the Internet usually means "using the Internet and intranet," while indirect education is what takes place within the traditional classroom setting.

Advantages of blended learning:

The most important characteristics of mixed knowledge can be identified as follows:

1- It improves the effectiveness of education by providing more harmony and harmony between the learner's requirements and the educational program presented.

2- Expanding the reach: following one method of presentation only inevitably determines the images and patterns of access to the educational program or the

transfer of knowledge, while the mixed education model allows multiple forms to reach the learners.

3- Increasing the effectiveness of benefiting from costly education programs: The incorporation of different presentation methods leads to benefit from the offered programs. The electronic program requires exorbitant costs, but it is presented through virtual educational sessions and merged with simple and selfpaced materials such as documents, case studies, and recorded facts of education, And text assignments and presentations, may parallel the same cost.

Examples of blended model applications include the following:

1- One or more course lessons are taught in the classroom without using elearning tools, and another lesson or some course lessons are taught using elearning tools, and the evaluation is done by using traditional and electronic evaluation methods interchangeably.

2- A specific lesson is taught alternately between classroom education and elearning, such as starting to teach the lesson in the classroom, then using elearning, for example, by explaining a specific lesson such as a lesson in the triangular countries, then moving to one of the sites to see some examples of the triangular countries and then returning To the book and complete the lesson and so on.

3- The pure form (Totally online): in which electronic learning is used alone to complete the teaching and learning process, as the network acts as a primary medium to provide the entire education process, and it is an image of distance education based on e-learning.

Examples of applications of the pure model include:

1- The student must study the electronic course individually through independent self-study, and this education is done through software loaded on CDs or the web (web) or the local network.

2- The student must learn through his participation in a specific group in learning a lesson or completing a project using participatory e-learning tools such as (chat rooms and video conferences).

Chapter Four: Research Results

The researcher found the possibility of employing the digitization of curricula with history materials with ease of teaching it by several types of e-learning.

Depending on the findings of the research, the researcher recommends the following:

1. Encourage the use of digital curriculum teaching models at all levels, including the model prepared in the current research.

2. Exchanging experiences with countries with experiences in developing skills so that these experiences can be used to develop digital curricula and electronic teaching methods.

3. Encourage extra-curricular activities in schools and establish scientific trips that stimulate and stimulate students' senses to discover and develop their perceptions and thinking.

4. They are urging those in charge of the educational process to provide a classroom environment dominated by appreciation and acceptance of their ideas and opinions.

5. Enhancing students 'motivation in acquiring knowledge from all fields to uncover skills and help them develop and activate them.

Depending on the research results, the researcher proposes to conduct the following studies:

1. Comparing the effect of digital curricula on multiple samples such as normal students, talented students, and gifted students.

2. Study the effect of digital curricula on variables (decision-making skills, thinking patterns, academic achievement).

References

- A. A. Al-Azhami, and A. M. A. Al-Jaf. Curricula and Teaching Methods., Al-Jazeera Office, Baghdad, Iraq, 2018.
- A. A. Al-Musa, and A. A. Al-Mubarak. E-Learning, Foundations and Applications, 1st Edition, King Fahd National Library for Publishing, Riyadh, 2005.
- A. Salem. Education Technology and E-learning, Riyadh, Al-Rashed Library. 2004.
- Y. Al-Arifi. E-learning is a pioneering technology and a promising method. A working paper submitted to the first symposium of e-learning, during the period (2003). King Faisal Schools in Riyadh, 2003.
- F. A. Al-Shehri. E-learning in Saudi schools: Before bought the train Did we set the rails? 2002, pp. 36-432.
- M. Ghuloom. E-learning in the schools of the Ministry of Education in the State of Kuwait. A working paper submitted for the e-learning symposium during the period (19/212 Safar 1424 AH) or (21-23/4/2003AD). King Faisal Schools, Riyadh, 2004.
- Q. M. Al-Shannaq, and H. A. Ban Domi, Fundamentals of E-Learning in Science, 1st Edition, Dar Wael, Amman, 2009.
- F. T. Ibrahim, and R. A. Al-Kalza. Contemporary Curricula. Al Maaref Institute, Alexandria, 2000.
- I. A. K. D. Al-Jubouri, O. M. Al-Ani, Y. S. Al-Askari's. Struggle, Curriculum and School Book, Al-Namothajaa Printing Press, Baghdad, 2014.
- Y. A. K. Al-Tamimi. Educational modules, (2nd Edition), Dar Al-Faihaa, Beirut, 2013.
- B. A. Nawaf. E-learning strategies. Syria, Dar Shuaa, 2005.
- N. A. Samara and A. Al-Adili. Concepts and terminology In educational and psychological sciences, 1st Edition, Dar Al Masirah, Amman, 2009.
- F. M. Mina. Issues in educational curricula, 1st Edition, Al-Anglo-Egyptian Library, Cairo, 2003.
- A. H. Bassuni. Electronic Book. Cairo, Dar Al- Keetab, Cairo, 2007.
- B. Al-Khan. E-learning innovative applications, 1st Edition, Dar Al-Fiker Al-Arabi, Cairo, 2005.
- A. Al-Lali, and A. Al-Jundi. E-Learning Concept Characteristics Benefits -And Obstacles. A working paper submitted for the Future School symposium during the period (22-23 / 10/2010). College of Education, King Saud University, Riyadh. 2002 AD.

- S. Z. Al-Muhtadi. E-Government Technology, Osama House for Publishing and Distribution, First Edition, Amman, Jordan, 2011.
- H. H. F. Al-Ajresh. E-learning is a contemporary vision, 1st Edition, Al-Sadiq Cultural House, Iraq, 2017.
- W. Al-Halafawi. Educational Technology Innovations in the Informatics Era, Dar Al-Fiker, Amman, 2006.